



Turkish Association for Psychopharmacology  
**6<sup>th</sup> International Congress on  
PSYCHOPHARMACOLOGY**  
&  
2<sup>nd</sup> International Symposium on Child and  
Adolescent Psychopharmacology

“From neuroscience to clinical practice: Tailoring treatments”

Scientific Program

April 16<sup>th</sup> - 20<sup>th</sup> 2014

Susesi Hotel - ANTALYA / TURKEY

**16<sup>th</sup> April 2014**

**09:00-12:00**

**Room 1 • Course 1**

*Mastery in pharmacotherapy combined with psychotherapy*

*Hakan Turkcapar (TAP- BDTD)*

**Room 2 • Course 2**

**EMDR**

*Onder Kavakci (Turkey)*

**Room 3 • Course 3**

*Acceptance and commitment therapy (ACT)*

*Fatih Kasim Yavuz (TAP)*

*Hasan Turan Karatepe (Turkey)*

**Room 4 Workshop 1**

*From malpractice to good clinical practice in psychopharmacological treatments: Malpractices in psychopharmacological treatments*

*Recep Tutuncu (TAP)*

*Ethical Mistakes*

*Sarper Ercan (Turkey)*

*Malpractice and good practices in the laboratory*

*Osman Metin Ipcioglu (TAP)*

*Malpractices in medical evaluation and treatment of acute agitation*

*Hakan Balibey (TAP)*

**Room 5 • Course 4**

*Management of sleep disorders*

*Murat Erdem (TAP)*

**Room 6 • Course 5 Dissociation course**

*Difficulties in diagnosis of dissociative disorders*

*Oguz Karamustafalioglu (TAP)*

*Treatment of dissociative disorders and difficulties*

*Bahadir Bakim (Turkey)*

**12:00-13:00 Lunch**

**13:00-14:30 Check-in**

**14:30-15:00 Coffee Break**

**15:00-15:30 Opening**

**15:30-16:30**

**Hall A • Opening Conference**

*Moderator Sunar Birsoz (Turkey)*

*Unmet needs in psychopharmacology in 21<sup>st</sup> century*

*Brian Leonard (CINP)*

**16:30-17:00 Coffee Break**

**17:00-19:00**

**Hall A • Symposium 1**

*Current approaches to the concept of dissociative disorders*

*Discussant moderators*

*Umit B. Semiz (TAP)*

*Omer Akil Ozer (TAP)*

17:00-19:00

**Hall A • Symposium 1**

*Current approaches to the concept of dissociative disorders*

*Discussant moderators*

*Umit B. Semiz (TAP)*

*Omer Akil Ozer (TAP)*

*Three leaves of the clover: Reflections of bipolarity, dissociation and conversion to clinical practice. Is comorbidity of bipolar disorder, dissociative disorder, and conversion disorder just a coincidence?*

*Oguz Karamustafalioglu (TAP)*

*Bipolar disorder comorbidity in dissociative disorder patients*

*Atilla Tekin (Turkey)*

*Conversion disorder comorbidity in dissociative disorder patients*

*Sinan Yayla (Turkey)*

*Treatment of bipolar disorders with a comorbid diagnosis of conversion and/or dissociative disorder*

*Bahadir Bakim (Turkey)*

*Clinical appearances and differential factors of dissociative disorders*

*Omer Yanartas (TAP)*

*Comparison of dissociative disorders and psychotic symptoms in schizophrenia*

*Ishak Saygili (Turkey)*

*Dissociative disorders in DSM-5*

*Serhat Citak (Turkey)*

**Hall B • Joint Symposium 1**

*ACBT-TAP*

*Group practices in CBT*

*Symposium chairs*

*Hakan Turkcapar (ACBT-TAP)*

*Murad Atmaca (TAP)*

*Cognitive-behavioral group psychotherapy in obsessive compulsive disorders*

*Kadir Ozdel (ACBT-TAP)*

*Cognitive-behavioral group psychotherapy in depression*

*Selcuk Aslan (ACBT-TAP)*

*Cognitive-behavioral group psychotherapy in obesity*

*Aslihan Sayin (ACBT)*

*Acceptance and commitment therapy in a group context*

*Fatih K. Yavuz (ACBT)*

**Hall C • Symposium 2**

*Psychopharmacological treatments in children and adolescents and new perspectives*

*Discussant moderators*

*Aynur Akay (Turkey)*

*Yasemen Isik (Turkey)*

*Comprehensive treatment of tic disorders and Tourette's syndrome*

*Sarper Taskiran (Turkey)*

*How does DSM5 Criteria affect our decision-making in treatments of childhood and adolescence psychiatric disorders?*

*Evren Tufan (Turkey)*

*Clinical management in childhood psychiatric disorders from neuropsychimmunology perspective*

*Aysegul Yolga Tahiroglu (Turkey)*

*The place of immunomodulators in psychopharmacological treatments*

*Gonca Gul Celik (Turkey)*

*Executive functions in ADHD*

*Yasemin Yulaf (Turkey)*

**Room 1 • Workshop 2**

*How do you conduct a research study?*

Murat Emul (TAP)

**Room 2 • Course 6**

*Clinical evaluation and management of co-occurring conditions in autistic spectrum disorders*

Koray Karabekiroglu (Turkey)

19:00-20:30 *Dinner*

**17<sup>th</sup> April 2014**

**07:00-08:30**

**Meet The Experts -1• Child and Adolescent Psychiatry Specialist Hours**

*Drug-drug interactions with use of psychotropic medications in children and adolescents*

*Discussant Specialists*

Turner Turkbay (TAP)

Dursun Karaman (Turkey)

Olgu Kurguculari Case Scenarists

Sevcan Karakoc (Turkey)

Meryem Ozlem Kutuk (Turkey)

Tayyip Kadak (Turkey)

**Room 2 • Course 7**

*Rational drug use in psychiatry: Antipsychotics*

Selcuk Aslan (Turkey)

**Room 3 • Course 8**

*Cognitive behavioral therapy for anxiety disorders in children and adolescents - Part 1*

Satwant Singh (UK)

**Room 4 • Course 9**

*Multicenter clinical trials*

Selim Kilic (TAP)

Cengiz Han Acikel (TAP)

**08:30-09:00 Breakfast**

**09:00-10:30**

**Hall A • Joint Symposium 2**

**BAP-TAP**

*Imaging of dopamine in the living human brain*

*Discussant moderators*

İlhan Yargic (TAP)

Samet Kose (TAP-USA)

*Subcortical dopamine, cortical function, and the transition to psychosis*

Oliver Howes (UK)

*Dopamine as a transmitter and a modulator*

Serdar Gergerlioglu (TAP)

*Dopaminergic pathways in mood disorders*

Ali Saffet Gonul (TAP)

*How adequate is dopaminergic hypothesis to explain schizophrenia: From research to clinical practice*

Kazim Yazici (TAP)

**Hall B • Joint Symposium 3**

**WPA-TAP**

*Hot topics of European psychiatry: View from the East*

*Discussant moderators*

Peter V.Morozov (WPA-Russia)

Yasin Bez (TAP)

*EEE WPA-Servier Academy: New educational model for young researchers*

*Peter V. Morozov (WPA-Russia)*

*Contemporary problems of diagnostics and therapy of negative symptoms and outcome in schizophrenia*

*Aram Hovsepyan (Armenia)*

*Future classifications of mental disorders: Problems and perspectives*

*Aleksey V. Pavlichenko (Russia)*

*Search of the optimal personal outcomes in the first psychotic episode: From neurobiological symptoms to clinical decision*

*Mykhailo Denysenko (Ukraine)*

#### **Hall C • Symposium 3**

*Management and treatment for conditions comorbid to autism spectrum disorders (ASD)*

*Discussant moderators*

*Tumer Turkbay (TAP)*

*Therapeutic approaches to anxiety disorders comorbid to ASD*

*Betul Mazlum (Turkey)*

*Therapeutic approaches to ADHD comorbid to ASD*

*Ayşe Kilincaslan (Turkey)*

*Therapeutic approaches to mood disorders comorbid to ASD*

*Canan Tanidir (Turkey)*

*Pharmacotherapy choices for irritability in children and adolescents with ASD*

*Ozden Uneri (Turkey)*

*Therapeutic approaches to problems in adolescents with ASD*

*Ozgur Oner (AP)*

**10:30-11:00 Coffee Break**

**11:00-12:00**

#### **Hall A • Satellite Symposium 1**

*Continuity in treatment of schizophrenia*

*Moderator*

*Nesrin Dilbaz (Turkey)*

*Difficulties in diagnosis of schizophrenia and predictors of relapse*

*Nesrin Dilbaz (Turkey)*

*Role of early intervention and approach to first-episode psychosis patients*

*Baybars Veznedaroglu (Turkey)*

*Increasing treatment compliance and decreasing adverse effects*

*Oguz Karamustafalioglu (TAP)*

**11:30-12:30 Poster presentations (001-152)**

**12:00-13:00 Lunch**

**13:00-14:30**

#### **Hall A • Symposium 4**

*Pillars of DSM-5*

*Discussant moderators*

*Peter Morozov (WPA-Russia)*

*Alican Dakilic (TAP-USA)*

*Contributions of meta-analyses in classifications*

*Selim Kilic (TAP)*

*Contributions of genetics in DSM-5*

*Thomas Schulze (Germany)*

*Contributions of psychopharmacology in DSM-5*

*Dost Ongur (TAP-USA)*

*Contributions of neuroimaging in DSM-5*

*Samet Kose (TAP-USA)*

#### **Hall B • Dual Conference 1**

*Discussant moderators*

*Bengi Semerci (TAP)*

*Neslihan Emiroglu (Turkey)*

*DSM-5 and disruptive mood dysregulation disorder*

*Gabriella Carlson (USA)*

*Metabolic side effects of psychotropic drugs*

*Harold Carlson (USA)*



### Hall C • Workshop 3

#### CINP-TAP

##### Basic aspects of schizophrenia: **Part-1**

Discussant moderators

Serdar Dursun (TAP-Canada)

Cyril Hoschl (CNPS)

Speakers

Brian Leonard (CINP)

Gregers Wegener (CINP)

**14:30-15:00** Coffee Break

**15:00-16:30**

### Hall A • Joint Symposium 4

#### CNPS - TAP

##### Progress in neurophysiology and treatment of depression spectrum

Discussant moderators

Serdar Dursun (TAP-Canada)

Samet Kose (TAP-USA)

##### The opposite effect of mood induction on amygdala response to emotional stimuli in bipolar patients and healthy controls: An fMRI study

Jiri Horacek (CNPS)

##### QEEG-based prediction of response to antidepressant modalities

Cyril Hoschl (CNPS)

##### Clinical and pharmaco-EEG changes after a single intravenous infusion of ketamine in patients with treatment-resistant unipolar depression

Martin Brunovsky (CNPS)

##### Longitudinal efficacy of TMS treatment in depression

Oguz Karamustafalioglu (TAP)

### Hall B • Symposium 5

#### Pediatric consultation-liaison psychiatry and psychopharmacology

Discussant moderators

Turner Turkbay (TAP)

Mucahit Ozturk (TAP)

##### Psychopharmacological treatment difficulties and coping methods in psychiatric comorbidities of epilepsy

Aynur Akay (Turkey)

##### Psychiatric issues in pediatric organ transplantation

Ozlem Ozel Ozcan (Turkey)

##### Psychopharmacological treatment difficulties and coping methods in hematology and cardiology consultations

Onur Burak Dursun (Turkey)

##### Consultation-liaison psychiatry and management of diabetes mellitus

Didem Oztop (Turkey)

##### Management of childhood eating disorders in collaboration with pediatrics

Yasemen Isik (Turkey)

### Hall C • Workshop 4

#### CINP-TAP

##### Clinical aspects of schizophrenia: **Part-2**

Discussant moderators

Serdar Dursun (TAP-Canada)

Dost Ongur (TAP-USA)

Cyril Hoschl (CNPS)

Speakers

Brian Leonard (CINP)

Gregers Wegener (CINP)

**16:30-17:30**

### Hall A

Moderator

Cengiz Han Acikel (TAP)

##### Lecture-1: A meta-analysis of the efficacy and tolerability of 15 antipsychotics in multiple treatments of 40,000 patients with schizophrenia

Stefan Leucht (Germany)

**17:30-18:00** *Coffee Break*

**18:00-19:30**

**Hall A • Course 10**

*How to conduct a metanalysis?*

*Stefan Leucht (Germany)*

**Hall B • Workshop 5**

*How to prepare scientific articles for publication?*

*Dost Ongur (TAP-USA)*

**Room 2 • Course 11**

*From depression to mania: How can a reliable differential diagnosis in youth with mood disorders be made?*

*Rasim Somer Diler (TAP-USA)*

**21:00-23:00**

**Hall A • Social Program And Workshop-6**

*Turkish classical music and it's role in therapies*

*Hanefi Ozbek (Turkey)*

**18<sup>th</sup> April 2014**

**07:00-08:30**

**Room 1 • Course 12**

*From depression to mania: How to treat the youth with mood disorders?*

*Rasim Somer Diler (TAP-USA)*

**Room 2 • Workshop -7**

*Neuroimaging in psychiatric disorders*

*Samet Kose (TAP-USA)*

**Room 3 • Course 13**

*Critical and effective reading techniques of scientific articles: How can statistical evaluation be inferred in articles?*

*Selim Kilic (TAP)*

*Cengiz Han Acikel (TAP)*

**Room 4 • Meet The Experts - 2**

*Child and adolescent psychiatry specialist hours Treatment difficulties and coping strategies in children and adolescents with OCD*

*Discussant Specialists*

*Mucahit Ozturk (TAP)*

*Kagan Gurkan (Turkey)*

*Case Scenarists*

*Senem Basgul (Turkey)*

*Esra Cop (Turkey)*

*Murat Coskun (Turkey)*

**08:30-09:00** *Breakfast*

**09:00-10:30**

**Hall A • Joint Symposium 5**

**AsCNP-CCNP-TAP**

*Update on biomarkers and novel drug targets in psychiatric disorders*

*Discussant moderators*

*Xin Min Li (CCNP)*

*Samet Kose (TAP-USA)*

*Novel drug targets for the treatment of depression: Is the glutamate era arriving?*

*Feyza Aricioglu (TAP)*

*Reactive aldehydes: What are their roles in neuropsychiatric disorders?*

*Glen Baker (CCNP)*

*Interaction of cytokines and the serotonin transporter: A new target for the treatment of mood disorders*

*Yuan-Hwa Chou (AsCNP)*

*Oligodendrocyte dysfunction in schizophrenia: Mechanism and target of treatment*

*Xin Min Li (CCNP)*

**Hall B • Symposium 6**

*An update on Alzheimer's disease from theory to the clinical practice*

*Discussant moderators*

*H. Murat Emul (TAP)*

*Recep Tutuncu (PD TAP)*

*Risk factors for Alzheimer's disease*

*Omer Yaci (Turkey)*

*PET studies in Alzheimer's disease*

*Ebru Findikli (Turkey)*

*Biomarkers in Alzheimer's disease*

*Burcu Goksan (Turkey)*

*The role of immune system in Alzheimer's disease: Where are we in terms of Alzheimer's disease vaccine?*

*Ozlem Erden Aki (Turkey)*

*An update on the treatment of Alzheimer's disease*

*Isin Baral Kulaksizoglu (Turkey)*

**Hall C • Symposium 7**

*Risk management in pediatric population*

*Discussant moderators*

*Yanki Yazgan (Turkey)*

*Kagan Gurkan (Turkey)*

*How to reduce mania risk when prescribing antidepressants in children and adolescents*

*Neslihan Emiroglu (Turkey)*

*The risk of suicide with SSRIs and prevention*

*Fevziye Toros (Turkey)*

*Delirium management and treatment in children and adolescents*

*Ibrahim Durukan (TAP)*

*Management of adolescent self-mutilation*

*Cem Gokcen (Turkey)*

**10:30 -11:00 Coffee Break**

**11:00-12:00**

**Hall A • Satellite Symposium-2**

*Individual touch in treatment of schizophrenia and bipolar disorders*

*Moderator*

*Mesut Cetin (TAP)*

*Schizophrenia*

*Mesut Cetin (TAP)*

*Bipolar Disorders*

*Haluk Savas (TAP)*

**11:30-12:30 Poster presentations (153-304)**

**12:00-13:00 Lunch**

**13:00-14:30**

**Hall A • Symposium 8**

*Treatment of schizophrenia: Quo vadis?*

*Discussant Moderators*

*Cyril Hoschl (CNPS)*

*Samet Kose (TAP-USA)*

*Recognition and management of negative symptoms in schizophrenia: Past, present and future*

*Ali Saffet Gonul (TAP)*

*Recognition and management of cognitive symptoms in schizophrenia: Past, present, and future*

*Peter Haddad (BAP)*

*Recognition and management of depressive symptoms in schizophrenia: Past, present and future*

*Serdar Dursun (TAP-Canada)*

*Recognition and management of treatment resistance in schizophrenia: Past, present, and future*

*Serdar Dursun (TAP-Canada)*

**Hall B • Joint Symposium 6**

**WPA-TAP**

*Focus on comorbidity: From theory to the clinical practice*

*Discussant Moderators*

*Yuan-Hwa Chou (AsCNP)*

*Erhan Kurt (TAP)*

*Default mode network functional connectivity in patients with temporal lobe epilepsy and comorbid depressive and anxiety symptoms*

*Liubov Shmeleva (Russia)*

*Mild depression and normal sadness: Language diagnostic criteria*

*Daria Smirnova (Russia)*

*Psychiatric comorbidity in diabetes mellitus type I and type II and the role of personality in glycemic control*

*Olga Karpenko (Russia)*

*Course of panic disorder and comorbidity*

*Alexey Pavlichenko (Russia)*

**Hall C • Symposium 9**

*Eating disorders: From different perspectives*

*Discussant Moderators*

*Mecit Caliskan (Turkey)*

*Psychiatric aspects of obesity*

*Atila Erol (TAP)*

*Obesity as a psychiatric illness*

*Numan Konuk (TAP)*

*Binge eating disorder*

*Alican Dalkilic (TAP-USA)*

*Eating disorders in terms of endocrinological (dys)regulation*

*Selma Bozkurt Zincir (TAP)*

**14:30-15:00 Coffee Break**

**15:00-16:00**

**Hall A • Satellite Symposium - 3**

*A life with ADHD*

*Speakers*

*Bengi Semerci (TAP)*

*Cengiz Basoglu (TAP)*

**16:00-16:30 Coffee Break**

**16:30-18:00**



**Hall A • Debate-1**

*Moderator*

*Alican Dalkilic (TAP-USA)*

*What does psychiatric genetics promise to clinicians: Are we rowing up the stream?*

*Dost Ongur (TAP-USA)*

*Thomas G. Schulze (Germany)*

**18:00-18:30 Coffee Break**

**18:30-19:30**

**Hall A • Debate-2**

*Moderator*

*Serdar Dursun (TAP-Canada)*

*Is polypharmacy needed in psychiatry?*

*Mesut Cetin (TAP)*

*Yasin Bez (TAP)*

**Hall B • Literature Session**

*Will disruptive mood dysregulation disorder reduce false diagnosis of bipolar disorder in children? Bipolar Disord. 2012 Aug;14(5):488-969*

*Author*

*Gabriella Carlson (USA)*

*Discussant*

*Rasim Somer Diler (TAP-USA)*

**19:30-20:00 Coffee Break**

## 20.00-22:00

### Hall A • Symposium 10

*Individualized treatment in psychiatric practice*

*Discussant moderators*

*Umit Yasar (TAP)*

*Aytekin Sir (TAP)*

*Use of genomics approach in psychiatry: A focus to treatment response in depression*

*Umit Yasar (PD TAP)*

*Gene-environment interactions in psychiatric disorders: Translation of neuroscientific developments into personalized medicine.*

*Timur S. Syunyakov (Russia)*

*Pharmacogenetics and individualized treatment: How relevant are drug blood levels?*

*Cem Sengul (TAP)*

*Resistance to treatment and individualized treatment*

*Tayfun Turan (TAP)*

*The risk of drug interactions in daily practice of patients with schizophrenia treated with antipsychotics*

*Filiz Karadag (TAP)*

### Hall B • Symposium 11

*Highlights of DSM-5 changes in posttraumatic stress disorder*

*Discussant Moderators*

*Barbaros Ozdemir (TAP)*

*Cemil Celik (TAP)*

*Have intended DSM-5 changes achieved the purpose in PTSD?*

*Abdullah Bolu (Turkey)*

*Trauma and stress associated changes in DSM-5*

*Suleyman Akarsu (Turkey)*

*The impact of DSM-5 changes in trauma related disorders on clinical practice*

*Taner Oznur (Turkey)*

### Hall C • Symposium 12

*Complementary and alternative therapies in psychiatry*

*Discussant Moderators*

*Cicek Hocaoglu (Turkey)*

*Nahit Ozmenler (Turkey)*

*Socio- demographic factors and frequency In the use of complementary and alternative therapies in psychiatric patients*

*Erman Bagcioglu (Turkey)*

*The reasons for complementary and alternative treatments in psychiatric patients*

*Haniifi Kokacya (Turkey)*

*Which complementary and alternative treatment methods are used in psychiatric patients?*

*Mustafa Ari (Turkey)*

*Are complementary and alternative treatment methods beneficial and recommended in psychiatric patients?*

*Bulent Bahceci (Turkey)*

*Vitamins in the treatment of psychiatric diseases and their mechanisms of action*

*Hayriye Baykan (Turkey)*

### Room 1 • Course 14

*Cognitive behavioral therapy for anxiety disorders in children and adolescents - Part 2*

*Satwant Singh (UK)*

### Room 2 • Course 15

*Three states of depression Unipolar depression*

*Haluk Savas (TAP)*

*Bipolar depression*

*Erhan Kurt (TAP)*

*Depression in schizophrenia*

*Ozcan Uzun (TAP)*

### Room 3 • Course 16

*How should scientific articles be prepared? How to avoid the mistakes in planning, statistics, application, and writing that prevent publishing and leading to rejection of the manuscripts? Publishing in high impact journals*

*Hasan Herken (TAP)*

*Murad Atmaca (TAP)*

*Selim Kilic (TAP)*

*Cengiz Han Acikel (TAP)*

Sponsor: AstraZeneca 

**19<sup>th</sup> April 2014**

**07:00-08:30**

**Room 1 • Course 17**

*Evaluation of scientific productivity and academic career: What are the standards for universities and academics? Position of Turkey in world in terms of scientific productivity*

*Hasan Herken (TAP)*

*Hirsch Index and administration in academic psychiatry*

*Salih Selek (Turkey)*

**Room 2 • Course 18**

*Cognitive behavioral therapy for anxiety disorders in children and adolescents - Part 3*

*Satwant Singh (UK)*

**Room 3 • Meet The Experts 3**

*Child and adolescent psychiatry specialist hours Functional deficits and management in children with ADHD*

*Discussant Specialists*

*Bengi Semerci (TAP)*

*Yanki Yazgan (Turkey)*

*Case Scenarists*

*Sebla Gokce (Turkey)*

*Arzu Onal (Turkey)*

*Ayşe Burcu Ayaz (Turkey)*

**Room 4 • Course 19**

*Learning physiology*

*Huseyin Gunay (PD TAP)*

*Animal experimental studies about learning*

*Arif Demirdas (Turkey)*

**08:30-09:00 Breakfast**

**09:00-10:30**

**Hall A • Joint Symposium 7**

**BPA-TPA**

*Discussant moderators*

*Kemal Sayar (TAP)*

*M. Akif Ersoy (TAP)*

*Oxidative stress: From molecule to the clinic Role of nitric oxide in the pathogenesis and therapeutics of schizophrenia*

*Serdar Dursun (TAP-Canada)*

*Total antioxidant-oxidant equilibrium and new oxidative stress markers*

*Haluk Savas (TAP)*

*Effects of antidepressants on oxidative stress*

*Kadir Karakus (Turkey)*

*Effects of antipsychotics on oxidative stress*

*Kadir Demirci (Turkey)*

**Hall B • Symposium 13**

*Lifelong womanhood states*

*Discussant moderators*

*Ismet Kirpinar (Turkey)*

*Nazan Aydin (TAP)*

*Do hormones or emotions fluctuate?*

*Esra Yazici (Turkey)*

*Periodic states: Premenstrual dysphoric disorder*

*Elif Oral (Turkey)*

*Women suffering from depression*

*Neriman Ustaoglu Aras (Turkey)*

*Postpartum psychosis: Is it different from the other psychoses?*

*Ismet Kirpinar (Turkey)*

**Hall C • Workshop 8**

**CINP-TAP Basic aspects of anxiety: Part-1**

*Discussant moderators*

*Murad Atmaca (TAP)*

*Ibrahim Eren (TAP)*

*Brian Leonard (CINP)*

*Gregers Wegener (CINP)*

**10:30-11:00** *Coffee Break*

**11:00-12:00**

**Hall A • Satellite Symposium 4**

*Targets for the treatment of Bipolar Depression*

*Oguz Karamustafalioglu (Turkey)*

*Haluk Savas (Turkey)*



**11:30-12:30** *Poster presentations (305-457)*

**12:00-13:00** *Lunch*

**13:00-14:30**

**Hall A • Joint Symposium 8**

*BAP-TAP Lithium: Multiple cellular and clinical effects*

*Discussant moderators*

*Nicol Ferrier (BAP)*

*Aysegul Yildiz (TAP)*

*Lithium: Still a major tool in the management of affective disorders*

*Peter Haddad (BAP)*

*Preclinical effects of lithium on networks, signalling and neurochemistry*

*Nicol Ferrier (BAP)*

*Translational studies on the effects of lithium*

*Nicol Ferrier (BAP)*

*Targeting networks and AKT/GSK3 signalling in the actions of mood stabilizers*

*Feyza Aricioglu (TAP)*

**Hall B • Joint Symposium 9**

*IBGAID-TAP Rational drug panel*

*Discussant moderators*

*Ismail Balik (IBGAID)*

*Mesut Cetin (TAP)*

*Why is rational drug use important?*

*Ahmet Akici (IBGAID)*

*Social Security Administration data on drug use in Turkey*

*Dr. Halil Akce (Turkey)*

*SUT studies*

*Hasan Karadag (Turkey)*

*TAP studies and reports*

*Nazan Aydin (TAP)*

**Hall C • Symposium 14**

*Neurobiology and Neuropsychopharmacology of obsessive-compulsive disorder*

*Discussant moderators*

*Rasit Tukul (Turkey)*

*Lutfullah Besiroglu (Turkey)*

*Neuroimaging findings in treatment of obsessive-compulsive disorder*

*Rasit Tukul (Turkey)*

*Cognitive functions in OCD*

*Pinar Cetinay Aydin (Turkey)*

*How does antidepressants work in OCD?*

*Lutfullah Besiroglu (Turkey)*

*Why OCD drugs are insufficient? How can we reinforce the effectivity?*

*Levent Sevincok (Turkey)*

**14:30-14:45** *Coffee Break*

**14:45 -15:45**

**Hall A • Satellite Symposium 5**

*Moderator*

*Mesut Cetin (TAP) Opening*

*Speakers*

*Clinical outcomes of various intervention strategies in the treatment with haloperidol decanoate*

*Nazan Aydin (TAP)*

*Sharing clinical experience*

*Hasan Herken (TAP)*

**15:45-16:00** *Coffee Break*

**16:00-17:00**

**Hall A • Breaking News - Dual Conference**

*Novel mechanisms and fast-acting treatments for depression and schizophrenia*

*Discussant moderators*

*Glen Baker (Canada)*

*Serdar Dursun (TAP-Canada)*

*Nitroprusside for schizophrenia*

*Serdar Dursun (TAP-Canada)*

*Esketamine for depression*

*Andreas Schreiner (Germany)*

**Hall B • Symposium 15**

*Depression treatment: General to particular*

*Discussant moderators*

*Orhan Dogan (Turkey)*

*Psychopharmacological approaches in treatment of depression*

*Erdal Ersan (Turkey)*

*Psychotherapeutical approaches in treatment of depression*

*Tunay Karlidere (Turkey)*

*Individualized approaches in treatment of depression*

*Orhan Dogan (Turkey)*

*New scopes in treatment of depression*

*Hulya Turgut (Turkey)*

**16:00-16:45**

**Hall C • Oral Presentations 1**

*Chairs*

*Recep Tutuncu, Yasin Bez*

**17:00-17:15** *Coffee Break*

**17:15-18:15**

**Hall A • Debate-3**

*Discussant moderator*

*Hakan Coskunol (Turkey)*

*What should be the goal in the treatment of alcohol use disorder?*

*Ilhan Yargic (TAP) - Cuneyt Evren (TAP)*

**Hall B • Workshop 9**

*CINP-TAP Clinical aspects of anxiety: Part-2*

*Discussant moderators*

*Samet Kose (TAP-USA) - Nesrin Dilbaz (Turkey)*

*Brian Leonard (CINP), Gregers Wegener (CINP)*

**18:15-18:30** *Coffee Break*

**18:30-20:00**

**Hall A Symposium 16**

*Recognition first attack psychosis and delicacies in management. How can we recognize the prodromal symptoms of schizophrenia?*

*Discussant moderators*

*Salih Battal (Turkey)*

*Servet Ebrinc (TAP)*

*Prodromal phase*

*Umit Basar Semiz (TAP)*

*All that glitters isn't gold: Differential diagnosis of first episode psychosis*

*M. Alpay Ates (TAP)*

*Pharmacological treatment delicacies in first episode psychosis*

*Ayhan Algul (TAP)*

*Treatments other than psychopharmacology: What are the required steps to increase compliance?*

*Adem Balikci (TAP)*

### **Hall B • Symposium 17**

*Attachment in dependency: A bridge between neurobiological and psychodynamic theories*

*Discussant moderators*

*Hulya Ensari (TAP)*

*Omer Ozbulut (TAP)*

*Findings about attachment in alcohol and substance dependency*

*Rabia Bilici (Turkey)*

*Neurobiology of behavioral attachment*

*Ilker Kucukparlak (Turkey)*

*Dependency and attachment from psychodynamic perspective*

*Serhat Citak (TAP)*

*Neurobiologic processes in drug reward and addiction: Insights from neuroimaging*

*Samet Kose (TAP-USA)*

*Treatment of dependency via attachment disorder approach*

*Hakan Coskunol (Turkey)*

### **Hall C • Symposium 18**

*Pharmacokinetic and pharmacodynamic solution in resistant psychiatric cases*

*Discussant moderators*

*Cem Sengul (TAP)*

*Hanefi Ozbek (Turkey)*

*General concepts, therapeutic drug monitoring, genotyping, phenotyping, controversial topics*

*Eylem Ozten (Turkey)*

*Therapeutic drug monitoring of antidepressants in clinical practice and combining antidepressants*

*Gokben Hizli Sayar (Turkey)*

*Is therapeutic drug monitoring adequate in prediction of clinical response in psychiatric cases? Finding more about p glycoprotein*

*Isil Gogcegoz Gul (Turkey)*

*Pharmacokinetics solutions in patients with treatment-resistant, CYP enzyme systems, fast and slow metabolizer*

*Gul Eryilmaz (Turkey)*

**20:00-20:15** *Coffee Break*

**20:15-22:00**

### **Hall A • Symposium 19**

*Individualized treatments in dependence and comorbid conditions: Administration of scientific data in clinical practice*

*Discussant moderators*

*Omer Gecici (TAP)*

*Cuneyt Evren (TAP)*

*Schizophrenia and dependence*

*Nesrin Dilbaz (Turkey)*

*Bipolar disorders and dependence*

*Asli Enez Darcin (Turkey)*

*Depression and dependence*

*C. Onur Noyan (Turkey)*

*Personality disorders and dependence*

*Serdar Nurmedov (Turkey)*

*Anxiety disorders and dependence*

*Hasan Kaya (Turkey)*

*Scales used in comorbid conditions*

*Saadet Merih Cengel (Turkey)*

### **Hall B • Symposium 20**

*Thyroid function disorders and treatment in psychiatric practises*

*Discussant moderators*

*Haluk A. Savas (TAP)*

*Osman Virit (TAP)*

*Psychotic disorders and thyroid functions*

*Osman Virit (TAP)*

*Anxiety disorders and thyroid functions*

*Feridun Bulbul (TAP)*

*Depression, bipolar disorders and thyroid functions*

*Ahmet Unal (TAP)*

### Hall C • Symposium 21

*Forensic psychiatry evaluations of sexual assault victims in context of Turkish Penal Code Law Number 102-103*

*Discussant moderators*

*Bengi Semerci (TAP)*

*Sakir Ozen (TAP)*

*Practices of Forensic Medicine Institute 6th Board regarding sexual assault victims' mental health evaluation*

*Hamdi Tutkun (TAP)*

*A 2-year experience and report about physical and mental health in Diyarbakir*

*Seref Simsek (Turkey)*

*Approaches and suggestions in cases which are frequent and difficult to decide*

*Halil Ozcan (Turkey)*

*What has been done for the victims and criminal children in sexual assault crimes?*

*Bengi Semerci (TAP)*

## 20<sup>th</sup> April 2014

09:00-10:30

### Hall A • Symposium 22

*Benzodiazepines in current practices*

*Discussant moderators*

*Omer Gecici (TAP)*

*Where are we according to benzodiazepine use prevalence in the world?*

*Abdullah Akpınar (Turkey)*

*Benzodiazepine use is useful*

*Murat Semiz (Turkey)*

*Benzodiazepine use is harmful*

*Fatih Canan (Turkey)*

*Benzodiazepine administration fields in our daily practices*

*Osman Yildirim (Turkey)*

### Hall B • Symposium 23

*Latest improvements in PTSD*

*Discussant moderators*

*Murat Gulsun (PD TAP)*

*Ali Doruk (PD TAP)*

*What does DSM-5 say about PTSD?*

*Mehmet Gunes (Turkey)*

*Neuroimaging findings in PTSD*

*Mehmet Cemal Kaya (TAP)*

*Biomarkers in PTSD*

*Mahmut Bulut (TAP)*

*Latest improvements in PTSD*

*Abdullah Atli (TAP)*

### Hall C • Symposium 24

*Childhood Schizophrenia*

*Discussant moderators*

*Ozgur Oner (TAP)*

*Ozcan Uzun (TAP)*

*Early signs, diagnosis and therapeutics of the prodromal phase of childhood schizophrenia*

*Ozhan Yalcin (Turkey)*

*Current data and approaches related to treatment of childhood-onset schizophrenia*

*Gul Karacetin (Turkey)*

*Strategies to manage challenges in psychopharmacological treatments of childhood-onset schizophrenia*

*Ayten Erdogan (Turkey)*

*Coping strategies for cognitive deficits in childhood-onset schizophrenia*

*Mine Elagoz Yuksel (Turkey)*

*How to manage agitation and aggression in emergency service*

*Kayhan Bahali (Turkey)*

### Room 1 • Course 20

*Cognitive disorders and treatment in elderly*

*Ismet Kirpınar (Turkey)*

*Erdem Deveci (Turkey)*

### Room 2 • Course 21

*Scientific article literacy*

*Orhan Dogan (Turkey)*

10:30-11:00 *Coffee Break*

11:00-12:00

*Hall A • Award Ceremony & Closing Remarks*

12:00 -13:00 *Lunch*

13:00-15:00

*Hall A • Oral Presentations 2*

*Chairs*

Atilla Erol, Numan Konuk

*Room 1 • Course 22*

*Psychopharmacology in general medicine practices*

*Discussant moderators*

*Ismet Kirpinar (Turkey)*

*Psychotropic medicine usage in hepatic and renal failure*

*Serap Oflaz (Turkey)*

*Psychotropic drug interactions*

*Hulya Guveli (Turkey)*

*Room 2 • Workshop 10*

*Hypnosis in psychiatric disorders*

*M. Kerem Doksat (Turkey)*

*Room 3 • Course 23*

*Schema therapy*

*Alp Karaosmanoglu (Turkey)*

### ***Poster Presentations Program***

*We kindly request to hang on posters between PP-001 and PP-152 on Thursday April 17<sup>th</sup>, 2014 at 09:00.*

*We kindly request to hang on posters between PP-153 and PP-304 on Friday April 18<sup>th</sup>, 2014 at 09:00.*

*We kindly request to hang on posters between PP-305 and PP-457 on Saturday April 19<sup>th</sup>, 2014 at 09:00.*

*Poster discussion will be done between 11:30 and 12:30 at Poster Area. Poster owners should be next to their posters during this time. Posters should be removed after 19:00. Congress staff will be remove posters which are not removed by the owners.*

### ***Poster Presentations Jury Members***

Nazan Aydin (Moderator)

Murad Atmaca

Cengiz Han Acikel

Erhan Kurt

Alpay Ates

Recep Tutuncu

Murat Erdem

Bengi Semerci

Murat Emul

Samet Kose

## Oral Presentations Program

Oral presentations will be on April 19, 2014 between 16:00 - 16:45 and April 20, 2014 between 13:00 – 15:00.

Duration of presentation will be 8 minutes, discussion will be 3 minutes.

### Oral Presentations 1

**April 19<sup>th</sup> / HALL C, 16:00 - 16:45**

Chairs: Recep Tutuncu, Yasin Bez

S-1 *Modeling Schizophrenia: Effects of a Psychotomimetic MK-801 on Behavioral Flexibility and Working Memory in Rats*  
Ales Stuchlik, Veronika Lobellova, Eva Brichtova, Anna Zemanova, Anna Stankova, Marie Entlerova, Tomas Petrasek, Iveta Vojtechova, Stepan Kubik, Karel Vales

S-2 *Neural Substrate of Place Navigation in The Moving World: Brain Circuits and Dynamic Tasks*  
Ales Stuchlik, Jan Svoboda, Petr Telensky, Stepan Kubik, Daniel Klement, Karel Vales

S-3 *Comparison Between Clinical Features and Residual Depressive Symptoms of Patients with Bipolar Depressive and Unipolar Depressive Disorder in Remission*  
Neslihan Akkisi Kumsar, Esma Yenilmez, Emel Koyuncu Kutuk, Nesrin Dilbaz

S-4 *Comorbid Psychiatric Disorders and Clinical Characteristics in Children and Adolescents with Obsessive-Compulsive Disorder: A Turkish Referred Sample*  
Canan Tanidir, Hilal Adaletli, Hatice Gunes, Ali Guven Kilicoglu, Caner Mutlu, Mustafa Kayhan Bahali, Tugce Aytemiz, Ozden Sukran Uneri

### Oral Presentations 2

**April 20<sup>th</sup> / HALL A, 13:00 - 15:00**

Chairs: Atilla Erol, Numan Konuk

S-6 *The Relationship Between Antioxidant Capacity and Antipsychotic Treatment in Patients with Bipolar Disorder*  
Abdullah Bolu, Emre Aydemir, Suleyman Akarsu, Gazi Unlu, Selma Bozkurt Zincir, Yasemin Gulcan Kurt, Murat Erdem, Ozcan Uzun

S-7 *Antipsychotic Effects of Atorvastatin and Melatonin in a Psychosis Model in Rats*  
Oytun Erbas, Volkan Solmaz, Huseyin Akseki, Dursun Delibas

S-8 *Neurox Effectiveness in the Treatment of Withdrawal Symptoms of Heroin Addiction*  
Nazira Islamovna Khodjaeva, V.k. Abdullayeva, Z.sh. Ashurov, Sh.kh. Sultanov, F.b. Pulatova

S-9 *Childhood and Adolescent Sexual Abuse and Relationship Between Attachment to Parent and Peer*  
Hatice Dogan, Didem Oztotop, Merve Uytun, Sevgi Ozmen, Selma Bozkurt Zincir

S-10 *Interaction of Biological Rhythm Variables and Internet Addiction in Patients with ADHD*  
Ahmet Zihni Soyata, Yagmur Gunduz, Duygu Kinay, Lutfi Ilhan Yargic

S-11 *The Problems of Using Psychotropic Medications in Family Practice*  
Tatiana Ivanovna Galako

S-12 *The Relationship Between Vitamin D Deficiency and Mental Development, Behavioral Problems and Autism*  
Ilknur Ucu, Onur Burak Dursun, Fatma Betul Ozgeris, Nezahat Kurt, Ibrahim Selcuk Esin, Zerrin Orbak, Ahmet Kiziltunc

S-13 *Discharge Against Medical Advice in a Psychiatric Unit*  
Ferzan Fikret Ergun, Ozlem Kizilkurt, Huseyin Unubol, Ishak Saygili, Umit Basar Semiz

S-14 *Mood Dysregulation in Children with Attention Deficit Hyperactivity Disorder: Its Effect on the Response to Methylphenidate Treatment and Functionality*  
Koray Karabekiroglu, Mirac Baris Usta, Murat Yuce

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## **Scientific Program Abstracts**

**JOINT SYMPOSIA**

[JS-1]

**Cognitive behavioral group therapy in obsessive compulsive disorder**

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Obsessive compulsive disorder (OCD), which is characterized by obsessions and compulsions, is usually a chronic, heterogeneous disorder with marked deterioration in social and vocational functioning. According to the World Health Organization, OCD is one of the top causes of illness-related disability worldwide. Although various pharmacological treatments are proposed as effective for the treatment of OCD cognitive behavioral therapy (CBT) represents an elegant option of treatment, either itself or together with pharmacological treatments. Behavioral therapy (BT) which aims behavioral change thorough the exposure and response prevention (ERP) has been using effectively but with partial successful since 1960's. Partial success that was achieved thorough BT was improved by adopting cognitive techniques and methods as from 70's. Although research conducted using individual CBT reported response rates up to 83%, as from 2000's Cognitive behavioral group therapy (CBGT) was proposed an advantageous alternative of treatment with similar effectiveness. However later research suggested that CBT in a group setting could be performed effectively, but that individual CBT was more effective. Nevertheless, it is difficult to know which CBT modality is more effective in the absence of head-to-head comparison. Taking into account above-mentioned consideration, we discuss pros and cons of CBGT for OCD. CBGT can be cost effective in comparison to individual therapy and has unique features like observational learning opportunity. On the other hand, subtle group factors such as lack of group cohesion or dysfunctional interpersonal interactions between the group members can be problematic and toxic to the group therapy process. Although research suggests that individual therapy was more effective for the OCD, to us preliminary preparation might increase the efficacy of CBGT.

**Keywords:** Obsessive compulsive disorder, cognitive therapy, behavioral therapy, psychotherapy, group

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[JS-1]

**Cognitive behavioral group psychotherapy for depression**

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Cognitive behavioral therapy (cbt) in the treatment of depression , effective as well as individual CBT. Best results are obtained with the implementation of group CBT within 12 - 16 weeks of group therapy, consisted of 4-8 people. Therapy conducted with the similar structure and content of individual CBT. Interpersonal factors psychoeducation and motivational factors can contribute positively to the group therapy process. Sessions are started with mood control, feedback on the previous sessions, and checking homework and agenda setting, group sessions is completed in 75 to 90 minutes. After agenda setting, specific cognitive and behavioral techniques studied with the participants during session, giving a psychoeducation on depression, sharing a cbt formulations for depression, identification of emotions and thoughts, recording daily automatic thoughts, revealing beliefs and examination of evidence supported this beliefs, common cognitive distortions are evaluated, then creating alternative beliefs and strategies implemented in ongoing group sessions.

Most of the group session is completed with getting feedback on session and implementing homework. Behavioral interventions includes, detecting events in the past that makes patients feel good , and in session activity planning, pleasure and mastery degree during the event is evaluated and recorded. Procrastination is one of the most negative behavioral strategies that can be worsened depressive symptoms. Motivation and time management strategies are also implemented for coping with procrastination. Defining problems and creating different solutions to solve the problems is another effective way that can be implemented in further group session. In further sessions identifying life problems and teaching problem solving techniques and, cope with possible early signs of depression are studied, and communication skills and empathy exercises and problem solving approaches are applied to specific situations for each member.

**Keywords:** cognitive behavioral group psychotherapy, depression

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[JS-3]

## EEE WPA-Servier Academy-new educational model for young researchers

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According to the decision of the 2<sup>nd</sup> Meeting of the Heads of WPA Zone 10 Psychiatric Societies (October 2012, Kharkov), a database for East European magazines in Russian has been created. It was also decided for an intensive magazine articles exchange within this database. In order to improve the quality of the material and to cover the International Psychiatric Congresses more deeply, the Heads suggested forming a group of young scientific observers. Within the framework of the WPA Educational Program, the East-European Educational WPA-Servier Academy has been established. On basis of references of national Societies 12 young researchers from Russia, Belarus, Ukraine, Georgia, Armenia, Azerbaijan, Kazakhstan, with equally good knowledge of Russian and English have been selected. During the years 2013-2014, this group shall be attending/attended major European Congresses (EPA and ECNP) and making reviews on the most interesting matters discussed at Congresses. After the reviews are edited by the supervisors, they will be added into the database and granted for publishing in various WPA Zone 10 magazines without limitation. This idea was for the first time put into practice at the EPA Congress in Nice, the first 11 reviews were forwarded for publication to the Presidents of Societies at the 3<sup>rd</sup> meeting (June 2013, Almaty). 15 reviews have been published already in psychiatric magazines of Russia, Belarus, Ukraine and Azerbaijan.

The next set of reviews were prepared by the members of EEE WPA-Servier Academy after the ECNP Congress in Barcelona and forwarded for publication in December 2013.

This approach definitely enhances scientific outlook of young researchers and is developing new skills in reports preparation. Distribution of such scientific information among psychiatrists of Post-Soviet countries on regular basis shall contribute to development of WPA Educational Program on our continent and raise the professionalism of specialists.

**Keywords:** educational model, researchers

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[JS-5]

## Oligodendrocyte dysfunction in schizophrenia: mechanism and target of treatment

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Schizophrenia is characterized by disturbances of perception, emotion, social functioning and cognition. Studies suggest that genetics, early environment, neurobiology, psychological and social processes are important contributing factors. Increasing evidence supports an important role of Oligodendrocyte (OL) in the pathogenesis of schizophrenia. Genome-wide gene expression analyses clearly have shown dysregulation of myelination-related genes. Neuropathological and neuroimaging studies demonstrated loss of oligodendrocytes and myelin abnormalities in the brains of schizophrenic patients. Furthermore, patients with various demyelination disorders have psychotic symptoms, indicating a correlation between demyelination and schizophrenia. The OL dysfunction hypothesis, however, has never been experimentally tested due to the lack of suitable animal models. We have revisited the cuprizone (CUP)-induced demyelination model, and found that a low dose (0.2%) of CUP caused OL dysfunction and demyelination primarily in the prefrontal cortex and the corpus callosum in C57BL/6J mice. Our data has found that the OL dysfunction, degeneration, and demyelination in this model were accompanied by the development of schizophrenia-like behaviors, and that enhancing remyelination by promoting OL proliferation and maturation significantly improved these behavioral changes.

**Keywords:** oligodendrocyte dysfunction, schizophrenia, treatment

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[JS-5]

## Reactive aldehydes: what is their role in neuropsychiatric disorders?

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The management of neurodegenerative disorders, including Alzheimer's disease (AD), Parkinson's disease (PD) and multiple sclerosis (MS), is one of the leading healthcare challenges in the fields of neurology and psychiatry. Although the aforementioned disorders appear to have different mechanisms of pathogenesis, they share a common finding of increased production of toxic reactive aldehydes in the central nervous system. These aldehydes, including acrolein, 4-hydroxy-2-nonenal, malondialdehyde, methylglyoxal, formaldehyde and 3-aminopropanal, are produced by a variety of endogenous sources including: membrane lipid peroxidation by reactive oxygen species; metabolism of monoamines and polyamines; and catalytic activity of primary amine oxidase. Reactive aldehydes can readily form adducts with nucleophilic groups in amino acids, nucleic acids and aminophospholipids, resulting in disruption of protein and cell membrane function, inhibition of DNA, RNA and protein synthesis and interference with mitochondrial pathways. There have been reports of increased aldehyde content in the cerebrospinal fluid of AD, PD and MS patients. Investigators have also reported increased aldehyde adducts in the hippocampus and adducts co-localized with neurofibrillary tangles in AD patient brains. Several in vitro studies have demonstrated that reactive aldehydes can promote formation of  $\beta$ -amyloid oligomers and protofibrils and induce tau phosphorylation, the major pathological hallmarks of AD. Primary amine oxidase, the enzyme responsible for production of methylglyoxal and formaldehyde, has been shown to be over-expressed and co-localized with  $\beta$ -amyloid deposits in cerebral blood vessels of AD patients. In PD, there are reports of increased aldehyde content and aldehyde-modified  $\alpha$ -synuclein in the substantia nigra of patients. Interestingly, increased aldehyde content was found in the hippocampus and substantia nigra of patients exhibiting pre-clinical AD and PD pathology, respectively, suggesting that reactive aldehyde production may be an early event in the progression of these disorders. In MS patients, it was discovered that increased aldehyde content was present in oligodendrocyte-like cells in active lesions of patients. One promising strategy in treatment of these neuropsychiatric disorders is the reduction of reactive aldehyde levels in the central nervous system. Trials with antioxidant therapy have produced largely conflicting results in AD in PD, although several further investigations are now underway. While antioxidants should reduce the rate of lipid peroxidation, there are multiple additional sources of endogenous reactive aldehyde generation. Another approach may include directly sequestering the aldehydes with drugs containing nucleophilic functional groups. The sequestration of acrolein with the hydrazine drug hydralazine has been shown to be beneficial in an animal model of MS, however, these studies have not been carried out in the clinical population. We have investigated the actions of the antidepressant hydrazine drug, phenelzine and its active metabolite  $\beta$ -phenylethylidenehydrazine (PEH) and found that both compounds sequester the reactive aldehydes mentioned above and reduce the formation of formaldehyde from methylamine by inhibiting primary amine oxidase. The possible clinical implications of these actions of these drugs will be described.

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**Keywords:** reactive aldehydes, neuropsychiatric disorders

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[JS-6]

## Mild depression and normal sadness: Language diagnostic criteria

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**Objective:** High rates of depression are viewed with some degree of skepticism due to the issue of validity and reliability of psychiatric diagnoses. The difficulties in the diagnostic differentiation of ordinary sadness and depression in the continuum of depressive states, and the existence of false-positive diagnoses of depression are identified. Incorrect diagnostics of mild depressions is related to clinical

interpretation of thinking content and structure within the depressive triad. Whereas nonverbal (motor) and affective components are similar to variations of normal sadness in healthy individuals, associative component reveals the most sensitive psychopathological unit, which is represented in language changes.

**Methods:** The study sample of 124 patients aged  $41.85 \pm 11.89$  years (67% female) was taken from Russian native speakers diagnosed with mild depression (D) in primary care and consulted at the University Psychiatry Department. 77 healthy persons (65% female) (H), including 35 healthy persons with reactions of normal sadness (NS), were observed as controls. Speech was studied using a number of standard psycholinguistic procedures at the superficial and deep levels of language. Statistical data analysis included descriptive methodics, nonparametric analysis (U-criteria Mann-Whitney, test by Wald-Wolfowitz,  $p < 0,05$ ), mathematic modeling of discriminate analysis ( $\lambda$ -Wilks; method Standard).

**Results:** Lexical-stylistic sublevel of speech in D was characterized by verbosity (D-311.18 $\pm$ 11.43 words in text; H-197.25 $\pm$ 11.24), inversive word order (D-124(100%);H-5(6.49%)), narration (D-106(85.48%);H-56(72.73%)) dominated over reasoning (D-18 (14.52%);H-21(27.27%)), communicative discourse signs (P-124(100%);H-9(11.69%)), increased number of phraseologisms (P-3.74;H-1.21), tautologies (P-3.77;H-1.44), repetitions (P-4.42;H-1.82), inversions (P-4.00;H-1.08), ellipsis (P-3.73;H-1.60). Lexical-grammar sublevel contained more pronouns of all types with the prevalence of personal (P-124(100%);H-54(70.13%) pronouns, continuous form verbs (P-116(93.55%);H-26 (33.77%)) in past tense (P-124(100%);H-2(2.6%)). Syntactical-stylistic sublevel represented the prevalence of simple (P-99(79.84%);H-2(2.6%)) sentences, truncated and impersonal (P-84(67.74%);H-7(9.09%)) types.

Component analysis of patients' speech demonstrated the distortion of quality and reduction of semantic component (over evaluated existential and family categories, diminished cognitive and altruistic categories, overestimation of communicative and hedonic categories over the self-realization and social status).

In accordance to clinical criteria, the sample of mild depression was subdivided onto subtypes (anxious, asthenic-hypodynamic, melancholic) where appropriate language differences were also revealed.

Speech in NS, in comparison to H, was impoverished by ellipsis (NS-1.60, H-1.21), tautologies (NS-1.66,H-1.22) and lexical, semantic repetitions (NS-1.97,H-1.69). Tempo of speech was reduced due to defaults (NS-1.71,H-1.38). Persons used preferentially verbs in continuous form (NS-54.29%,H-16.67%) in present tense (NS-88.57%,H-47.62%).

Mathematical modeling proved the hypothesis about importance of language criteria and significance of verbal markers for diagnostics and differentiation of mild depression and normal sadness (98%,  $\lambda$ -Wilks=0.0007; $p < 0.001$ ).

**Conclusions:** 1) Mild depression and state of normal sadness are characterized by definite psycholinguistic features, which reflect cognitive dysfunction and thought strategies significantly related to the symptoms of leading hypothymic affect and signs of mood deviation. 2) In mild depression and state of normal sadness, the speech is distorted both in structure and in semantics. 3) The structure of affective component significantly determines the whole mental status and is represented in speech, so the sensitivity of linguistic markers in diagnostics of mild depression and normal sadness is revealed.

**Keywords:** language, mild depression, diagnosis, psycholinguistics

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[JS-7]

## Antidepressants and their effects on oxidative stress

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Major depressive disorder is a common mental disorder. Increasing evidences suggests that major depression is associated with increased oxidative stress and lipid peroxidation. Many studies indicate that, reactive oxygen species induce neuronal damage and they have an important role in the pathophysiology of depression. Oxidative stress is defined as the imbalance between production of reactive oxygen species (superoxide radical, hydrogen peroxide and hydroxyl radical) and reactive nitrogen species (peroxynitrite, ONOO<sup>-</sup>) and their insufficient decomposition by the antioxidative defense system. In normal physiological conditions, reactive oxygen species and reactive nitrogen species are produced continuously and they are effectively controlled or eliminated by intracellular and extracellular antioxidant defense systems. This antioxidative defense systems involves enzymatic antioxidants; superoxide dismutase, glutathione peroxidase, glutathione reductase, catalase, and paraoxonase and nonenzymatic antioxidants; reduced glutathione, provitamin A, vitamin C and E, coenzyme Q10, carotenoids and trace elements like copper, zinc or selenium. High oxygen consumption, high amount of polyunsaturated fatty acids and iron and low activities of antioxidant enzymes makes sensitive brain to oxidative damage. In high

concentrations, reactive oxygen species lead to damage of components of the cell, including proteins, lipids and DNA. Antidepressants are widely used in the treatment of major depression and other psychiatric disorders and their use are increasing with each passing day. The exact mechanisms of action of antidepressants are unknown but they may act by suppressing production of several proinflammatory cytokines and reactive oxygen species, reactive nitrogen species or enhancing antioxidant defense systems such as antioxidant enzymes. In vitro studies were conducted to investigate the antidepressants effects on antioxidant and oxidant system. These studies revealed antioxidant related effects and their protective effects against oxidative stress for antidepressant drugs. Moreover, it has been suggested that, some antidepressants may be pro-oxidant at high doses in in vitro studies. In animal studies, different animal models were used to investigate the oxidant and antioxidant effects of antidepressant drugs. Most of animal studies suggested that antidepressant drugs decrease oxidative stress and modulate the antioxidant enzyme activities. In recent years, an increasing number of studies have focused on the potential effects of antidepressant treatments on oxidative stress and antioxidant status in humans. Most of human studies have shown that, antidepressant drugs have antioxidant properties and they reduce increased oxidative stress, when they are used to treat the patients, in consistency with the findings of in vitro and animal studies. Also in some studies, antidepressants did not modify any oxidative and antioxidative parameters or induced oxidative stress in patients. Therefore, to elucidate the effects of antidepressants on oxidative and nitrosative stress we need the well-designed studies. In addition, it has been shown that some of the classic antioxidants causes antidepressant like effects and these are indicates us new targets for antidepressant treatment.

**Keywords:** antidepressants, oxidative stress, depression

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[JS-7]

## Effects of antipsychotic drugs on oxidative stress

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Schizophrenia is a severe chronic debilitating psychiatric disease that affects almost 1% of the world's population. Etiology of schizophrenia is still not completely understood. There has been an increasing number of studies which indicate that reactive oxygen species may play a crucial role in the pathogenesis of schizophrenia, genetic factors aside. Tardive dyskinesia and extrapyramidal side effects are frequently observed side effects of treatment with especially older generation (typical) antipsychotic drugs. It is suggested that oxidative stress may responsible for etiology of tardive dyskinesia that may develop after antipsychotic treatment. The treatment of schizophrenia is multifactorial, with antipsychotic medications comprising a major part of treatment.

Oxidative stress is a common term, which generally used to describe the unbalanced situation between oxidants and antioxidants, in favor of oxidants. Under physiological conditions, reactive oxygen species can be produced. If the excess amount of reactive oxygen species cannot be detoxified by antioxidant defense mechanism, cellular damage would be occurs (lipid peroxidation, DNA damage etc.). The controversial data was also reported in the literature on oxidative stress markers in schizophrenia patients. Abnormalities in the antioxidant defense system and a major decrease in antioxidant levels were determined in schizophrenic patients. Several studies have shown differences for the activities of antioxidant enzymes. Antipsychotic drugs are widely used in treating schizophrenia. Since the relationship between schizophrenia and oxidative stress showed, many studies have been performed about the possible protective effects of antipsychotic drugs on oxidant/antioxidant system and lipid peroxidation. The effects of antipsychotic drugs on oxidant, antioxidants and lipid peroxidation have become a subject of curiosity. It has also been suggested that some older generation antipsychotics may have shown pro-oxidant effects by increasing the cellular damage, especially in brain. Some antipsychotic drugs were reported to have neuroprotective effects against oxidative stress at the cellular level. This panel aims to provide information about the effects of antipsychotic drugs on oxidative stress.

**Keywords:** antipsychotic drugs, oxidative stress

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[JS-8]

## Translational studies on the effects of lithium

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In preclinical experiments, lithium has a myriad of actions. A brief review of the main actions of lithium will be given concentrating on its effects on monoamines, on signal transduction pathways and on neuroplasticity. It is not clear which of these many actions are important for lithium's unique clinical profile. One way around this problem is to do studies of lithium in normal human subjects to investigate which cellular effects of lithium appear to have significant effects in the human subject. An example of such a study is given below. However, it should be noted that this technique might not provide all the answers since it is conceivable that lithium's important clinical effects are only evident, when it is given to people who are unwell with disturbed physiology.

A recent randomized placebo controlled study of lithium involving 24 healthy men will be described. There is preclinical evidence from our group and others that one of the important actions of lithium is to attenuate the release of dopamine without change in postsynaptic dopamine receptors and it is being proposed that the anti-manic properties of lithium derive from this effect. In our study, mania was modeled by the administration of methylphenetamine. Sustained attention, known to be disturbed in mania, was assessed during functional magnetic resonance imaging. Within the lithium group, response times were slowed and the effects of methylphenetamine on functional magnetic resonance imaging contrast diminished suggesting that lithium is associated with reduced dopamine release in humans. Further examples of the translational approach will also be reviewed. A series of studies have investigated the putative neuroplastic effects of lithium. Changes in neuroplasticity markers have been seen in rat studies of lithium but the equivalent human studies are negative. There is uncertainty over the effect of lithium on grey matter volumes in MRI scans in controls and in bipolar disorder and this evidence will be discussed. Finally, studies examining the biochemical and neuroendocrine effects of lithium in normal controls will be reviewed and contrasted with data from animal studies and studies of bipolar disorder. All these findings will be discussed in the context of current theories of lithium's mechanism(s) of clinical action.

**Keywords:** translational studies, lithium

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[JS-9]

## Why the rational use of medicines is important?

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Medicine is one of the basic health care products needed for protecting, promoting the health and wellbeing, etc. For a sustainable health care service, it is mandatory to use medicines with regard to rational principles. World Health Organization (WHO), defined rational use of medicines (RUM) as "Patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest cost to them and their community." Since its definition, over the past 30 years many activities have been conducted for promoting RUM. Despite these activities, irrational use of medicines (IUM) still continues to be one of the significant public health problems.

In time, particularly in recent years, the number, the variety and the use of medicines has dramatically increased. This increase has brought some affirmative improvements (i.e. new medication opportunities) as well as some important health care problems (i.e. treatment failures, drug resistance, health care problems related to medication error, drug interactions, increased health care costs). Furthermore, the knowledge which physicians, patients and other people involved in the drug utilization process need to know increases day by day, in parallel with the increase in the knowledge about treatments and medicines. This situation brings along the lack of knowledge and information pollution. These problems, which are characterized as IUM, are the major health care problems in countries. All health care professionals, particularly physicians assume primary responsibility for these problems. What extent the health care professionals move away from the RUM principles in their field, they become the source of problems. Therefore, it's needed to conduct training and informing

activities particularly for physicians who are the key people for the solution as well as other health care professionals. Psychopharmacology is a special area, which specific developments encountered and RUM principles had to be put in practice in all levels. In this congress, it's believed that this RUM subjected panel will contribute to the need for the information exchange. As stated above, in this panel the importance and the subject of RUM will be discussed in detail.

**Keywords:** rational drug use, treatment, psychopharmacology

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**SYMPOSIUM****[S-1]****Childhood trauma and dissociation in patients with bipolar disorder**

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Traumatic experiences during childhood are frequently emphasized in the etiology of bipolar disorder as well as many other psychiatric disorders. In bipolar patients with a history of childhood trauma, studies have shown that the age of disease onset age is earlier, the number of affective episodes is higher, the rate of rapid cycling is increased and psychotic symptoms as well as suicide attempts are more common. Dissociation, which is characterized with changes in or deterioration of the normal integrative functions of memory, identity and consciousness, manifests in many psychiatric disorders. Some studies have demonstrated dissociative symptoms to be present in psychotic disorders such as schizophrenia, anxiety disorders and in borderline personality disorders and that, there is a relationship between childhood traumatic experiences and dissociative symptoms. Additionally, there are fewer studies and case reports in literature investigating the relationship between bipolar disorder and dissociation. These researches have shown that in bipolar disorder patients with high dissociation scores, the onset of the disease may be earlier and treatment responses may be lower.

**Keywords:** childhood trauma, dissociation, bipolar disorder

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**[S-1]****Bipolar disorder comorbidity with dissociative and conversion disorders**

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The prevalence of bipolar disorder (BD) was determined to be 0.4-1.1%. However, the lifetime prevalence estimates of bipolar spectrum disorder are now placed at least 5% of the general population. Psychiatric comorbidities are common in the patients with BD. Some authors report the incidence rates of lifetime comorbidity in BD as high as 70%. Bipolar patients with a history of childhood trauma have an earlier age of onset, have more affective and rapid cycling episodes, have more psychotic symptoms and suicide attempts. Latalova et al found that bipolar patients had higher DES scores compared to healthy volunteers.

Although comorbidities are common in DD, cases in which BD is comorbid with DD is generally overlooked because dissociative symptoms obscure and impair the individual's self-perception and self-report.

In a study by Jans et al, affective disorder co-morbidity is found 71% among adult patients with dissociative disorders.

Foote et al found that a dissociative disorder diagnosis was more strongly associated with suicidality or self-harm than any other diagnosis.

Studies show that 1 to 2.1% of patients with DID had completed suicide, with an incidence of 61 to 72%, who have attempted suicide.

Studies conducted in patients with the most complex dissociative disorder, dissociative identity disorder (DID), have found between 34% and 86% have histories of self-mutilation. Patients with DD have been reported to have used more methods of self-injury and started to injure themselves at an earlier age than patients who have not dissociated.

Conflict with others and difficulty with boundaries as well as frequent re-victimization in subsequent relationships are all too common. Emotional dysregulation occurs frequently in this subset and may be the precipitant of psychiatric treatment.

There is evidence that patients with DD may drop out of cognitive behavioral treatments, indicating that programs that do not specifically address dissociation may not be well tolerated.

Atypical antipsychotic drugs that block both D2 and 5-HT2A receptors may be of use in treating complex trauma cases with "psychotic features" although auditory hallucinations and voice hearing in subjects with trauma disorders could be conceptualized as dissociative rather than psychotic in some cases.

Most medications (e.g., antidepressants, anxiolytics) are prescribed for comorbid anxiety and mood symptoms, but these medications do not specifically treat the dissociation. Presently, no pharmacological treatment has been found to reduce dissociation. Although

antidepressant and anxiolytic medications are useful in the reduction of depression and anxiety and in the stabilization of mood, the psychiatrist must be cautious in using benzodiazepines to reduce anxiety as they can also exacerbate dissociation. In treating patients with DID, there are reports of some success with selective serotonin reuptake inhibitors (SSRIs), tricyclic antidepressants, monoamine oxidase inhibitors, beta blockers, clonidine, anticonvulsants, and benzodiazepines in reducing intrusive symptoms, hyperarousal, anxiety, and mood instability. Other possible suggestions for pharmacological interventions for DID include the use of prazosin in reducing nightmares, carbamazepine to reduce aggression, and naltrexone for amelioration of recurrent self-injurious behaviors.

**Keywords:** dissociative disorders, bipolar disorder, comorbidity, treatment.

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[S-1]

## Conversion disorder, dissociation, comorbidity

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Conversion disorder (CD) is defined as the emergence and course of one or more symptoms, which are caused by psychological conflicts or needs affecting the voluntary motor or perceptual functions. Although CD can be seen at any time between early childhood to late old ages, it is reported to be most common between the 15-35 years of age. In a general hospital setting 5 to 16% of all psychiatric patients have conversion symptoms. In Turkey, among outpatients who were admitted to a primary health care center, the lifetime prevalence of conversion symptoms was 48.2%. In western societies, the rate of CD is 1-3% in clinical populations whereas in non western societies rate for CD is about 10%. CD is more prevalent among females compared to males with a ratio ranging between 2:1 to 10:1. CD is also more prevalent in rural areas, developing countries, low socioeconomic classes, among under educated people and those with relatively low medical knowledge.

Conversion disorder is generally accompanied by a neurological or psychiatric disorder. Comorbidities significantly affect the prognosis and the treatment of CD symptoms. The most common psychiatric comorbidities for CD are mood disorders, anxiety disorders, dissociative disorders and somatoform disorders. Personality disorders also accompany CD. The comorbidity of dissociative disorders interferes with the treatment of primary disorder further complicating the prognosis.

**Keywords:** conversion, dissociation, comorbidity

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[S-1]

## Dissociative disorders in DSM-5

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The DSM and ICD formulations originate in Janet's conceptualization of dissociation, which he termed "de'sagre'gation mentale". Janet postulated that a failure of integration of mental elements was the fundamental aspect of hysterical (i.e. dissociative and conversion) disorders.

In DSM-5, possession experiences are included in the diagnostic criteria of dissociative identity disorder (DID) as well as in related types of other specified dissociative disorders possibly, non-dissociative psychiatric disorders with an onset in adulthood compensate. Downloaded by this difference by possession experiences accompanying the primary disorder. Dissociative subtypes of schizophrenia, depression, and PTSD may be among them. Experiences of possession seem to be a common final pathway of adaptation to traumatic stress in the spectrum extending from normality to pathological. Last but not least, future studies may lead to development of revised diagnostic criteria (e.g. requirements for a minimum of severity and chronicity) for adolescent DID and allied dissociative disorders in

updated versions of the DSM-5 to exclude dissociative phenomena possibly normative or rather acute or transient for this age group. DSM-IV-TR portrays DID by means of two dissociative phenomena: amnesia and the presence of alter personalities. DSM-IV-TR also notes that DID patients may manifest flashbacks, voices, and conversion symptoms. Dell proposed a revised concept of DID that he called "major dissociative disorder." He organized the previously replicated findings about DID into three diagnostic criteria: a) pervasive dissociation (i.e., memory problems, depersonalization, derealization, flashbacks, somatoform dissociation, and trance); b) partially dissociated manifestations of an alter personality (i.e., child voices; internal struggle; persecutory voices; partially dissociated speech, thoughts, emotions, impulses, and actions; temporarily dissociated knowledge/skills; disconcerting experiences of self-alteration; and self-puzzlement); and c) fully dissociated manifestations of an alter personality (i.e., time loss, "coming to," fugues, being told of forgotten behavior, finding unexplainable objects among one's possessions, and finding evidence of one's previous unknown actions). Research on DID has repeatedly reported that DID patients manifest memory problems; depersonalization; derealization; identity confusion; trance; ego-alien, passive influence experiences such as the Schneiderian first-rank symptoms of "made" feelings, "made" impulses, "made" actions, influences playing on the body, thought insertion, and thought withdrawal; child voices; persecutory voices; voices commenting; voices arguing or conversing; somatoform/ conversion symptoms; time loss; fugues; finding evidence of one's previously unknown actions; and flashbacks.

Spiegel et al. made the following recommendations for DSM-5: 1. Depersonalization Disorder (DPD) should derealization symptoms as well. 2. Dissociative Fugue should become a subtype of Dissociative Amnesia (DA). 3. The diagnostic criteria for DID should be changed to emphasize the disruptive nature of the dissociation and amnesia for everyday as well as traumatic events. The experience of possession should be included in the definition of identity disruption. 4. Dissociative Trance Disorder should be included in the Unspecified Dissociative Disorder (UDD) category.

**Keywords:** dissociative disorders, DSM-5, phenomenology

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[S-1]

## A comparison of psychotic symptoms in schizophrenia and dissociative disorders

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The nature of some symptoms are very complicated and most of the time it is hard to determine whether these symptoms are dissociative or psychotic. The psychotic symptoms, which were described by Diagnostic Statistical Manual (DSM) may be seen also in dissociative disorders. In a study dissociative identity disorder (DID) patients had higher positive symptoms scores on the positive and negative symptoms scale (PANSS) compared to schizophrenia. There are evidences that childhood traumas (CTs), especially physical and sexual abuse are increasing the dissociative and psychotic symptoms which seen in schizophrenic patients. CTs are also a well-known, common etiologic factor for dissociative disorders. Hallucinations are one of the most common psychotic symptoms in schizophrenia and dissociative disorder. Phenomenological and cognitive differences of hallucinations in dissociative disorders and schizophrenia are still not clearly putted forth. There were different criteria's accepted for specifying, which types of hallucinations should be the focus of clinicians effort. There have been some phenomenological specialties offered for distinguishing them properly. Metacognitive beliefs, thought suppression, belief about hallucinations are concepts, which have shown associated with hallucinations. Similarly, insight and its cognitive components are studied in schizophrenia and those studies revealed its associations with hallucinations. This debate has aimed to review the phenomenological features of psychotic symptoms which seen both in schizophrenia and dissociative disorders, and has focused on a hypothetic cognitive model, which has been suggested for auditory hallucinations.

**Keywords:** childhood trauma, dissociative disorders, metacognition, psychotic symptoms, schizophrenia

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[S-2]

## Executive functions in children and adolescents with attention deficit hyperactivity disorder

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ADHD is now increasingly recognized as developmental impairment of executive functions (EFs), the brain's cognitive management system. Executive function (EF) is a set of self-regulatory mechanisms for planning, organizing, directing, and managing cognitive processes and emotional responses.

Children with ADHD have serious difficulties with EF in so many areas that some psychiatrists and psychologists have proposed renaming this disorder as EF disorder or EF deficit disorder. Many of the executive dysfunctions described earlier are found in children with ADHD including difficulties with priority and time management, planning and organization, initiating and completing tasks in a timely manner, difficulty shifting cognitive set, a high level of procrastination, forgetfulness and poor working memory.

Barkley proposed the hypothesis that attention-deficit/ hyperactivity disorder (ADHD) symptoms may be due to EF deficits. In a meta-analysis of 83 studies, children and adolescents with ADHD exhibited significant deficits compared to those without ADHD in neuropsychological measures of EF; the EF domains that showed impairments included planning, spatial and verbal working memory, response inhibition, and vigilance.

The ES is mediated by various networks in the frontal, parietal and occipital cortices, the thalamus and the cerebellum. It is linked through a series of circuits connecting every region of the central nervous system. The circuits originate in the dorsolateral prefrontal cortex (PFC) / orbitofrontal cortex (OFC), project through the striatum, synapse at the level of the globus pallidus, substantia nigra and the thalamus and finally return to the PFC forming closed loops. Each circuit regulates specific functions. The circuit that is most responsible for coordinating EF is located primarily in the frontal lobe. Functional imaging studies have implicated the PFC as the primary site of cortical activation during tasks involving EF.

There is not yet full agreement regarding exactly which functions should be classified as EFs. But there is a general agreement that there were three core EFs: 1) inhibition [inhibitory control, including self-control (behavioral inhibition) and interference control (selective attention and cognitive inhibition)], 2) working memory (WM), and 3) cognitive flexibility (also called set shifting, mental flexibility, or mental set shifting and closely linked to creativity). From these, higher order EFs are built such as reasoning, problem solving, and planning.

The therapeutic effect of the stimulants in ADHD is associated with their effects on the catecholamine system. Impaired neurotransmission causing executive dysfunction occurs because of abnormalities of the dopamine transporter. All currently approved pharmacotherapies for ADHD, both stimulants and non-stimulants, work by potentiating neurotransmission in the PFC. In ADHD subjects, single doses of the non-stimulant atomoxetine produced selective effects on response inhibition in the absence of effects on attention and memory. Although a norepinephrine reuptake inhibitor, atomoxetine acts primarily via presynaptic norepinephrine transporter blockade and elevates dopamine in selective cerebral regions.

**Keywords:** working memory, attention deficit hyperactivity disorder

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[S-3]

## Therapeutic approaches to anxiety disorders comorbid to ASD

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Autism spectrum disorders (ASD) are characterized by social communication difficulties and repetitive, stereotyped behavior. Comorbid features exist in children and adolescents with ASD in addition to the core symptoms and it is known that these patients are at increased risk for anxiety and anxiety disorders. 40% of children with ASD fulfill diagnostic criteria for an anxiety disorder which specific phobia, obsessive compulsive disorder and social anxiety disorder are suggested to be the most frequent ones. There is still disagreement over

whether anxiety symptoms in ASD are related with core ASD aspects or they just constitute comorbid conditions. In addition, recognition and measurement of anxiety in children with ASD is another problem since low intellectual functioning, which is highly associated with ASD, restricts evaluation of these patients and might lead to underdiagnosis of comorbid conditions. Anxiety associated with ASD contributes to overall impairment in these patients and psychosocial and pharmacological treatment approaches are considered to improve the life quality of both patients and their parents. Although there are treatment options for anxiety disorders in typically developing children, treatment strategies for children with ASD are mostly the adaptation of these options. Antidepressants and antipsychotics are suggested to be effective to treat anxiety in ASD. Furthermore, cognitive-behavioral therapy appears as an effective treatment option for co-occurring anxiety in older and high-functioning children with ASD. We need more double blind controlled studies to test the efficiency of these psychopharmacological and psychosocial treatment options in ASD group. This part of the panel will focus on literature regarding therapeutic approaches to anxiety disorders prevalent in ASD.

**Keywords:** anxiety, autism spectrum disorders, treatment

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[S-3]

## Therapeutic approaches to attention deficit hyperactivity disorder comorbid with autism spectrum disorders

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Many individuals with Autism Spectrum Disorders (ASD) exhibit behaviors and symptoms associated with Attention Deficit Hyperactivity Disorder (ADHD). Comorbidity of ADHD symptoms in individuals with ASD have generally been reported to be between 30 and 50% although even higher rates (e.g., as high as 78%) have been reported in clinical samples.

Individuals with co-occurring ASD and ADHD are more severely impaired than those with no ADHD. They exhibit significant deficits in social processing, adaptive functioning, executive control and motor problems, which cause major challenges with educational achievement, socialization and behavioral management in these children. ADHD symptoms are similar whether occurring alone or comorbid with autism, so children with ASD may benefit from the same systematically tested, evidence-based treatments that have been proven successful in typically developing children with ADHD.

Studies have demonstrated the efficacy of methylphenidate treatment of ADHD symptoms in children with ASD, however, the response rates were lower and discontinuation due to adverse effects were higher compared with the non-ASD ADHD population. Two additional medications (i.e., clonidine and atomoxetine) have also reported to be effective in randomized placebo-controlled trials. Atypical antipsychotic agents have been demonstrated to reduce ADHD symptoms in children with ASD, who have co-occurring irritability and agitation. Compared with typically developing children with ADHD, children who have ASD, as in other developmental disabilities seem to have lower effect sizes with these medications and are more sensitive to side effects, including emotionality and agitation.

In this presentation, recent studies on treatment of children with ASD comorbid with ADHD will be presented together with our clinical and research experience.

**Keywords:** treatment, Attention deficit hyperactivity disorder, comorbidity, autism spectrum disorders

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[S-3]

## Pharmacotherapy choices for irritability in children and adolescents with Autism Spectrum Disorders

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Autism spectrum disorders (ASD) are a class of neurodevelopmental disorders, which affect 1 out of 110 children. Children and adolescents diagnosed with ASD often suffer from severe irritability, including aggression, self-injurious behavior, and tantrums (about 68% of patients). Managing irritability with an effective and safer agent can improve overall functioning in individuals with autism and alleviate burdens on the individual and family. Research into the pharmacotherapy of severe behavioral disturbance in ASD has primarily focused on the atypical antipsychotics. The Food and Drug Administration (FDA) approved risperidone and aripiprazole for the treatment of irritability associated with ASD. Risperidone was approved by FDA in 2006 for the children and adolescents of age 5 to 16, with a maximum recommended dose of 3 mg/d. Aripiprazole was approved by FDA in 2009 for the patients of age 6 to 17. The usual recommended clinical dose for maintenance is between 5 and 15 mg/d. Clozapine, olanzapine, quetiapine, ziprasidone, paliperidone are other atypical antipsychotics which are used for irritability in children and adolescents with ASD. Relatively small sized controlled studies of the anticonvulsants and mood stabilizers (lithium, divalproex sodium, lamotrigine, levetiracetam) for irritability in youth with ASD have generally demonstrated negative results. Alpha2 adrenergic agonists such as guanfacine may be useful for milder irritability symptoms in ASD. One recent study investigated use of the glutamatergic modulator and antioxidant N-acetylcysteine (NAC) for irritability in ASD. In this double blind, placebo-controlled trial, subjects in the NAC group, compared to the placebo group, demonstrated significant improvement in irritability as measured. Additional research is needed to understand the potential role of alpha2 adrenergic agonists and NAC better, as in the treatment of irritability in ASD.

**Keywords:** ASD, irritability, treatment

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[S-3]

## Therapeutic approaches to mood disorders comorbid to ASD

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**Objectives:** High rates of aggressive behaviors and severe mood disturbances are documented in children with autism spectrum disorders (ASD) and limited literature documented the presence of bipolar disorder (BPD) comorbidity in ASD populations. Also there is a high incidence of bipolar disorder (BPD) in family members of children with ASD. There is a small number of randomized controlled trials about the treatment protocol of BPD in youth with ASD and the comorbidity rates between these two disorders and there is no treatment guideline for autistic children with bipolar disorder. But this presentation aimed to make a summary of the current consensus on pharmacological treatment options and to briefly review the evidence-based pharmacological agents.

**Method:** Original articles, reviews and guidelines about the treatment of bipolar disorders and autism in children and adolescents were searched on Pubmed. Key words of "autism, bipolar disorder, mood disorder, pervasive developmental disorders, Asperger syndrome, irritability, mood dysregulation" were used while searching on Pubmed.

**Results:** Limited literature on the treatment of comorbid BPD in children with ASD suggests that first generation antipsychotics (haloperidol, chlorpromazine, thioridazine) and traditional mood stabilizers (lithium, carbamazepine) are minimally effective for the treatment of mania. On the contrary, in a recent secondary analysis of acute atypical antipsychotic monotherapy trials in BPD youth, acceptable tolerability and robust antimanic response to atypical antipsychotics in the presence of ASD comorbidity was reported. Atypical antipsychotics especially risperidone and aripiprazole seem to be first choice in the treatment of manic or mixed episodes in youth with ASD. The combination of fluoxetine or citalopram with atypical antipsychotics or mood stabilizers seems to be good choice for the acute phase of bipolar depression in youth with ASD.

**Conclusion:** The actual incidence of BPD in youth with ASD is probably underestimated. BPD should be borne in mind if a child with ASD refers with episodic irritability and aggressive attacks and have a family history of BPD. In the light of the current literature, atypical

antipsychotics seem to be more effective and tolerable than the mood stabilizers in children and adolescents with both ASD and BPD. There is an urgent need for randomized controlled trials with large samples, for the treatment of BPD in youth with ASD.

**Keywords:** autism spectrum disorders, mood disorder, comorbidity, treatment

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[S-5]

## Psychopharmacological treatment difficulties and coping methods in hematology and cardiology consultations

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Psychiatric disorders co-occur at least in 1/3 of children with chronic health conditions. Additionally the risk for psychological adjustment problems in these children is nearly twice the risk of healthy children. Cardiologic and hematologic diseases are among the leading chronic health conditions of childhood and overlap with psychiatric problems in different areas. In this presentation, we'll discuss the psychiatric aspects of most prevalent hematologic and cardiologic problems of childhood in the light of recent scientific literature.

**Keywords:** child psychiatry, heart disease, hematologic disease

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[S-6]

## PET imaging in Alzheimer disease

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Alzheimer disease was first described in 1907 by Alois Alzheimer. From its original status as a rare disease, Alzheimer disease has become one of the most common diseases in the aging population, ranking as the fourth most common cause of death. Alzheimer disease is a progressive neurodegenerative disorder characterized by the gradual onset of dementia. The pathologic hallmarks of the disease are beta-amyloid (A $\beta$ ) plaques, neurofibrillary tangles (NFTs), and reactive gliosis. Current diagnosis of Alzheimer disease is made by clinical, neuropsychological, and neuroimaging assessments. Developing new approaches for early and specific recognition of Alzheimer disease at the prodromal stages is of crucial importance. The search for therapies that can modify the course of AD to slow, delay, or prevent it is clearly the most important challenge. That search has in turn led to a search for imaging markers that can be used as outcomes in drug discovery and trials.

Imaging has played a variety of roles in the study of Alzheimer disease (AD) over the past four decades. Initially, computed tomography (CT) and then magnetic resonance imaging (MRI) were used diagnostically to rule out other causes of dementia. PET scanning is a powerful imaging technique that enables in vivo examination of brain functions. It allows for noninvasive quantification of cerebral blood flow, metabolism, and receptor binding. PET scanning helps in understanding the disease's pathogenesis, making the correct diagnosis, and monitoring the disease's progression and response to treatment. More recently, a variety of imaging modalities including structural and functional MRI and positron emission tomography (PET) studies of cerebral metabolism with fluoro-deoxy-D-glucose (FDG) and amyloid tracers such as Pittsburgh Compound-B (PiB), FDDNP, Florbetapir F 18 (AMYVID), flutemetamol F18 and their a combination have shown characteristic changes in the brains of patients with AD, and in prodromal and even presymptomatic states that can help rule-in the AD pathophysiological process.

In the future, efforts to develop specific neuro ligands for neuropsychiatric diseases, may further enhance the sensitivity of PET scanning for early diagnosis of Alzheimer disease and may provide a biologic marker of disease progression.

**Keywords:** PET imaging, Alzheimer disease

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[S-6]

## Biomarkers in Alzheimer's disease

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In 1984, clinical diagnostic guidelines for probable Alzheimer's Disease (AD) were created by the National Institute of Neurological and Communicative Disorders and Stroke and the Alzheimer's Disease and Related Disorders Association. The 1984 criteria have been successfully used for 27 years. In the past decade, molecular biomarkers have been developed. Hence, revised criteria were published in 2011 for the clinical diagnosis of AD, mild cognitive impairment due to AD, and preclinical AD.

It is well known that the pathological processes in the CNS of AD patients start more than a decade before the first symptoms of AD are noticed. Due to the advances in research, brain imaging and tests based on cerebrospinal fluid (CSF) biomarkers have been implemented to provide evidence of an ongoing pathophysiological progression of AD and it is also possible to make a pre-dementia diagnosis of AD. Reduced levels of beta-amyloid in the CSF, elevated levels of CSF tau or hyperphosphorylated tau are found in individuals with AD. Extracellular accumulations of amyloid  $\beta$  ( $A\beta$ ) in senile plaques and intracellular neurofibrillary tangles of hyperphosphorylated tau (P-tau), the total amount of tau (T-tau) which reflects the intensity of neuroaxonal degeneration are revealed as characteristic hallmarks of AD. Both cross-sectional and longitudinal studies have evaluated the association between the core CSF AD biomarkers and preclinical AD. CSF levels of  $A\beta$ 42 alone or in combination with T-tau or P-tau have been associated with future development of cognitive impairment in cognitively normal individuals at the time of lumbar puncture. Increased T-tau:  $A\beta$ 42 ratio or low levels of CSF  $A\beta$ 42 have been found to predict conversion to minimal cognitive impairment in cognitively normal. A large multicenter study found that the combination of  $A\beta$ 42:P-tau ratio and T-tau predicted a sensitivity of 83% and a specificity of 72% for progression to AD. Hansson et al. found that CSF level of  $A\beta$ 42, T-tau and P-tau among MVI patients could predict progression to AD after a follow up period of 5.2 years. In differential diagnosis among other dementias, P-tau may have a greater value since it is more AD-specific. T-tau is not AD-specific since increase levels of T-tau are also seen in head trauma, disease or acute stroke.

Biomarkers may provide early disease detection and lead to effective early treatment of AD. Apart from the core biomarkers, there are several candidate biomarkers of CSF and blood that need to be verified in future studies.

**Keywords:** Alzheimer's disease, amyloid $\beta$ , tau, biomarker

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[S-8]

## Recognition and management of depressive symptoms in schizophrenia; past, present and future

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Mood and anxiety disorder-related psychopathology, including anxiety and depression are very frequently present in patients with schizophrenia. This co-morbid psychopathology can significantly influence appropriate psychiatric management.

In this presentation, the prevalence of depressive symptoms in schizophrenia will be presented and discussed. In particular, there will be a discussion on the origins of negative symptoms and how to possibly differentiate these symptoms from depressive symptoms in patients with schizophrenia.

Furthermore, the impact of depressive symptoms on prognosis of schizophrenia, its severity, patient functioning and quality of life, as well as relapse and chronicity, will also be presented. The presentation will then focus on psychopharmacological evidence to support the efficacy of atypical antipsychotic medications and other available treatments in this area, and how they can be used to increase remission rates, reduce the risk of relapse and enhance functional outcomes.

**Keywords:** depressive symptoms, schizophrenia

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[S-9]

## Eating disorders in terms of neuroendocrine-molecular interaction

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There are three basic pillars for the development of eating disorders: genetic predisposition, neuroendocrine-molecular changes in the brain and metabolic response to it. As an outcome of neuroendocrine research, a close relationship was found between neuroendocrine functions and symptom complexes of psychiatric disorders such as eating disorders and mood disorders. For example, in particular of eating disorders as well as hypothalamic dysfunction, there are also known to be some specific changes including hypothalamic-pituitary-adrenal axis and gonadotropin secretion. These changes may be primary or secondary. Monoaminergic neurotransmitter peptides, which play an important role in the pathogenesis of psychiatric diseases, also control synthesis and secretion of the some hypothalamic-pituitary hormones. Additionally, hypothalamic hormones, widely available in the brain, produce specific effects via receptors and influence the functional activity of the brain neurotransmitter systems. Many hypothalamic hormones are believed to co-ordinate more complex behavior and function of internal homeostasis.

Certain hormones, neurotransmitters and other molecules, which might have effect in particular of eating disorders can be listed as follows: estrogen, serotonin, leptin, alpha melanocyte stimulating hormone, cholecystokinin, dopamine, noradrenaline, ghrelin, BDNF, NMDAR, agouti-related protein, neuropeptide Y, opioids and their receptors, thiamine, zinc, omega-3 acids. In this presentation, main neuroendocrine-molecular changes and interactions that occurs in the eating disorders are mentioned.

**Keywords:** eating disorders, neuroendocrine changes, molecular interactions

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[S-9]

## Binge Eating Disorder

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After first being described in 1959 as "night eating syndrome," binge eating disorder (BED) is now included as a formal diagnosis in DSM 5. BED is the most prevalent eating disorder (ED) in adults, seen all ethnic and cultural groups, and has 2% and 3.5% lifetime prevalence in males and females, respectively. Clinicians should consider BED diagnosis in individuals with recurrent episodes of binge eating occurring once a week or more, lasting 3 months or longer and characterized both by eating definitely larger amount of food in a similar period and under similar circumstances than most people would eat and by a sense of lack of control over eating during the episodes. The person must experience marked distress regarding binge eating and episodes should be associated with at least 3 of the following: eating much more rapidly than normal, eating until feeling uncomfortably full, eating large amount of food when not feeling physically hungry, eating alone because of embarrassment, and feeling disgusted with oneself, depressed, or very guilty after overeating. BED cannot occur exclusively during the course of anorexia or bulimia nervosa.

Risk factors for BED include childhood obesity, depression, low self-esteem, abuse history in childhood, critical comments about weight, strict and yo-yo dieting, and possible genetic predisposition. People with BED do not only face more social difficulties and have lower quality of lives, but also are prone to development of obesity, obstructive sleep apnea, metabolic syndrome or its components including diabetes, cardiovascular, gastrointestinal, and high lipid problems. BED patients usually binge on foods that are high in fat, carbohydrate, and salt. They unexpectedly may have vitamin and mineral deficiencies.

Treatment approaches in BED can be categorized into: self-help approaches aiming to manage binge eating and weight, medical/surgical interventions targeting underlying hormonal/metabolic problems, and psychopharmacological and psychological modalities aiming to address underlying and core symptoms and concurrent psychiatric conditions associated with BED. Bariatric surgery has been an effective tool in treating severe obesity, but obese patients with BED seem to have poorer outcomes and some continue to binge eat and gain weight after surgery. Cognitive behavioral therapy (CBT) can achieve 50% remission of bingeing and seems to be more effective than behavioral weight loss programs. Addressing comorbid psychiatric conditions, which reach as high as 60-70% in BED, by

pharmacological tools and CBT would likely provide extra benefits. Some reviews have concluded psychotherapeutic modalities are superior to pharmacological interventions in BED, yet there is good evidence of efficacy for few antidepressant, antiepileptic, and other medications and anecdotal evidence for some other agents. In addition psychotropic medications are proven to be effective in treating comorbid mood, anxiety, trauma, and/or substance abuse disorders that are frequently associated with BED.

Unfortunately most health care providers including psychiatrists and psychologists do not screen for BED and not attempt to treat or refer patients with BED, despite it is a formal DSM 5 disorder that cause significant suffering and morbidity and can worsen co-occurring medical and psychiatric problems. Screening and assessing individuals for BED and concurrent conditions at clinics and providing evidence based treatment options would likely improve quality of lives of patients and overall outcomes in BED.

**Keywords:** binge eating disorder, psychopharmacological treatment, eating disorders, bulimia, anorexia

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[S-10]

## Psychotropic drug interactions risk in daily clinical practice: a preliminary study on patients with schizophrenia spectrum disorders

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The chronic clinical course of schizophrenia, resistance to treatment, drug side effects, different responses of negative and cognitive symptom clusters to anti-psychotic medications with different receptor profiles may require combination therapy and thus antipsychotic poly-pharmacy. Although the frequency of poly-pharmacy may vary between 46% to 70% in different countries and years, most studies report antipsychotic poly-pharmacy in nearly half of the patients. Anti-psychotic poly-pharmacy was reported between 38.2 – 64.7% of patients with schizophrenia – spectrum of disorders in Turkey.

The aim of this report to present the data\* about the drug interaction risks in the patients with schizophrenia spectrum disorders (schizophrenia or schizo-affective disorder) receiving antipsychotic treatment in a provincial area of Turkey reflecting real world conditions. As far as we know, no study was undertaken to investigate the risk of drug interactions that these patients may experience in Turkey.

The baseline pharmacotherapy data of a prospective naturalistic study (Project Number: 2008TPF029) supported by the Committee of Scientific Research Projects of Pamukkale University were used in this report. The study sample consisted of 240 patients with schizophrenia spectrum disorders. Co-administration of antipsychotics and other psychotropic drugs for at least 4 weeks were recorded as poly-pharmacy. As individual treatment regimens all used medications for each patient, drug-drug interaction risks were evaluated via the internet site <http://www.drugs.com/> and; interaction information for healthcare professionals were used.

We found that 56.7% of our patients were under antipsychotic monotherapy, of 35.8% were treated with two antipsychotic medications. A total of 172 (71.7%) patients were taking medications with a risk of interaction, with 417 total drug interaction risks. 87.8% of the interaction risks were at a moderate level. Approximately one quarter of the patients (24.4%) were using medications with a major interaction risk. The majority of major interaction risks were QT prolongation (83.3%) risk, and 9.5% were risk of hypotension – serious bradycardia, 7.2% were the risk of changes in blood drug levels. Among the drug interactions risks related to QT prolongation, 26.2% had a warning of contra-indication. The medications with a risk of QT prolongation were ziprasidone, quetiapine, citalopram / escitalopram, clozapine and haloperidol. All of the major interactions that were related with drug blood levels consisted of quetiapine – carbamazepine interaction.

The present report suggested that an important percentage of patients are exposed to drug – drug interactions with ever increasing use of multiple medications in schizophrenia spectrum disorders, and among these interactions, most major risks were cardiovascular risks, and especially QT prolongation. Prospective studies with larger numbers of patients are needed in this topic.

**Keywords:** psychotropics, drug interactions, schizophrenia

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[S-10]

## Treatment resistant patient and personalized medicine

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Today, in clinical practice, factors such as signs and symptoms of mental illness and prior treatments and probable side effects of drugs are taken into consideration when clinician decides a proper treatment for a patient. However, psychiatric patients may exhibit interindividual variability in their responses to psychotropic drugs. Nevertheless, it takes longer duration for diagnose or make differential diagnosis of an illness since some disorders may exhibit similar symptoms. Thus, this variability affects response duration, compliance, effective and toxic levels of drugs and even may cause unresponsiveness. A longer duration for a drug to reduce symptoms or resistance to treatment may lead to poor life quality, disabilities, morbidity and mortality. Moreover, poor response to one treatment does not mean poor response to others. In general, fifty percent of psychiatric patients exhibit, somehow, resistance to treatment. Personal and environmental factors such as stress, smoking, feeding, ethnic background, genetic history and patients' genome influence treatment response.

Recently, research has focused on searching predictive factors, endophenotypes and biomarkers to help true diagnosis and to find a more effective treatment with less or no adverse effects. Endophenotypes are markers of an illness, which should not depend on clinical appearance symptoms that should be defined as a trait marker. Biomarkers are measurable characteristics that evaluate normal and pathogenic process, or response to treatment and may be a state or trait marker. For example, negative mood and anhedonia are endophenotypes for major depression, brain derived neurotrophic factors and oxytocin may be biomarkers for bipolar disorder, cognitive deficits such as verbal memory recall, executive functioning are endophenotypes for schizophrenia.

In recent years, significant advances have been made in the genetics of mental disorders. Genetic factors are target for personalized medicine to predict drug response and side effects. Most common psychotropics are substrates for CYP2D6, an enzyme, which belongs to cytochrome P450 enzyme family, to be considered as a biomarker. Because the genes coding cytochrome P450 enzymes are highly polymorphic, they lead to differential metabolism of psychotropics. The enzymes metabolic rates play a significant role in the efficacy and side effects of a psychotic drug. Therefore, ultra-rapid metabolizers may need high doses of substrates to be effective in treatment while poor metabolizers exhibit side effects even within normal dose ranges.

Genome-wide association studies (GWAS) have showed the relation between Single Nucleotide Polymorphisms (SNPs) and common psychiatric disorders such as schizophrenia, major depression, bipolar disorder. There also may be an association between efficacy and side effects of psychotropics and SNPs. For instance, a GWAS identified an association between one single locus at rs17390445 (on chromosome4p15) and relief of positive symptoms with ziprasidone treatment.

In conclusion, the studies showed that inter-individual differences determined clinical response and side effects of a psychotropic agent. In the near future, it seems that genetic markers will be promising tools for personalized treatment.

**Keywords:** treatment resistant patient, personalized medicine, psychiatry

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[S-11]

## Changes about "trauma" and "stress" in DSM-5

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DSM-5, The Diagnostic and Statistical Manual of Mental Disorders, was released at the American Psychiatric Association's (APA) meeting in May 2013 that is the fifth major revision. In DSM-5, Posttraumatic Stress Disorder (PTSD) is no longer included in Anxiety Disorders and included in a new chapter as Trauma- and Stress-or-Related Disorders. The Trauma-and-Stressor Related Disorders include Reactive Attachment Disorder, Disinhibited Social Engagement Disorder, Acute Stress Disorder, PTSD and Adjustment Disorders. Trauma- and Stress-or-Related Disorders reflect the close relationship between anxiety disorders, obsessive-compulsive and dissociative disorders. DSM-5 eliminates the distinction between acute and chronic phases of PTSD. The patient must have PTSD symptoms that persist for at

least 1 month after the traumatic event. The DSM-5 aimed to expand the definition of PTSD beyond the fear construct. DSM-5 draws a clear line about the traumatic event. The definition of trauma in PTSD indicates "Exposure to actual or threatened death, serious injury, or sexual violence." Sexual assault is specifically included. PTSD patients can be the actual victim or witness. Exposure to the trauma through electronic media, television, movies, and pictures is not considered as PTSD unless these traumatic events are work-related. There are four PTSD symptom clusters (There were three in DSM IV) a) Intrusion symptoms including dissociative reactions (dissociative reactions are flashbacks, derealization, and depersonalization.) b) avoidance symptoms c) Negative alterations in mood and cognitions (dysphoric type) d) alterations in arousal and reactivity. To satisfy the criteria for PTSD, there must be a minimum number of symptoms from each cluster: at least one of five re-experiencing symptoms, one of two avoidance symptoms, three of seven cognitions and mood symptoms, and three of six hyperarousal symptoms.

The number of symptoms increased from 17 in DSM-IV to 20 in DSM-5. There are new symptoms, namely persistent negative beliefs and expectations about oneself or the world, persistent negative trauma-related emotions, and risky or reckless behaviors. Diagnostic criteria have been suitable for children and adolescents. Separate criteria have been added for children aged 6 years or younger. Thus, there is not a separate child section in DSM-5.

**Keywords:** DSM-5, trauma, stress, changes

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[S-11]

## Effect of DSM-5 changes on clinical applications of trauma related disorders

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Given the incidence of encountering with traumatic life events and mental illnesses that are developing after trauma in the community, importance of the diagnosis of trauma-related disorders is emerging. Therefore, it is necessary to follow the changes in current diagnostic manuals. A number of diagnostic criteria have been changed with the publication of DSM-5 in May 2013. Specific diagnostic criteria have been defined for young children. While trauma-related diseases have been defined within anxiety disorders in DSM-IV, they are now being defined as a new individual set of diagnosis in DSM-V. The number of symptoms described in trauma related disorders was increased to 20 by the introduction of DSM 5. The number of symptom clusters defined for posttraumatic stress disorder (PTSD) has increased to four from three. The criteria of experiencing intense fear, anxiety and helplessness after the trauma and the acute and chronic markers (definitions) have been removed. Preschool and dissociative subtypes have been identified. In addition, unexpected loss of family members and relatives of the person due to natural causes have been removed from being a diagnostic criterion. Moreover, presence of at least one avoidance symptom has been set as a requirement for the diagnosis. All these changes in the diagnostic criteria are being estimated to reduce the rates of PTSD. On the other hand, it was noted that the redefined concept of PTSD by DSM- 5 have more overlap with complex PTSD diagnosis, which is a quite acceptable concept in trauma psychology.

**Keywords:** DSM-5, trauma related disorders

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[S-11]

## Did intended changes for DSM-5 achieve the purpose of post-traumatic stress disorder?

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One of the main changes in DSM-5 is associated with for post-traumatic stress disorder (PTSD). Previously (DSM-IV), PTSD were classified under the anxiety disorders group. In DSM-5, It is classified under the main heading of "trauma and stressor-related disorders" with psychiatric disorders with common etiological factors.

Diagnostic criteria of PTSD are now grouped under five main titles with DSM-5. These main titles are summarized as; having a serious trauma (A), re-experiencing the trauma (B), avoidance symptoms (C), negative cognition, mood related symptoms (D), aggressiveness, and hyperarousal symptoms (E).

Changes associated with the definition of traumatic event which causing psychiatric disorder are made. Definitions about subjective components of traumatic event in DSM-IV were removed, but instead it, definitions, which will help to identify the traumatic event were added. Briefly, criterion A (the traumatic event) has been tried to purify from subjective components and traumatic events were described in an objective way. Definition has been expanded, since items related with the impact of event over the patient have been removed.

Diagnostic criterion B is simplified with DSM-5. Borders of diagnostic criteria B were clarified with a definition of re-experiencing comprising dissociative features.

According to new criteria, diagnostic criterion C was completely organized as an item related to avoidance. Mood-related items were removed. Some authors have interpreted this situation as clearing the borders between PTSD and other mental disorders and highlighting the mood features of PTSD.

Criterion D consists new forms of mood symptoms and negative cognitions which took part in the old diagnostic criteria. According to some authors, mood symptoms in PTSD had the opportunity of expanded definition with these criteria.

E criterion carries the nature of a novelty for PTSD. By this criterion, aggression and impulsivity of patients with PTSD which are frequently encountered, are set out in a clear format.

PTSD identification in DSM-5 (especially criteria D and E) has been targeted to explain of many symptoms of patients without the need for some comorbid diagnosis. Unlike symptoms of anxiety in the DSM-IV, depressive symptoms were clearly defined. Remaining of anxiety symptoms so behind of depressive symptoms or the expression of depressive symptoms so clearly bring to mind the question that have DSM-5 tried to create compelling reasons to the fundamental change in the classification. Rigid and clear statements were used rather than more inclusive and expanded changes for the description of the traumatic event.

Another significant change in DSM-5 is identification of dissociative subtype. It is considered the identification of this subtype based on the hypothesis that some people's reactions to traumatic events are mainly in the form of dissociative reactions so that they reveal a coping strategy with intense anxiety and fear. In one aspect, this definition create open field to neurobiological studies and treatment-related researches, on the other hand it may cause legal problems. Even, there are comments that this situation might cause secondary gains.

These new criteria will be tested more accurately by clinical practices and studies. PTSD prevalence is reported to be similar in terms of DSM-IV and DSM-5 diagnostic criteria

**Keywords:** DSM-5, posttraumatic stress disorder

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[S-12]

## Vitamins in the treatment of psychiatric diseases and their mechanisms of action

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Vitamins are organic molecules that are required for health, growth and reproduction. Human body is unable to synthesize adequate amounts of vitamins, except vitamin D. Therefore, they should be obtained through diet via foods or supplements. Vitamin deficiencies are generally due to malnutrition, on the other hand, toxicity is usually due to over usage of vitamin supplements. Drug interactions may also effect serum vitamin concentration. For example, anticonvulsant therapy may result in deficiency of folic acid, or proton pump inhibitors may decrease the absorption of Vitamin B12.

Vitamins are also important in maintaining the mental health. Vitamin B9 (folate), Vitamin B12 (cobalamine), Vitamin B1 (thiamine), Vitamin B6 (pyridoxine) and vitamin E deficiencies have been known to cause mental dysfunction. Thiamine is essential for pentose-phosphate pathway and oxidative decarboxylation reactions and is important for brain functions. Wernicke's encephalopathy and Korsakoff's psychosis caused by thiamine deficiency. Vitamin B2 (riboflavin) is required as a cofactor (FMN and FAD) for many of the enzymes in human metabolism. Pyridoxine has a critical role in synthesis of many neurotransmitters (dopamine, noradrenaline, adrenalin, serotonin, histamine, GABA) associated with mental functions. Decreased levels of pyridoxine are usually seen in alcoholics, which lead to epileptic seizures, EEG abnormalities, depression and confusion. Vitamin B9 (folic acid) plays a basic role in one carbon metabolism and act as a cofactor for serotonin, noradrenaline, dopamine, DNA and phospholipid synthesis. Many of the studies showed that low folic acid levels are associated with mood disorders. Deficiency of Vitamin B12 (cobalamine) causes both neurological and hematological pathologies. Acting as a coenzyme in one-carbon transfer reactions, cobalamine deficiency is highly related to demyelination defects. Folic acid and vitamin B12 deficiencies may result in impaired synthesis of purine and pyrimidine bases. Hematologic findings of vitamin B12 deficiency may be masked by high doses of folic acid ingestion, but this condition will not delay psychiatric symptoms. Vitamin C has also a critical role in biosynthesis of neurotransmitters and it is essential for brain functions.

However, association between mental disorders and some of the other vitamins is not well established yet. Further investigations are needed to explain relationship between vitamins and psychiatric disorders.

**Keywords:** psychiatric disorders, vitamin

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[S-13]

## Which one is fluctuating? hormones or emotions?

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The lifetime prevalence of mood disorders in women is approximately twice that of men. The underlying causality of this gender difference is not well understood. There is increasing scientific attention to the modulation of the neuroendocrine system by fluctuating gonadal hormones. This presentation attempts to summarize our current state of knowledge on the role and potential relevance of estrogen and other sex steroids to psychiatric disorders specific to women from menarche to menopause as a general topic.

Although genetic, psychosocial and environmental factors clearly contribute to an individual's risk for depression and other mood disorders, substantial experimental data support an independent role for hormonal influences on the expression of mood symptoms. Estrogen is a potent neuromodulator and is known to alter the activities of multiple neurotransmitter systems including those involved in major depressive disorder. Unlike men, neurons throughout the female brain must be able to respond to the effects of rapid increases and decreases in estrogen levels that occur during the menstrual cycle. It is shown that ovarian hormones can alter synaptic plasticity in female rats and in further researches it is understood that neuronal function is fluid and dynamic and is programmed to respond to predictable changes in ovarian hormones during the reproductive period.

The sudden appearance of higher levels of estrogen in puberty alters the sensitivity of the neurotransmitter systems. Moreover,

the constant flux of estrogen and progesterone levels throughout the reproductive years, proceeds constant modification of the neurotransmitter systems. Premenstrual syndromes may be the result of an altered activity or sensitivity of certain neurotransmitter systems. Pregnancy and delivery produce dramatic changes in estrogen and progesterone levels as well as significant suppression along the HPA axis, possibly increasing vulnerability to depression. At menopause, estrogen levels decline while pituitary LH and FSH levels increase. The loss of modulating effects of estrogen and progesterone may underlie the development of perimenopausal mood disorders in vulnerable women.

All these results suggest a certain relationship between hormones and mood disorders and in recent studies role of hormones in treatment of mood disorders is discussed. Further studies may present a better understanding and treatment options about reproductive hormones and mood disorders especially 'reproductive depression'.

There are many studies about the relationship between hormonal fluctuations and mood disorders but there are few studies about the relationship between affective temperaments and reproductive cycles. Affective temperaments are known as antecedents of mood disorders so as mood disorders; affective temperaments may be awaited to have a concurrence of simultaneous fluctuations with hormones. Opening a preview to several projections of hormonal fluctuations to mood changes as well as projections of mood changes to hormonal fluctuations is aimed in the presentation. Affective temperaments, mood disorders and hormones are the subtopics and all will be discussed in the lightening of their interactions.

**Keywords:** hormone, mood, depression, affective temperament

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[S-13]

## Women suffering from depression

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Several factors have been considered to be the contributors for depression. Perinatal period is important for vulnerability to depressive disorders. Prevalence of Postpartum Depression changes between 14-29% in Turkey. Lifetime prevalence of Major Depressive Disorder is high in Eastern Turkey. Therefore, the real prevalence of postpartum depression is still unknown. We aimed to evaluate the depressive disorders and associated factors in a large sample of reproductive age women, who are not in prenatal or postnatal period.

We used General Health Questionnaire-28 and Edinburgh Postpartum Depression Scale as screening tests in 589 women between the ages of 15-49 in Erzurum. Associated factors were established with the socio-demographic questionnaire. Prevalence of Depressive Disorders was determined by SCID-I, severity of depression was assessed with Hamilton Rating Scale for Depression. General Assessment of Functionality, Brief Disability Scale, and Scale of Perceived Social Support from Family were administered to evaluate functionality, disability and social support.

Results of the study showed that 32.8% of women had Depressive Disorders. Being a widow or divorced, having low levels of education and income, being a housewife or worker, marriage and giving birth at an early age, having an unemployed spouse and possessing three or more children were associated with Depressive Disorders. While 84.0% of women who were diagnosed with depressive disorders presented with mild or moderate depression, 82.9% of them appeared to suffer from disability. We found a negative correlation between functionality, social support and severity of depression.

Since there is a high prevalence of Depressive Disorders throughout a woman's life, it is extremely important to consider all periods in terms of diagnosis and treatment.

**Keywords:** depressive disorders, reproductive age, women

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[S-13]

## Menstruation and premenstrual dysphoric disorder

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Since Hippocrates, it was defined that premenstrual changes such as sense of weight, headache, tinnitus, and be seen as small spots in front of eyes. Premenstrual syndrome (PMS) is a term that is commonly used to describe a group of emotional, behavioral, and physical symptoms that occur for several days before menstrual bleeding and calm during the menstruation. Premenstrual Dysphoric Disorder (PMDD) is severe form of PMS. PMS occurs in 20–32 % of premenopausal women, and PMDD affects 3–8 % of premenopausal women. Modern studies related with PMS started with Robert Frank in 1931. Various biological and psychological factors have been proposed to cause PMDD, including the absence of progesterone, abnormal serotonin function, altered endorphin modulation of gonadotropin secretion, lack of exercise, and poor dietary habits. Recently, it has been suggested that the cyclical course of PMS could be the result of a complex chain of psycho-neuroendocrine events triggered by normal ovulation rather than hormonal imbalance. PMDD described in the chapter of depressive disorders in DSM-V. We have two studies related with PMDD and PMS published in recent years; firstly, we scanned to the prevalence, clinical features and functionality in PMS within population of Atatürk University Medical Faculty. Severe PMS was found in 5.5% of the participants. According to our results, level of higher carbohydrate and junk food consumption and dysmenorrhea were related to higher premenstrual symptom scores. The presence of dysmenorrhea was significantly correlated with poorer school performance, including class attendance and/or concentration difficulties during class and exam performance/exam attendance. In our second study, participants diagnosed as PMDD with two prospective assessments of consecutive menstrual periods had significantly higher luteal serum BDNF and HSP70 levels compared with controls, and there was a significant positive correlation between serum BDNF and HSP70 levels. Premenstrual symptoms are one of the most common problem areas and PMDD is one of the depressive disorders of young women that adversely affect their academic performance and emotional status.

**Keywords:** premenstrual syndrome, premenstrual dysphoric disorder, menstruation

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[S-14]

## Cognitive functions in patients with obsessive compulsive disorder

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The literature related to cognitive dysfunction in OCD is primarily focused on executive dysfunction. Most psychology studies on OCD have examined information-processing bias. OCD researchers analyze cognitive function based on neuropsychology testing and clinical observation in the psychiatry. The literature concerning differences in verbal memory performance between OCD patients and healthy controls is inconsistent. Verbal memory performance is different in OCD patients, as they code words during objective verbal memory tests, whereas healthy individuals tend to use an organizational strategy, such as semantic relationships. OCD patients have difficulty formulating an organizational strategy, but are able to implement one once formulated. The inability to formulate an organizational strategy for information coding might be related to executive dysfunction.

Executive dysfunction appears to be the primary cognitive deficiency in OCD patients. Deficiencies related to memory are associated with faulty information processing and poor organizational strategy implementation. Most studies have reported that executive functions, including set shifting, verbal fluency, planning, and decision-making, are similar in OCD patients and controls. In addition, it is known that OCD patients make more perseverative errors, have more difficulty using feedback, and have delayed response during neurocognitive testing, all of which might be related to slow cognition or an increase in compulsive behavior in an effort to avoid making mistakes. The findings of neuroimaging studies support the existence of dysfunction in the

frontostriatothalamic pathway in OCD. Response inhibition and decision-making are cognitive functions that should be the target of future OCD research.

**Keywords:** obsessive compulsive disorder, cognitive function, memory, attention, executive function

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[S-15]

## Psychopharmacologic approaches in depression treatment

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Depression is one of the most common psychiatric diseases. Depression affects about one in ten people. Disability associated with depression is one of the most important health problems. Today, the most important approach in depression treatment is psychopharmacology. There are clinical and experimental studies to develop more effective treatment strategies. There is no consensus on individual treatment because the treatment response and its duration are varied between patients. There are no significant differences in terms of efficacy between antidepressant medicines. The treatment targets should be identified and the most suitable one should be preferred according to the patients' characteristics. 1) Definite diagnosis, 2) If possible, symptoms (eg: Agitation, insomnia, memory problems) 3) the prognosis should be assessed carefully. Acute treatment should be administered for active symptoms, maintained treatment should be administered to prevent early recurrence, and protective treatment should be administered to decrease the number of relapses and depression severity. In this presentation, we present you the treatment objectives, and the most important features of psychopharmacologic agents, we use.

**Keywords:** depression, treatment, psychopharmacology

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[S-15]

## New horizons in the treatment of depression

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In the treatment of depression, the target is the elimination of depressive symptoms, the acquisition of (regaining) functionality, and the prevention of relapses and recurrences. In the treatment of depression, in certain cases, it may become necessary to implement somatic therapies in addition to psychopharmacological and psychotherapeutic methods..

Of these treatments, the following are the main ones as follows: electroconvulsive therapy (ECT), magnetic seizure therapy (MST), transcranial magnetic stimulation (TMS), vagus nerve stimulation (VNS), deep brain stimulation (DBS), transcranial direct current stimulation (tDCS) and chronotherapeutic approaches such as sleep deprivation, sleep phase advance and light therapy.

ECT is a treatment method whose efficacy in the treatment of many psychiatric disorders has been proven. Its administration is based on the principle of creating generalized convulsions by stimulating brain tissue with electrical current. MST is a new treatment method that uses high doses of rTMS in order to induce seizures. MST is administered under anesthesia. MST seizures have shorter duration compared to ECT. It has been reported that MST causes fewer cognitive side effects. TMS is a technique aiming to generate low-level transient electric current in the cerebral cortex by a very strong magnetic field induced by a stimulating coil. TMS may change regional activities in the cortex by revealing cortical blood flow and cortical metabolic changes. When directly administered, TMS can lead to changes in gene expression patterns. In a study conducted with TMS, it was determined that the c-fos expression led to increases in thalamic paraventricular nucleus in mice. If TMS is administered repetitively and rhythmically, it is called rTMS. VNS is based on the stimulation of

the vagus nerve.

DBS shows its effect with the current generated with an electrode inserted in a small hole drilled in the skull. tDCS is performed by stimulating cortical neurons via low amplitude 1-3 mA current sent by the electrodes placed on the scalp. If sleep disorders frequently accompany depression, then sleep deprivation and sleep phase advance methods are considered. Once fully implemented, sleep deprivation provides an antidepressant effect. In light therapy, the importance of circadian rhythms is focused in terms of the biochemical, neuroendocrine and behavioral physiology. Externally applied light and light-dark cycles are the most important factors that regulate circadian rhythms. In practice, a broad-spectrum white light is the gold standard. In ideal applications, 10,000 lux of light is applied at least 30 minutes.

**Keywords:** depression, new methods, psychiatric somatic therapies

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[S-15]

## Personalized treatment for depression

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The response ratio for the drug treatment of depression is between 30-50%. In the first line treatment of depression, different antidepressants have similar efficacy in moderate depression, to that of antidepressant medication combined with specific psychotherapies. In order to provide personalized treatment for depression, it must be identified characteristics of individual. The principle of "There is not illness, there is patient" that it has been emerged before almost one hundred years, has been formed the basis of personalized treatment. Numerous factors affect the response to drug treatment and to psychotherapy. In the previous studies, these factors have been evaluated according to outcomes of treatment as retrospectively. In these times, it is accepted that the success of treatment depends on personalized treatment. The evidences are necessary for this application.

The better and more specific interventions are known as personalized medicine. In psychiatry, this approach includes the predictors of treatment response such as biological, genetic, behavioral, experiential, clinical, and environmental factors.

The aims of personalized treatment are to select the most appropriate drug for depression, to arrange therapeutic doses, to identify treatment efficacy, to predict side effects and drug interactions.

The predictors for personalized treatment could not yet be identified. The studies on this issue may review as follows:

1. Individual predictors: age, gender, genetic characteristics, metabolic rate (phenotype), personality structure, stressful or traumatic life events, patient treatment preference, family history of treatment response, adherence.
2. Clinical predictors: the subtypes of depression, clinical symptoms, comorbid illnesses, response of past treatment.
3. The characteristics of antidepressant: the pharmacodynamics and pharmacokinetic characteristics of antidepressant, mechanism of action, side effects, drug interactions.
4. The type of psychotherapy: interpersonal or cognitive therapy, relationship with the other features.
5. Biochemical and neuroendocrine predictors: neurotransmitter production or metabolism, receptor polymorphism, hypothalamic-pituitary-adrenal axis measures, urinary 3-methoxy-4-hydroxyphenylglycol, serotonergic measures in serum/platelets, dexamethasone-corticotropin releasing hormone tests,
6. Inflammatory predictors: cytokines, tumor necrosis factor-alpha, interleukin (IL)-1-beta, and IL-6, C-reactive protein,
7. Neuroimaging and physiological predictors: auditory evoked potentials, quantitative EEG, PET and fMRI studies,
8. Predictors of molecular genetics: Genetic factors affect the variation of response to drug treatment; they contribute for about 50% of side effects. Pharmacogenomics use the data emerged from the human genome to identify new targets for treatment and to predict drug responses. The elucidation of gene-environment interactions may help to understand the pathophysiology of depression and may provide predictors for a personalized depression treatment.

The studies regarding these probable predictors have not satisfactory results. The causes:

1. For personalized treatment, it may be necessary the larger sample than in traditional clinical trials.
2. To identify person-level predictors of treatment response may need to consider response across multiple episodes of depression.
3. To predict response to specific treatments may require combinations of several weak predictors rather than a single powerful one.

Replication is the first step in translating research findings to clinical tests or predictors. Even after replication, while use them must be careful. There is necessity numerous and various studies for personalized treatment for depression. When the predictors are identify, it will provide

early diagnosis, more efficient treatment, less side effects, the shorter illness duration, higher remission rate.

**Keywords:** depression, personalized treatment, predictors, drug treatment, antidepressants, psychotherapies

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[S-16]

## All that glitters isn't gold: Differential diagnosis of first episode psychosis

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Schizophrenia disrupts social and family relationships, resulting severe educational and occupational impairment, lost productivity, physical illness, and premature mortality. A wide range of non-psychiatric medical conditions and a variety of substances can induce symptoms of psychotic disorders and catatonia. These are medical and neurological disease which consist of substance induced, epilepsy, neoplasm, cerebrovascular disease or trauma, AIDS, B12 deficiency, carbon monoxide poisoning, Creutzfeldt-Jakob disease, heavy metal poisoning, herpes encephalitis, homocystinuria, Huntington's disease, neurosyphilis, pellagra, systemic lupus erythematosus, Wernicke-Korsakoff syndrome, Wilson's disease etc.

When evaluating a patient with psychosis, clinicians should follow the general guidelines for assessing non-psychiatric conditions. First, psychiatrists should aggressively pursue undiagnosed non-psychiatric medical condition when a patient exhibits any unusual or rare symptoms or any variation in the level of consciousness. Second, psychiatrists should attempt to obtain a complete family history, including a history of medical, neurological and other psychiatric disorders. Third, psychiatrists should consider the possibility of a non-psychiatric medical condition, even in patients with previous diagnoses of schizophrenia. A patient with schizophrenia is just as likely to have a brain tumor that produces psychotic symptoms.

Differential diagnosis of schizophrenia symptoms should be considered other psychotic disorders. The psychotic symptoms of schizophrenia can be identical with those of schizophreniform disorder, brief psychotic disorder, schizoaffective disorder, and delusional disorders. There is a precipitating traumatic event in brief psychotic disorder. When a manic or depressive syndrome develops concurrently with the major symptoms of schizophrenia, schizoaffective disorder is the appropriate diagnosis. Non-bizarre delusions present for at least one month without other symptoms of schizophrenia or a mood disorder warrant the diagnosis of delusional disorder.

In this presentation, differential diagnosis of first episode psychosis will be reviewed based on the existing studies and general principles.

**Keywords:** psychosis, differential diagnosis, schizophrenia

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[S-17]

## Dependency and attachment from psychodynamic perspective

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Attachment research has repeatedly shown the influence of early social interactions on developing inner working models and object representations that substantially impact on bonding behavior, subject-environment-interactions and psychopathology in later life. According to Bowlby's conceptual description, interactions of genetic, neurobiological, and developmental factors contribute to the establishment of neuronal networks involved in the regulation of stress resilience, anxiety sensitivity and personality development. All three variables must therefore be supposed to contribute to the development of certain psychopathologies or even psychiatric disorders under certain circumstances.

Ainsworth et al. first described different behavioral patterns, so-called "attachment styles" which have subsequently been implemented in various reliable and valid rating scales for the differentiation between individual attachment styles (secure, insecure avoidant, insecure

anxious, insecure ambivalent and disorganized). Several reports indicate a higher prevalence of insecure compared to secure attachment styles in alcohol and substance addiction and other psychiatric disorders. If this available and reliable attachment is experienced insufficiently, the individuals coping of stress or anxiety is therefore less effective and this may activate epigenetic mechanisms promoting onset of psychiatric disorders later on. Additionally, insecure attachment styles may go along with the development of distinct potentially dysfunctional behaviors in social interactions promoting the development of dysfunctional personality styles or personality disorders. This dysfunctionality is related to a higher incidence of addictive disorders.

Wedekind et al. found in alcohol-addicted inpatients, a correspondence of insecure attachment styles with high trait anxiety, more dysfunctional anxiety coping and dysfunctional personality styles. Their results imply the potentially high importance of attachment style in the characterization of alcohol dependency because of its possible high relevance for psycho-therapeutic strategies, individual therapeutic abilities and comorbid conditions. By separation into attachment styles, significant differences in potentially dysfunctional personality styles can be observed, giving a more differentiated characterization of groups than by diagnosing personality disorders exclusively. Clinical routine may profit from attachment style assessments. Insecure attachment styles in alcohol dependence may contribute to poorer outcome due to dysfunctional personality styles and anxiety coping behavior.

Earlier studies on attachment and substance use disorders using the Hazan and Shaver self-report mainly indicate a link with "avoidant" attachment styles. Schindler et al. found that, fearful attachment was predominant in drug dependent adolescents, while controls were predominantly secure. Severity of drug use was positively correlated with fearful attachment, but negatively correlated with dismissing attachment. The presence of comorbid psychiatric disorders was associated with fearful attachment but not with addiction severity.

In another study, Schindler et al. found that, opioid abusers were mainly fearful-avoidant, ecstasy abusers were preoccupied, fearful-avoidant and dismissing-avoidant, cannabis abusers were mainly dismissing and secure, and controls were mainly secure. Based on the self-medication hypothesis, they concluded that the preferences for specific substances were influenced by specific attachment strategies. Opioid seems to be used as an emotional substitute for lacking coping strategies. Cannabis seems to be used to support existing deactivating and distancing strategies. Ecstasy abuse was related to insecure attachment but not to a specific attachment strategy.

**Keywords:** attachment, dependency, psychodynamics

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[S-18]

## Therapeutic drug monitoring

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Therapeutic Drug Monitoring (TDM) is a valid tool to optimize pharmacotherapy. Individualization of pharmacotherapy is essential in order to optimize efficacy and minimize toxicity, especially for compounds with narrow therapeutic index. The interdisciplinary TDM group of the Arbeitsgemeinschaft für Neuropsychopharmakologie und Pharmakopsychiatrie (AGNP) has therefore worked out consensus guidelines to assist psychiatrists involved in psychotropic drug analysis to optimize the use of TDM of psychotropic drugs. Five research-based levels of recommendation were defined with regard to routine monitoring of plasma concentrations for dose titration of 65 psychoactive drugs: 1-strongly recommended 2-recommended 3-useful 4-probably useful 5-not recommended.

Cytochrome P450 phenotyping has been valuable research tool and a way of assessing the genetic basis of metabolic capacity. Phenotyping allows estimation of the total influence of drug interaction, genetic polymorphisms, hepatic disease and other factor altering pharmacokinetics.

There are characteristic benefits of different methods to assess the pharmacokinetics of psychotropic drugs in clinical practice. TDM measures current plasma concentration and hence summarizes the effect of all pharmacokinetic influence, determines the phenotype for the drug currently in use, detects interaction with co-administered drugs. Phenotyping predicts metabolic capacity, provides information about metabolic capacity for a variety of drugs, detects interaction by co-administered drugs. Genotyping as a specific method for mutation, predicts metabolic capacity, provides information about metabolic capacity for a variety of drugs, helps to differentiate noncompliance, and the acquired information has a lifelong validity.

**Keywords:** therapeutic, drug monitoring

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[S-18]

## Use of therapeutic drug monitoring in treatment of depression and antidepressant combinations

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Although there is sufficient evidence for the benefits of therapeutic drug monitoring (TDM) in optimizing antidepressant therapy, its widespread use in routine care is far from optimal. In clinical practice, in antidepressant drug dose optimization is often guided by a trial-and-error dose titration strategy. The importance of therapeutic drug monitoring of SSRIs is the subject of controversial discussion. However, TDM offers information about drug interactions, insufficient therapeutic effect, side effects, compliance and overdose.

Genetic influences on metabolism are most salient for antidepressants that have a low therapeutic index. TDM has been reported to increase not only efficacy and safety of antidepressant treatment, but also cost-effectiveness. Tricyclic antidepressant (TCAD) use in the treatment of depression is limited by their greater risk of overdose, potential effects on cardiac conduction. TCAD's may lead to toxic plasma levels producing anticholinergic, cardiac, and CNS effects. The toxic levels of most TCAD's are only two times therapeutic levels. Although the SSRI have a broad therapeutic index so that most patients are able to tolerate wide fluctuations in plasma levels due to pharmacokinetic interactions and can influence toxicity of co-administered drugs that are metabolized via this system.

The SSRIs are the most commonly prescribed antidepressants. They are generally well tolerated but have sexual adverse effects, increase the risk of hyponatremia, bleeding, stroke, and death in the elderly. All of the SSRIs are primarily eliminated by cytochrome P450 catalyzed oxidation in the liver. Fluoxetine and paroxetine are potent inhibitors of CYP2D6, fluvoxamine markedly inhibits CYP1A2 and CYP2C19. For this reason, clinically relevant interactions may be expected when these antidepressants are co-administered with substrates of the pertinent forms, particularly those with a narrow therapeutic index. Duloxetine and bupropion are inhibitors of CYP2D6. Both the practitioner and the patient need to be aware of the potential risks of using a combination strategy and should set up an active monitoring system, which may include service of TDM.

TDM group of the Arbeitsgemeinschaft für Neuropsychopharmakologie und Pharmakopsychiatrie (AGNP) has published literature-based guidelines for optimal use of TDM in psychiatry. AGNP recommends regular monitoring of plasma concentrations under maintenance therapy, at least every 3-6 months, to prevent relapses and rehospitalizations. The frequency of TDM requests may be increased if patients are known to be non-adherent to the medication or in case of changes of co-medications or of smoking (CYP1A2 substrate such as duloxetine) that affect the pharmacokinetics of the drug.

Combining antidepressants is a recognized step for those failing to respond to monotherapy. Despite the limited evidence base, this strategy is widely used by clinicians in practice. Not every combination used clinically is safe, and the use of such combinations may increase the side-effect burden without any additional advantage to the patient.

**Keywords:** antidepressant, combination, therapeutic drug monitoring

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[S-18]

## Is therapeutic drug monitoring adequate in prediction of clinical response in psychiatric cases? find out more about P glycoprotein

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To obtain optimal results than pharmacotherapy, therapy with the purpose to make personalized methods used has been increasing in recent years. These methods relates to detecting changes in pharmacokinetics and pharmacodynamics. P glycoprotein (P-gp) and enzyme systems (CYP) responsible for drug metabolism due to genetic factors are changes in drug pharmacokinetics. The P-glycoprotein multi drug transporter (P-gp, ABCB1) is a member of the ABC (ATP-binding cassette) super family. In vitro and in vivo studies have demonstrated that P-gp plays a significant role in drug absorption and disposition because of its localization, P-gp appears to have a greater impact on limiting cellular uptake of drugs from blood circulation into brain and from intestinal lumen into epithelial cells than

on enhancing the excretion of drugs out of hepatocytes and renal tubules into the adjacent luminal space. For instance, induction of the intestinal P-gp activity can cause reduced bioavailability of orally administered drugs and decreased therapeutic efficacy. On the other hand, the inhibition of the intestinal P-gp activity can lead to increased bioavailability, thus leading to an increased risk of adverse side effects. The brain uptake of the majority of antidepressants and antipsychotics, as well as many other psychotropic drugs and endogenous compounds are hampered by the activity of P-gp. In this presentation, we discuss the current state of knowledge concerning the role of P-gp on pharmacokinetics of psychiatric drugs and the impact of modulation of P-gp on major psychiatric disorders. Relevant issues in reference to the function of P-gp and other efflux pumps in the blood-brain barrier related to mood disorders and schizophrenia are addressed, such as a possible role of P-gp as a susceptibility factor in depressive disorders and psychotic disorders.

**Keywords:** P glycoprotein, pharmacokinetics, blood-brain barrier, psychiatric drugs

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[S-18]

## Pharmacokinetics solutions in patients with treatment-resistant, CYP enzyme systems, fast and slow metabolizer

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In a CYP2D6 genotyping study on Turkish psychiatric patients by Herken et al., poor metabolizer ratio has been reported as 1.45%, and ultra-rapid metabolizer 10.29%. The sum of the frequency of poor and rapid metabolizers in terms of CYP2D6 activity is about 12.7%. Hence, 12.7% of Turkish population is at risk for R treatment. In slow metabolizers, side effects of drugs occur more, while the drug ineffectiveness arises in fast metabolizers. In evaluation of CYP2D6 enzyme activity, genotyping, phenotyping by prop medication and TDM are methods that are used. Although genotyping for CYP2D6 enzyme is a very important data in terms of drug metabolism, it, alone, is not sufficient in terms of showing enzyme activity. Genotyping is recommended, if a substrate that has quite different metabolism is being used, if the drugs have narrow therapeutic range (if it has the toxic effects due to genetic differences in metabolism), if the drug or metabolite has an unusual plasma concentration and if genetic factors thought to be responsible, if there is a chronic disorder that needs a lifelong treatment. Additionally, as the enzyme activity can be also affected by environmental factors in addition to genotyping factors, the most effective method for current enzyme activity of the individual is phenotyping.

In a phenotyping study performed with dextromethorphan metabolites ratio, Gaedigk et al. reported in 60% of cases polymorphism commonly seen in CYP2D6 and in 40% of the cases rare polymorphisms. Hence, estimating phenotype through genotyping has been insufficient in explaining phenotype. Nowadays, phenotypic research indicating this enzyme's activity is increasing.

For the first time, in 1993, phenotypic investigation performed through debrisoquin metabolic way has reported a similarity to R metabolism. In a study investigating the relationship between CYP2D6 enzyme activity and R hydroxylation, debrisoquin probe was used and it was reported that phenotyping performed according to debrisoquin metabolite and R/9-OHR rates are related and R plasma level might reflect enzyme activity. Today, most effective method for CYP2D6 enzyme phenotyping is dextromethorphan metabolism. According to this, 4 types of phenotyping—namely intermediate metabolizer (ARA), normal metabolizer (NM), fast metabolizer (HM), and slow metabolizer (YM)—was determined. In 1999, Huang et al. has investigated the relationship between DEX phenotyping and R plasma level in 6 cases for the first time, and 7-times decrease in the clearance of R in YM phenotype has been reported.

On the other hand, TDM will provide information on pharmacokinetics by showing the drug plasma concentration. A strong correlation between CYP2D6 enzyme activity and R hydroxylation has been reported. According to this, risperidone / paliperidone ratio was adopted as CYP2D6 index. If risperidone/ paliperidone ratio is 01-02 normal range >1: YM or CYP2D6 inhibition has been reported. In another study, in HM cases with risperidone/ paliperidone less than or equal to 0.1, genotyping was performed and the ratio for HM was evaluated as highly sensitive but nonspecific.

**Keywords:** CYP 2D6, treatment, resistant

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[S-19]

## Bipolar disorder and substance use disorders comorbidity: diagnosis and management

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Bipolar disorder has a higher prevalence of substance use disorders comorbidity than any other psychiatric illness. Repeated epidemiological surveys have reported that people with bipolar disorder I and II have co-occurring substance use disorders with lifetime prevalence estimates ranging from 42% to 60%. Substance abuse may predispose to bipolar disorder and bipolar disorder may predispose to substance abuse, perhaps through self-treatment or through increased sensitivity to rewarding stimuli, or both disorders could arise from a common mechanism. Substance use in patients with bipolar disorder also contributes to excess morbidity and mortality. Bipolar patients with substance use disorders have a more severe course of mood disorder, including earlier onset, episodes that are more frequent, mixed episodes, hospitalizations and more complications, including anxiety- and stress-related disorders, aggressive behavior, legal problems, and suicide.

Limited data for pharmacological interventions to manage concurrent drug and alcohol use in patients with bipolar disorder are available. Nevertheless, in most studies, medications for managing mood symptoms did not appear to have an impact on the substance use disorder. Pharmacotherapy for comorbid substance use disorder and bipolar disorder typically involves use of mood stabilizers or/and atypical antipsychotics, antidepressants and concomitant use of a medication specifically for the substance use disorder, e.g., naltrexone, acamprostate. Valproate seems to be a good treatment choice for patients with concomitant bipolar disorder and substance use disorders, as add on medication or alone. Carbamazepine, lamotrigine and topiramate are the other promising mood stabilizers in management of this comorbidity. Among antipsychotics mostly studied second generation antipsychotics are quetiapine and aripiprazole in bipolar patients with comorbid substance use. Antidepressants can be lifesaving in patients who are at risk for suicide whether they have a co-occurring substance use disorder. Literature encourages the clinicians that are working on this field about substance oriented medications use like buprenorphine, acamprostate, naltrexone as add on treatment. But level of evidence for literature make us think that we are still far away from the best treatment approach for co-occurring substance dependence and other psychiatric disorders. The field of bipolar disorder comorbid with substance use disorders is in need of large double-blind, placebo-controlled randomized studies. The lack of evidence in this field prevents experts to make clinical recommendations for most of this frequent comorbidity of bipolar disorder and substance use disorders. Treatment should maximize the use of psychosocial interventions and prescription of first-line medications with proven efficacy in the context of recurrent alcohol and substance abuse.

**Keywords:** bipolar disorder, substance use disorders, comorbidity, treatment

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[S-20]

## Depression, bipolar disorders and thyroid functions

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Mood disorders are one of the most prevalent psychiatric disorders in clinical practice. Etiology of mood disorders is still not clear. There are many hypotheses about this issue. One of them is endocrine pathologies and especially thyroid disorders. The association between mood disorders and thyroid functions came from; thyroid hormones are recommended in treatment resistant mood disorders, thyroid dysfunctions may lead mood symptoms, and mood stabilizers like lithium may have some side effects on thyroid hormones. In this presentation, I will summarize the relationship between thyroid and mood disorders in the lights of accumulating literature.

**Keywords:** depression, bipolar disorders, thyroid

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[S-21]

## What is done for children who are either sexual abuse victims or sexual offenders?

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To sexually abuse a child is defined as, to have a child in an activity that would satisfy the sexual hunger of an adult or to condone such an act. Also sexual activities between two kids; when the age difference in between is of 4 years or more, and the younger child is forced or convinced to be a part of the activities that harbor sexual pleasure, are also defined as sexual abuse. For children who are a victim of sexual abuse or conduct sexual abuse, there are necessary measures to be followed other than the legal process. Generally, because the attention is focused on the crime and punishment, these procedures are overlooked and sexual offenses cause much worse problems than the damage it already creates.

In our country, some projects are pursued regarding what to do for sexual abuse victims once they report the crime. Child Protection Centers established in universities and Child Observation Centers established in state hospitals aim to collect all the procedure, from taking statements, to evaluating the victim physically and psychologically, under one roof. Afterwards, the child may be taken under protective custody. Sexual abuse is one the major traumas there are. Unfortunately, psychiatric and social follow up cannot be done regularly. Also these projects are still not widely spread and lack many important issues. After the psychiatric evaluation of the child for the report, there are no procedures regarding the healing process. The abused child's treatment, which remains with their families, depends on the family's request. In many cases, the victims do not get any treatment. There are no social projects monitoring sexually abused children.

Children, who conduct sexual abuse are completely irrelevant to these projects. Other than the punishment they get, these abusing children should be monitored, treated and should get necessary social support for both their and the community's sake. These children, who offended a crime, are sent to a doctor merely to figure out whether they are suitable for the punishment. Moreover, if their situation is not an obstacle for the punishment, but the child still in need of psychiatric treatment, nothing else is offered for this person. Not enough is done regarding these sexual offenders and the projects lack a great deal regarding the evaluation, treatment, and rehabilitation of these kids. This is the main reason why the crime is repeated again and again.

**Keywords:** child, sexual abuse, sexual offenses

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[S-21]

## Issues that need to be considered in forensic psychiatric evaluation and forensic psychiatric case examples

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Legal cases are situations that most specialists do not like and see them as a challenge to their practice. However, being appointed as a legal expert is almost inevitable. Therefore, legal experts and especially psychiatrists should have enough knowledge in order to evaluate the forensic cases appropriately. Psychiatrists need to be careful on certain legal issues. In this presentation, some important points that psychiatrists should be aware of, were emphasized. Mental disorders may have a course of improvement or worsening of the symptoms and might become chronic. (e.g. The criminal responsibility is effected by whether patients with schizophrenia had a psychotic episode or not at the time of crime, slight referential perceptions, or some thoughts not powerful as delusions may not be detected during psychiatric evaluation, patients with borderline personality disorders may have micro psychotic episodes effecting criminal responsibility). Patients should provide the legal expert with information about their past diagnosis and treatments, etc. If the patients withhold information, this situation can have an effect on the case process and this kind of can be misleading for the legal expert. As a general view, if the civil court asks for a detailed epicrisis without the consent of the person, this may not be provided due to it being confidential information. So the consent of the patient should be provided. If it is a criminal court, the epicrisis should be presented even without the consent of the

patient. Otherwise, the judge may accuse the expert for preventing the course of justice and the expert can be sued for a compensation case). All possible information sources should be evaluated (information from the person of interest, relatives acquaintances of the person should be gathered and if necessary, social evaluation should be asked from the social services). The expert should answer all the questions of the judge or the prosecutor, otherwise the expert may be asked to give another expert opinion again. Any psychometric measurements such as electroencephalography (EEG), brain imaging (MRI, etc.) should also be written on the forensic expert opinion report. If necessary, personal and family history, personality traits, upbringing and cultural features should also be evaluated and reported. All findings and evaluation results should be discussed first and eventually evaluated on the conclusion part on forensic expert opinion report. Although legal expert is not the judge and does not give penalty, etc., but should examine the case file carefully. The report given is a forensic expert opinion, if the expert does not have a solid opinion, the patient can be referred to another expert or a medical legal institute. In the light of the existing data, if an expert opinion is not formed, this should be stated properly with its reasons.

**Keywords:** examination, forensic psychiatry

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[S-22]

## Benzodiazepine use is harmful

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Benzodiazepines have several actions such as anxiolytic, sedative/hypnotic, muscle relaxant and anticonvulsant. They are used for a variety of conditions, particularly anxiety and insomnia. However, they have been prescribed widely and often inappropriately. Withdrawal syndrome, tolerance, and dependence are commonly known side effects of benzodiazepines. However, there are many other unwanted effects of this type of drugs that have to be kept in mind, when prescribing.

Although benzodiazepines reduce tension and aggression, they can also rarely lead to a release of aggression by reducing inhibitions in individuals with a tendency to aggressive behavior. This possible effect should be remembered when prescribing for those judged to be at risk of child abuse, or for any person with a previous history of impulsive aggressive behavior.

Drowsiness, poor concentration, ataxia, dysarthria, motor incoordination, diplopia, muscle weakness, vertigo and mental confusion caused by benzodiazepines can affect driving skills and the operation of potentially dangerous machinery.

Among the elderly, the risk of drug interactions, psychomotor slowing, cognitive dysfunction and paradoxical disinhibition may be amplified. Benzodiazepine use in the elderly is associated with an increased rate of falls that cause hip and femur fractures. Benzodiazepines may also increase the risk for delirium.

An association has been noted between benzodiazepine use and depressive symptoms and, in some cases, the emergence of suicidal ideation. Although the mechanism of this action is unclear, benzodiazepine-related depression might occur as a physiologic result of a reduction in central monoamine activity.

Benzodiazepines cross the placenta and are classified as class D teratogens. They may lead to the development of dependence and consequent withdrawal symptoms in the fetus. Benzodiazepines are excreted in breast milk and thus are usually contraindicated in breast-feeding mothers.

In conclusion, before prescribing benzodiazepines, it is always crucial to remember possible and frequent problems related to benzodiazepine use and seek the causes of anxiety and to try to modify them.

**Keywords:** benzodiazepines, side effects, treatment

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[S-22]

## Benzodiazepine use is useful

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Benzodiazepines are the medications used to treat many of the frequent symptoms seen in medical practice and especially in psychiatry, including anxiety, depression, insomnia, epilepsy and other psychophysiological disorders. Benzodiazepines derive their name from their molecular structure. These molecules share a common effect on receptors that have been denominated benzodiazepine receptors, which modulate GABA activity. During 1980s, there was a decrease in benzodiazepine use because of their dependence and abuse potential. However, recent studies suggest that benzodiazepines are not drugs of abuse for all patients. Patients, who have a preexisting history of substance abuse or co-morbid personality disorders, are prone to addiction.

Benzodiazepines are divided into three groups according to the duration of action: 1) short-acting (triazolam, midazolam); 2) intermediate-acting (alprazolam, lorazepam); 3) long-acting (diazepam, clorazepate, clonazepam). They have a rapid anxiolytic sedative effect and are most commonly prescribed for immediate treatment of insomnia, acute anxiety and agitation or anxiety associated with any psychiatric disorder. Alprazolam and clonazepam, both high potency benzodiazepines, are commonly used medications for panic disorder. However, the selective serotonin reuptake inhibitors are also used for treatment of panic disorder. Benzodiazepines have the advantage of rapid effect and of not causing significant sexual dysfunction and weight gain. Clonazepam has been suggested to be effective treatment for social phobia. In addition, several other benzodiazepines (e.g., diazepam) have been prescribed as adjunctive medications for treatment of social phobia. Clonazepam and lorazepam are useful in the management of manic episodes and as an adjuvant to maintenance therapy in lieu of antipsychotics. Additionally, benzodiazepines are prescribed to provide sedation when changing antipsychotic medications. In this presentation, the pharmacological properties, psychiatric use and side effects of the benzodiazepines will be reviewed based on the existing controlled studies and general principles. Additionally, minimizing the risk of withdrawal syndrome will be emphasized.

**Keywords:** benzodiazepines, psychiatric use, side effects

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[S-22]

## Benzodiazepine administration fields in our daily practices

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Benzodiazepines are an important class of bioactive molecules, widely used as an anxiolytic agent. Their pharmacological actions are mediated through specific receptors located in a supramolecular complex with gamma-aminobutyric acid (GABA) receptors. Benzodiazepines enhance GABA neurotransmission, thus indirectly changing the activity of other neurotransmitters such as serotonin and noradrenaline.

Benzodiazepines are indicated for the short-term relief of anxiety that is severe, disabling, or subjecting the individual to unacceptable distress. The efficacy of benzodiazepines (particularly alprazolam - a high potency benzodiazepine-) in the treatment of panic disorder is well established. However, in generalized anxiety disorder, high drop-out rates due to adverse effects limit their effectiveness; in social phobia, little is known about their long-term affect; and they have uncertain efficacy in either acute or continuation treatment in post-traumatic stress disorder.

Apart from their frequent use in anxiety disorders, benzodiazepines are widely prescribed for acutely disturbed patients (mania, schizophrenia, agitated depression, agitation in medical conditions), addiction (alcohol and opiate withdrawal), neurological disorders (epilepsy, muscular spasm, spasticity), and antidepressant or antipsychotic-induced side effects.

Benzodiazepines are also frequently prescribed in the treatment of sleep disorders. However, they should only be used to treat insomnia when it is severe, disabling, or causing extreme distress. Only short-term (2-4 weeks) use is recommended.

Since benzodiazepines may cause dependency, withdrawal needs to be gradual; a withdrawal syndrome may occur as long as 3 weeks

after stopping the drug. Benzodiazepines also adversely impair the individual's ability to operate machinery or drive. They may also, paradoxically, cause increased aggression and hostility.

The key points for safe and effective use of benzodiazepines are, the careful selection of patients who might benefit from them, prescription of lower doses and in conjunction with an antidepressant, administration in clinical situations in which they are more likely to be beneficial, monitoring and managing their side-effects and minimizing the risk of withdrawal symptoms and relapse, mainly through tapering the dose and/or combining with effective psychological interventions.

**Keywords:** benzodiazepines, psychiatry

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[S-22]

## Where are we according to benzodiazepine use prevalence in the world?

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Benzodiazepines have become a treatment option for psychiatric disorders since 1960 upon the discovery of its sedative, anxiolytic and hypnotic effects and replaced the barbiturates previously used to obtain those effects. The main indications of benzodiazepines in the psychiatry practice are anxiety disorders, insomnia, alcohol withdrawal, dystonia associated with neuroleptics and akathisia. Their use is limited a possibility of causing impairment in daily, occupational and social functioning, criminal events (theft, harassment, aggression), accidents, fractures, injuries and deaths due to those effects. One-year prevalence of benzodiazepine use at least one time in Germany, Canada, the Netherlands, the USA, Sweden and Belgium was reported as 4-7%, 10%, 10%, 11%, 14.5% and 17.6% respectively. Benzodiazepines can be readily obtained from pharmacies without a prescription in Latin America and some Asian and African countries. It is considered that benzodiazepine use may be more common in those countries. High levels were reported, one-year prevalence of benzodiazepine use at least one time being 31.4% in Chile and monthly prevalence of use in Lebanon being 9.6%. In those studies, the rate of benzodiazepine use was found generally to be higher in females and elderly. It was reported that prescription rate of benzodiazepines among all physicians is 35-50% and it was most frequently prescribed by primary care physicians. It was stated that benzodiazepine prescription rate of psychiatrists was 4.7-11%. There was no community-based prevalence study regarding benzodiazepine use in Turkey.

**Keywords:** benzodiazepine, prevalence

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[S-24]

## Childhood schizophrenia: early signs, diagnosis and therapeutics of the prodromal phase of childhood schizophrenia

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Schizophrenia disrupts social and family relationships, resulting severe educational and occupational impairment, lost productivity, unemployment, physical illness, and premature mortality. Among people at "ultra high risk" of psychosis, about 22% to 40% is in transition within 12 months. Interventions that delay or prevent transition to psychosis from this prodromal syndrome could be clinically and economically important.

The common symptoms in the prodromal psychotic phase are; reduced concentration and attention, reduced drive and motivation, anergy, anhedonia, depressed mood, sleep disturbance, anxiety, social withdrawal, suspiciousness, deterioration in role functioning, irritability, suicidal ideas, somatic complaints, change in motility, change in sense of self, others or world, perceptual abnormalities, mood swings, day dreaming, somatic anxiety findings, obsessive-compulsive symptoms, sexual orientation difficulties, metaphysical

occupations and overvalued ideas.

In the period of adolescence, it is difficult to determine these symptoms as prodromal signs of a developing psychosis as a result of the peculiar behavioral characteristics of this period.

Family education and psychoeducation must be well balanced and must be individualized as alerting the family and the patient may cause negative outcomes and increase the stress of the family and the patient. Above all, it is impossible to know whether the patient will experience full symptom psychosis. Intense family therapy and psychoeducation may cause significant stress leading detrimental effect on family function or atypical antipsychotic treatment may cause serious metabolic-cardiac side effects in a patient who will never experience psychotic disorder. Individualized assessment and individualized treatment is essential considering the risk-benefit analysis. Although the treatment of the prepsychotic adolescents aims to prevent transition to psychosis, it may also improve the symptoms of the prepsychotic adolescents and leads to improvement in functionality. Even if the patient will not experience full symptom psychosis, these prodromal sign and symptoms may continue for a long time and may cause serious burden on the academic, familial, occupational functionality. Treatments in the prepsychotic and prodromal phase should prevent transition to schizophrenia but also should aim to treat the present symptoms. Low doses of atypical antipsychotics, SSRI's, mirtazapine, benzodiazepines, antihistaminics and lithium come into prominence in the symptomatic treatment of prodromal phase.

Although perospirone, aripiprazole, amisulpride, risperidone, and olanzapine have been found to be effective in treating the symptoms of the prepsychosis, it is controversial that whether second generation antipsychotics prevents transition to psychosis. In the first decade of the new millennium, SSRIs come forward for the prevention of schizophrenia in prepsychotic individuals, however in the recent years there has been little research on that possibility. As it is impossible to estimate the length of the treatment, aripiprazole and ziprasidone may be more reliable for the treatment of prepsychotic symptoms due to their low metabolic side effect profile.

As a result although there is no proven treatment for individuals in the prodromal phase of psychosis, CBT, Psychoeducation, Family education, low doses of atypical antipsychotics, SSRI's (especially fluvoxamine), Mirtazapine, omega-3 fatty acids, may have little benefit on the symptoms of prepsychosis.

**Keywords:** childhood schizophrenia, prodromal phase, treatment

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[S-24]

## Strategies for cognitive deficits in early onset schizophrenia

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Early Onset Schizophrenia (EOS; onset of schizophrenia before the age of 18 years) is characterized by moderate to severe cognitive deficits, which have been linked to poor functional outcomes. Cognitive deficits in EOS patients include impairments in general cognitive abilities, attention, working memory, visio-spatial skills, verbal memory, visual memory. It is crucial to develop cognitive remediation strategies to achieve an optimal functional response in EOS. Studies were identified through searches of the Medline (PubMed) and PsycINFO databases using the terms "early onset schizophrenia" and "childhood onset schizophrenia" along with the terms "cognition" and "cognitive". This presentation will focus on impact of individual differences and comorbid diagnosis on cognitive functioning and pharmacological and non-pharmacological interventions for cognitive deficits in patients with EOS.

**Keywords:** early onset schizophrenia, cognition

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[S-24]

## How to manage agitation and aggression in emergency service

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Visits of children and adolescents for mental health problems to emergency departments have increased markedly in recent years. Acute agitation and aggressive behaviors are common presentations in emergency departments and may be associated with various psychiatric and medical conditions. Diagnosing and treating the underlying medical-psychiatric conditions are essential to the management of agitation and aggressive behavior. Psychotic conditions are common causes of agitation among individuals attending to the emergency departments. This presentation will focus on the current approach for the prevention and management of agitation and aggressive behavior in children and adolescents, which is particularly related psychosis in emergency departments. The use of physical restraint and chemical restraint will be presented, and procedures for carrying out each of these interventions will be mentioned in this presentation.

**Keywords:** adolescent, agitation, aggression, child, emergency, psychosis

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**COURSES****[C-5]****Treatment of dissociative disorder and difficulties encountered**

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Dissociative amnesia-fugue treatment consists of gathering anamnesis from patient and family, emotional support, building trust in relationships, normalizing family relationships and activities with behavioral approach and prevention of regressive acts and talking about probable traumas, psychoeducation, providing impulse control and mood control.

Suppression of emotional experiences in depersonalization-derealization disorder considered as mental escape, psychodynamically. Probable anxiety evoking experiences should be identified, and it important that to produce attitudes of positive perception of own body and social surroundings, not catastrophic. There is no general pharmacotherapeutic approach for depersonalization-derealization disorder. Opioid receptor antagonists, SSRI + lamotrigine and clonazepam (if there is comorbid anxiety SSRI) were found beneficial.

Basic treatment method of DID is intensive individual outpatient psychotherapy. It is considered short psychotherapy in long-term. Therapist must be very active during therapy. Hypnotherapeutic techniques are used additionally. Short-term hospitalization may be necessary in times of crisis. Psychotherapy of DID is work with alter personalities directly. DID therapy can be divided into four stages namely first, middle, late and after integration phases. DID treatment usually last a few years, while it may be prolonged in severe cases. Length of psychotherapy of DID depends on severity and repetitiveness of trauma and traumatic experiences in early age, rather than severity of symptomatology.

Integration may be easier in childhood then other ages. Quitting treatment is a high risk in adolescence. Treatment focused to integration might be delayed into their twenties. Patients test the therapist continuously. Anger could be observed in severe borderline dissociative personalities. If you have not basic positive emotions directed to patients, you cannot tolerate the stress of projective identification of patient. Number of alter personalities can vary from 1 to 50, average is 13. The goal of treatment is integration. It should be helped to alter personality to understand that they were parts of the person. It is important not to use ECT (It is regarded as contraindication according to some publications) to stay within the span of authority and to systematically intervene, when necessary. Group therapy may be helpful. They should be treated as possible as by outpatient without hospitalization, they can easily regress. Hospitalization should be as far as possible at short-term. If two or three of the patients in the ward were acting out simultaneously, they might be in competition for the attention of the team. They do not have privileges from other patients, and suffer the consequences of their non-admitted behavior. Hospitalization is usually for suicidal thoughts-initiatives, internal conflicts, anxiety and non-controllable behaviors. All alter personalities should be treated fairly and empathic. Empathy and relationship between alter personalities should be supported. Mood stabilization, prevention of unsafe sex, reckless driving, neglects of health, self-mutilation and suicide are the goals of initial phase of therapy.

Working with traumatic material, mapping of the system, producing smooth inner conversations, accepting abuses, fusion of layers of alter personalities, and then integration are the route of therapy.

**Keywords:** dissociative disorder, treatment, difficulties encountered

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[C-12]

## How to make differential diagnosis from depression to mania in adolescents?

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Bipolar disorder (BP) is a familial and recurrent illness that significantly affects the child's normal development. BP is often manifested by periods of depression during which the child has significant psychosocial problems and increased risk for suicide. Depression in youth is reported to be highly prevalent and relapsing condition that is treatable, but frequently comorbid and associated with significant morbidity and mortality, and has a high risk (20% to 40%) for switching into bipolar disorder. Studies in adults reported that bipolar depression was less recognized and treated than manic episodes despite the findings that depressive episodes and symptoms dominated the longitudinal course of BP and most suicide occurred during depression. Similar to adults, children with bipolar depression were more likely to have severe depression with suicidality, anhedonia, and hopelessness and had higher rates of comorbid disruptive behavior, anxiety, and substance use disorders, had lower Global Assessment of Functioning (GAF) scores and higher rates of hospitalization and psychiatric disorders in first-degree relatives compared to children with unipolar depression. However, most clinical studies with BP have focused on the manic phase of the illness. Depressed youth with BP are more likely to have more severe depression, greater suicidality, and higher rates of comorbidities and functional impairment relative to depressed youth with major depressive disorder (MDD or "unipolar depression"). However, it is difficult to clinically differentiate the symptoms of BP depression from those of MDD, and some children may still be in early phases of developing bipolar spectrum illness. This issue is very important because youth with BP depression may be treated with antidepressants that can precipitate an episode of mania or mixed BP symptoms. In addition, it may take up to 10 years from the initial symptoms of depression until BP is diagnosed and appropriate treatment is prescribed. Moreover, new DSM 5 introduced new "mixed features" specifier for major depressive disorder, first time identifying manic symptoms within depressive disorders spectrum. This brings the gap even more between mania and depression dichotomy. In conclusion, early differential diagnosis of depression and mania youth from a spectrum perspective is a key factor to enable youth to follow a normative developmental path and prevent an unrecoverable loss in their development.

**Keywords:** mania, depression, bipolar, mixed features, diagnosis

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[C-12]

## How to treat adolescents with mood disorders from depression to mania?

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Now that new DSM 5 introduced new "mixed features" specifier for major depressive disorder, first time identifying manic symptoms within depressive disorders spectrum, the view of the gap between mania and depression dichotomy needs to be replaced with mood disorders spectrum. Thus, early identification of bipolar disorder (BP) youth, especially during depression, and early identification of manic symptoms in major depression (MDD) is critical not only to improve the long-term prognosis of adolescents with mood disorders, but also to prevent inappropriate treatments. As demonstrated recently in adults, improving the accuracy of early diagnosis of BP in youth may be achieved by identifying objective neural biomarkers at an early age that are specific to BP and not common to MDD, which in turn can help identify predictors of treatment response. Treatment guidelines for BP in children and adolescents were recently developed, but the panel left out depression and agreed that there was insufficient evidence to develop a treatment algorithm for it. Several studies suggest that there were effective and well-tolerated treatment options (e.g., lithium, mood stabilizers, second-generation antipsychotics [SGA]) for manic or mixed episodes of BP in youth; however, there are no maintenance studies in depressed children and adolescents with BP and available data for depressive episode in BP is limited to few randomized and two open-label acute treatment studies in adolescents. Management of depression is very different in BP depression than in MDD: Antidepressants are widely used in MDD, but may exacerbate or induce mania and suicide in depressed BP youth. Antidepressant monotherapy is therefore contraindicated for the

treatment of BP depression, and studies in depressed BP adults show that combining antidepressants with mood stabilizers may also not be effective. Furthermore, we know very little about treatment of MDD with mixed features, but those adolescents with episodic severe but short lasting manic episodes are at very high risk for developing BP over the next 4-5 years. Treatment of mood disorder in adolescents should be tailored for each individual by taking into account their developmental history, family history, comorbidities, and mood disorder spectrum approach.

**Keywords:** mania, depression, bipolar, mixed features, treatment

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[C-14]

## Cognitive behavioral therapy for anxiety disorders in children and adolescents

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This mini-workshop will focus on Kendall's Coping Cat and Beckian's Cognitive Behavioral Therapy for anxiety in children and adolescents. The Coping Cat is a 16 individual therapy session model involving the child and patients in the therapy. Outcome studies have supported the efficacy of Kendall's Coping Cat treatment package. The workshop will discuss the 16 sessions and briefly address the adaptation of Beckman CBT for children and adolescents in relation to other anxiety disorders such as OCD and PTSD.

**Keywords:** CBT, anxiety disorders, children, adolescent

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[C-17]

## Evaluation of academic productivity and promotion: which is the best according to what? Hirsch Index and its use in academic psychiatry

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Indices like number of publications, citations, funding and awards gives an idea of one part of the productivity of academicians however, a universal metric has not been identified so far. H index is one of the publication metrics that might be used in academic productivity. In this course, definition of the several scientometric parameters including h index will be discussed. Several studies of h index as well as in academic psychiatry will be outlined. H index may be a valuable tool for academic productivity evaluation.

**Keywords:** H index, scientometrics, academic productivity, academic psychiatry

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[C-19]

## Learning and animal models

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Learning is a quite long-term change occurring in behaviors by an individual's experiences. In fact learning process is for not only human beings but also all organisms. That is why animal experiments and animal models are used to investigate learning process. There are behavioral, affective, cognitive and neurophysiological learning rules, which were put forward for learning. Behavioral theoreticians admit that learning improves establishing a connection between stimulus and behavior and changing behaviors via reinforcement is essential. According to cognitive hypothesis, learning is attributing a meaning to whatever takes place around an individual. Affective concepts concern problems about learning rather than nature of it. Neurophysiological education principles emphasize that the brain is a parallel processor and learning should be evaluated as a psychological event.

Experimental animal studies help us understand the physiological and psychological conditions of several diseases. Studies concerning learning and memory play a great role in explaining cognitive processes of neuropsychiatric diseases. When we have a look at the literature, experimental animal models about learning were described. These are Morris water maze, T maze or radial arm maze, novel object recognition, fear conditioning, 5-choice serial reaction time task, active avoidance and passive avoidance. In this course, 'learning and animal models' will be presented.

**Keywords:** animal models, learning

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[C-21]

## Scientific article literateness

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There are various motivations to write a scientific article: the contribution to science, to share knowledge, social benefit, spiritual satisfaction etc. To write scientific article is a duty and function of a scientist. If a scientific research is not published, it is not accepted that this research is completed.

After new knowledge was published, they are added to database and it is given as a scientific knowledge. The findings are shared with professional colleagues, and then it is presented to community benefit.

A scientific article identifies the results of original research, meets the criteria of valid publication, and various published report. It is necessary that the scientific article must be a basic publication but it must be a valid publication.

Scientific communication is very new rather than interpersonal communication. First scientific journals were published in France and United Kingdom, in 1655. There are nearly one hundred thousand scientific and technical journals in the world.

The articles in the first journals based on narrative style (For example, "First, I did this, and then I did that". After Pasteur, it was considered methods section important, and it was developed the IMRAD format. The IMRAD is an abbreviation: I-Introduction, M-Methods, R-Results, A-and, D-Discussion. The IMRAD format is the most common approach.

A scientific article includes the sections of heading of article, abstract, introduction, methods, results, discussion, suggestions, and references.

The heading of article must be showed the content of article, it must be short, and the abbreviations must not be.

In general, abstract is on the IMRAD format. It must be written clean and spare. In an abstract, p value and abbreviation were not used. Uncertain expressions must be avoided. It must be included key words.

In the introduction section, the subject of research, the necessity of this research, the previous studies regarding subject, the missing aspects of subject, contribution of research must take place.

In the methods section, the characteristics of research, sampling, used tools, statistical assessment and ethical aspects must be written. It must be stated that how is done this research as detailed.

In the results section, the data must be selected and presented. Data must be showed in a tabulated and/or graphical form. Data must not be shown both in table and in text.

In the discussion section, the results must be repeated, but discussed. The results compared with the results of previous researches. Discussion must be only based on the data, must be avoided from speculations. The limitations of research must be stated. This section is completed with a paragraph that stated the importance of this research.

The suggestions section must be depended on results of research, and realistic and applicable.

The references section must be arranged according to rules of journal.

Similarly, the reading of scientific article will also examined and given examples.

**Keywords:** scientific article, IMRAD, basic publication, valid publication

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[C-22]

## Psychotropic drug interactions

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Drug interactions occur, when the effect and/or the metabolism of a drug is altered by another drug or substance. A drug interaction can be beneficial, damaging, or have no significant effect. The majorities of drug interactions have minor clinical significance but sometimes can result in potentially hazardous, and occasionally lethal adverse events. Drug interactions can be classified as pharmacokinetic or pharmacodynamic. Pharmacokinetic interactions occur when a drug modifies the absorption, distribution, metabolism or excretion of another co-administered drug. These interactions are mainly a result of inhibition or induction of the cytochrome P450 (CYP450) isozymes. Pharmacodynamic interactions occur when the concurrent use of two drugs results in an alteration of the therapeutic and/or toxic effects of either drug without altering their pharmacokinetics, and can be additive, synergistic or antagonistic. The pharmacokinetics of a drug defines its potential for drug-drug interactions. Most drug interactions with psychotropics are pharmacokinetic and include the CYP450 family of enzymes. Drug interactions with psychotropics can cause adverse effects due to inhibition of CYP450 enzyme or can reduce therapeutic efficacy duo to induction of CYP450 enzyme. There is also a large inter-individual variation in the amount of isoenzymes that individuals possess; different individuals can be poor metabolizers or ultrafast metabolizers with respect to particular CYP450 enzymes. However, not all drug-drug interactions via the CYP enzyme system are of clinical significance. Additionally, a clinician must consider significant other factors to the patients. Younger people tend to metabolize drugs faster than older people, men faster than women. Comorbid medical conditions and gene polymorphism may also affect drug metabolism. Dose reductions in special populations may be necessary when the factors affecting plasma clearance are present. Assessment of the pharmacodynamic and pharmacokinetic profile of psychotropic and other drugs can help determine the clinical significance of any interactions and prevent the serious consequences of drug interactions.

**Keywords:** drug interactions, psychotropic agent, cytochrome P450

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[C-22]

## Psychotropic drug use in liver and renal failures

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Liver or renal failures are common medical conditions, and many patients have comorbid psychiatric disorders. Liver and kidney have significant roles in the pharmacokinetics of drugs including the mechanisms of absorption, distribution, metabolism or excretion. The liver is the primary site for metabolism of psychotropic drugs. The processing and elimination of drugs from the body occurs through two phases of metabolism: phase 1 reactions, during which CYP 450 enzymes convert the parent compound to metabolites through processes of oxidation, reduction, or hydrolysis and phase two reactions, which couple the metabolites with endogenous substances rendering them more water-soluble for excretion from the body. Regarding antidepressant metabolism, the CYP 2D6 and CYP 3A4 systems may be the two most important metabolic pathways, as most psychotropic drugs are eliminated via these pathways.

Liver failure affects basic elements of medication pharmacokinetics, from absorption to metabolism, distribution to elimination, changing drug levels, duration of action, and efficacy. Additionally, physiological models of hepatic drug elimination have emphasized the importance of physiological variables such as hepatic blood flow, protein binding and intrinsic clearance of the liver on hepatic drug elimination. Dose adjustment of psychotropic drugs in patients with liver disease may be important as most of these drugs are predominantly eliminated by the liver and many of them are associated with dose-dependent adverse reactions. Following the administration of a drug to a patient with hepatic impairment, careful monitoring of the patient and also monitoring of plasma or blood drug concentrations remain important considerations.

The kidney is a primary route of drug elimination; abnormal kidney function is predicted to alter the pharmacokinetics of agents metabolized and/or excreted predominantly through this route. In renal failure, there is a general slowing of chemical reduction and of hydrolysis, but there are normal rates of glucuronidation, microsomal oxidation, and sulfate conjugation. Drug metabolites that are pharmacologically active may be retained in patients with renal insufficiency and may cause adverse effects. Very few drugs are excreted from the body unchanged in the urine; most are metabolized within the body to less lipid-soluble compounds that are excreted by the kidneys. So that few drugs are contraindicated with end stage organ dysfunction, but many require dose adjustment and caution. Guiding principles include, but are not limited to, slow titration of doses, low-dose treatment initiation, and careful monitoring of clinical response. Psychiatric consultants need to be aware of the presence of comorbid renal, liver and psychiatric disorders, and they should be knowledgeable about the use of psychotropic medications in this situation. Disease-related changes in pharmacokinetics and pharmacodynamics, as well as vulnerability to side effects, polypharmacy, and potential drug interactions are all important considerations.

**Keywords:** psychotropic drug, liver, renal failure

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[C-24]

## Current data and approaches related to treatment of childhood-onset schizophrenia

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Early onset schizophrenia is defined as the onset of psychosis before the age of 18 years and very early-onset schizophrenia is a term used for cases developing before the age of 13 years. The aim of this presentation is to review the recent studies related to treatment of childhood-onset schizophrenia.

A computerized-aided literature search was performed in PubMed database for recent studies that assessed the effectiveness, safety and tolerability of first-generation and second- and third-generation antipsychotics in children and adolescents with schizophrenia.

The main treatment modality in schizophrenia is pharmacological in both children and adults. Antipsychotic drugs are the first-line of treatment and atypical antipsychotics should be preferred to typical antipsychotics as they show at least the same efficacy and a better tolerability in childhood-onset schizophrenia. Recent randomized controlled trials have shown the efficacy of some atypical

antipsychotics in childhood-onset schizophrenia. As a result, aripiprazole, olanzapine, quetiapine, paliperidone and risperidone have received formal indications for the treatment of schizophrenia between the ages of 13-17 years. The pediatric use of atypical antipsychotic drugs has increased considerably over the past decade. Risperidone was the most often prescribed atypical antipsychotic in a naturalistic longitudinal study of early-onset first psychotic episodes in children and adolescents, followed by quetiapine and olanzapine. Clozapine, which is the prototype of the atypical antipsychotic class, is reserved for cases unresponsive or intolerant of other antipsychotics because of the risk of serious side effects. Risperidone is associated with a higher frequency of extrapyramidal symptoms than other antipsychotics, while olanzapine is associated with marked weight gain. Hyperprolactinemia and QTc interval prolongation are the other side effects that raise concern for the clinical use of antipsychotics in children and adolescents.

Early detection and treatment of childhood-onset schizophrenia may improve outcomes of the disorder. Current data provides evidence for the effectiveness and safety of atypical antipsychotic use in children and adolescents with schizophrenia. Although atypical antipsychotics are associated with a lower risk of extrapyramidal symptoms, metabolic abnormalities such as weight gain, hyperglycemia and dyslipidemia require careful monitoring in children and adolescents. Antipsychotic drugs may also differ with regard to their pharmacokinetics, which should be kept in mind for improving utilization of these drugs in children and adolescents.

**Keywords:** adolescents, children, effectiveness, safety, schizophrenia

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**MEET THE EXPERTS****[MTE-1]****Drug interactions in psychopharmacology**

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Modifications in the effect of a drug are caused by differences in the absorption, transport, distribution, metabolism or excretion of one or both of the drugs compared with the expected behavior of each drug when taken individually. These changes are basically, the modifications in the concentration of the drugs.

Inhibition: Fluvoxamine inhibits CYP 1A2 and the serum level of theophylline increases. Induction: Carbamazepine and phenobarbital induce cytochrome P450 enzymes and eventually the metabolism of TSA increases.

Treatment of ADHD in case of epilepsy comorbidity:

Dexamphetamine may be preferred to methylphenidate for children with both ADHD and epilepsy. Although children with ADHD are increasingly recognized as being at an elevated risk for seizures, treatment of ADHD symptoms with atomoxetine does not appear to elevate this risk further. The shared vulnerability between ADHD and seizure activity should be taken into account when making treatment decisions for populations of children with epilepsy and children with ADHD. No interactions with any of the AEDs have been reported for atomoxetine, while MPH can increase phenytoin serum concentrations. Furthermore, MPH serum concentrations may be lowered by the contemporary administration of carbamazepine, thus leading to a loss of efficacy.

**Keywords:** drug, interaction, child

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S44**

**[MTE-1]****Psychotropic drug-drug interactions; two cases from the clinical practice**

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A drug interaction, defined as the modification of the action of one drug by another, can be beneficial or harmful, or it can have no important effect.

An acknowledgment of drug interactions at the clinics is becoming increasingly necessary with the rising use of combinations of drugs in all medical conditions.

Drug interactions are usually classified as pharmaceutical, pharmacodynamic and pharmacokinetic. Of the three mechanisms, pharmaceutical interactions are least likely to lead to problems in clinical practice and there are no potentially risky interactions of this type with psychotropic drugs. Pharmacokinetic interactions occur when the absorption, distribution or elimination of one drug is influenced by another.

The most common interactions seen in clinical practice are pharmacodynamic. They occur when drugs compete for the same receptor or produce antagonistic or synergistic effects on the same target organ or system. The most important enzymes involved in drug interactions are members of the cytochrome P450 (CYP) system that are responsible for many of the phase 1 biotransformations of drugs. The other potential for interactions involving uridine diphosphate glucuronosyl transferases (UGT) responsible for phase two conjugation reactions, is newly recognized very well. Many psychotropic drugs have a high affinity for one or more of the enzymes in the CYP or UGT systems, which play a major role in their metabolism.

Any attempt to keep hundreds of potential drug interactions in mind to prevent hazardous interactions is ineffective. Rather, a child psychiatrist should have a basic understanding of the types and timing of possible drug interactions and then develop prevention strategies in prescribing psychotropics. Additionally, drug interaction simulation software that detail both reported and predicted CYP-based, glucuronidation-based and other drug interactions are emerging to be part of a clinician armamentarium. Finally, two cases will be discussed about this topic in this section.

**Keywords:** psychotropic drug interactions, P450 (CYP) system, adverse events

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S44**

[MTE-1]

## Psychotropic drug interactions with non-psychotropic medications

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A drug interaction occurs when the effectiveness or toxicity of a drug is modified by the addition of another drug. Sometimes, drug interactions may be beneficial, leading to increased efficacy or reduced risk of side effects. However, more often, drug interactions are important when concurrent drug administration leads to decrease in efficacy or increase in toxicity of medications. Drug-drug interactions occur via two ways; pharmacodynamic and pharmacokinetic interactions. Pharmacodynamic interactions mean synergy or antagonism of each drug's effects at target receptors. Pharmacokinetic drug-drug interactions may occur by mechanisms, including alterations in drug metabolism, absorption, excretion, and distribution. In pharmacokinetic interactions, blood level of administered drug changes.

Many psychotropic drugs have significant interactions with other medications. Psychotropic drugs are mostly metabolized in the liver by cytochrome P450 (CYP) enzymes. Therefore, they are sensitive to metabolically based drug interactions. Psychotropic drug-drug interaction may occur with other psychotropic medications as well as with agents used for the treatment of accompanying somatic illnesses. P450 inhibitors produce an increase in blood levels of drugs, which are metabolized by CYP enzymes. Conversely, inducers cause an increase in metabolization and decrease in blood levels. Enzymatic inhibition is usually immediate, whereas induction requires several days to two or more weeks to show an effect on drug metabolism. In child psychiatry practice, antipsychotics (especially risperidone, aripiprazole and olanzapine), selective serotonin reuptake inhibitors (fluoxetine, sertraline, and escitalopram), tricyclic antidepressants (imipramine), methylphenidate and atomoxetine are mostly prescribed. CYP2D6, CYP3A4 and CYP2C9 are commonly involved in psychotropic metabolism. Therefore, other drugs prescribed for somatic diseases altering CYP enzymes can change psychotropic drug levels.

In summary, risperidone is metabolized primarily by CYP2D6 and, to a lesser extent, CYP3A4. Aripiprazole is metabolized by CYP2D6 and CYP3A4. Fluoxetine and paroxetine are potent inhibitors of CYP2D6; sertraline inhibits CYP3A4. Stimulants react with other drugs through pharmacodynamic reactions. Dopaminergic, noradrenergic and possible serotonergic receptors play role in stimulant and other drug interactions. Atomoxetine does not alter CYP enzymes but drugs affecting on CYP2D6 can cause differences in atomoxetine metabolism. Carbamazepine stimulates many enzymes especially CYP3A4 and leads to many important alterations. It is essential to be aware of any drug, prescription or otherwise, that the patient may be taking concurrently and to evaluate the potential interaction. As part of medical history, enquiries should be made about all medications, including those prescribed by other physicians; over-the-counter drugs (Aspirin, painkiller); dietary supplements (ginseng, grapefruit juice); and herbal preparations (St John's worth) and alcohol use. Drugs used for common childhood disorders such as asthma (theophylline, beta agonists), infections (erythromycin), epilepsy (e.g. carbamazepine, phenytoin), fungal infections (e.g. fluconazole), nasal congestion (pseudoephedrine) can cause drug-drug interactions with psychotropics. Therefore, clinicians must be careful in clinical practice Two case scenario about psychotropic drug interactions with non-psychotropic medications will be discussed in the presentation.

**Keywords:** psychotropic drugs, CYP enzymes, drug interactions

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S45**

**[MTE-2]****An adolescent with obsessive compulsive disorder and bipolar disorder: A case report**

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One to three percent of children and adolescents have Obsessive compulsive disorder (OCD). Although high co-morbidity occurs between OCD and Bipolar Disorder (BD) in adults, there has been limited research on anxiety in pediatric BD.

A 15 year-old adolescent on chlorpromazine treatment for OCD was referred for his manic symptoms. During hospitalization, chlorpromazine was discontinued. Lithium 20 mg/kg was initiated gradually. Manic symptoms were recovered in one month. Aripiprazole and clonazepam treatment was combined with cognitive behavioral therapy for his OCD symptoms. He was discharged after 2 months with partial remission of OCD symptoms.

This OCD case will be discussed as a severe case with comorbid BD having complicated treatment approach.

**Keywords:** adolescent, obsessive compulsive disorder, bipolar disorder, comorbidity

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**[MTE-3]****Impairments in social skills in Attention deficit hyperactivity disorder: a case report**

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In Attention deficit hyperactivity disorder (ADHD), the symptoms of attention deficit, hyperactivity and impulsivity occur and it is thought that this disorder influences the school age children at the rate of 3-5% throughout the world. ADHS leads to loss of functioning in cognitive, academic, family and professional areas. Another area impaired in ADHS is social functioning. Impairment in social functionality mostly emerges in the form of refusal by peers and having conflicts with other children and adults. In addition, impairment in social functioning is important for short and long-term unfavorable prognosis of ADHD.

5 year old boy were referred to a child and adolescent psychiatry clinic in 2009 with the symptoms of hyperactivity, temper tantrums, acting as the opposite sex, and impairments in social skills. He was assessed by a semi-structured interview based on DSM-IV criteria, and diagnosed as ADHD-combined subtype. The impairments in social functioning and the treatment modalities between 2009 and 2014 will be discussed in this section.

The implementation of interventional programs in the involved areas such as early social skill training for preventing impairment in social functioning may help to alleviate the effect of disorder in adulthood. The efficiency of family training, judicious drug treatment and intervention programs should be increased. In interventions, comorbid disorders as well as ADHD should be taken into account and if necessary, supplementary treatment directed to these disorders should be added to the program.

**Keywords:** attention deficit disorder with hyperactivity, child, social problems

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S46**

**[MTE-3]**

## Comorbidity between obesity and diagnosed attention deficit hyperactivity disorder in children and adolescents: case report

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Obesity is now reaching epidemic proportions in the pediatric population worldwide. Previous studies have reported associations between child overweight and some features of psychopathology as depressive symptoms, Attention deficit hyperactivity disorder, and low self-esteem.

Attention deficit hyperactivity disorder is one of the most common psychiatric disorder which affects 5-10% of school age children worldwide. Although somewhat overlooked in the past, in recent years studies have focused on the relationship between ADHD and obesity.

A 12-year-old male patient was referred to a child endocrinology outpatient clinic with his parents because of obesity complaint. The patient, who was diagnosed as having probable ADHD after the evaluation of the questionnaire filled out by his parents, was invited to the child and adolescent psychiatry outpatient clinic for further evaluation. ADHD was determined according to DSM-IV diagnostic criteria, information obtained from his parents and teacher. Additionally, sociodemographic form, the Conners Parents Rating Scale and Strengths and Difficulties Questionnaire (SDQ) were administered.

Understanding the underlying pathological mechanisms would highlight the relation between ADHD and obesity could be beneficial about treatment and managing outcomes.

**Keywords:** attention, hyperactivity, obesity

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**[MTE-22]**

## Psychotropic drug interactions in systemic disorders of children and adolescents

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Psychiatric morbidity in chronic childhood illnesses is higher than general population ranging with 10–30%. Risk factors for morbidity are multiple admissions to hospital, adaptation to illness, physical disability, brain dysfunction, pain frequency, younger age, poverty, single parent family and increased psychological symptoms in the parents. In psychiatric consultation, patients receive psychotropic medication for broad-ranging diagnoses, including depression, anxiety, delirium, behavioral disturbances, and substance abuse and withdrawal. Potential for specific drug-disease and drug-drug interactions is enormous.

The appropriate use of psychopharmacology in medically ill patients requires consideration of the underlying medical illness, potential alterations to pharmacokinetics and pharmacodynamics, drug–drug interactions, and contra indications. By recognition of these issues, there must be great consideration about the prescription, safety, and efficacy of psychopharmacological treatments in medically ill patients.

Physical disease and organ failure can interfere with drug absorption, distribution, metabolism, and elimination. A physical condition and malfunction organ can also influence a variety of different aspects of drug handling. Therefore, these conditions are important in choosing and managing psychoactive medications. Psychopharmacological agents need monitoring and modifying drug dose or administration in seriously ill patients.

While most psychoactive drugs are primarily subject to hepatic metabolism, hepatic disease or failure, mostly, challenges treatment of psychiatric disorder. Using drugs in patients with renal impairment needs careful consideration especially lithium. Moreover, medical

conditions related with cardiovascular disease (congestive heart failure, cardiac conduction abnormalities, etc.), pulmonary disease and respiratory disorders (hypoxia and hypercarbia, cystic fibrosis), gastrointestinal disease (mucosal integrity or gut motility, lumen pH) and endocrine disease affect pharmacokinetic and pharmacodynamic properties of drug. We will discuss these drug-disease interactions with case illustrations in systemic disorders.

**Keywords:** drug-interaction, systemic disorder, psychopharmacology

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**DEBATE****[D-2]****Polypharmacy is a need in psychiatric practice**

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Polypharmacy is defined as using two or more drugs in treatment of one disorder. It might be considered as a “rule” rather than “exception” in psychiatry. The National Association of State Mental Health Program Directors (NASMHPD) categorized polypharmacy as follows in 2001 NASMHPD Technical Report: “same class polypharmacy,” such as using two SSRIs in a case of depression; “multi-class polypharmacy” (e.g. use of a mood stabilizer like valproate along with an atypical antipsychotic, such as olanzapine, for treatment of mania); “adjunctive polypharmacy” (e.g. treating insomnia caused by bupropion with trazodone); “augmentation polypharmacy” refers to the use of one medication at a lower than normal dose along with another medication from a different class in full therapeutic dose for the same symptom cluster (e.g. addition of low dose haloperidol in a patient responding to risperidone alone only partially); or addition of a medication that would not be used alone for the same symptom cluster (e.g. augmentation of antidepressants with lithium or thyroid hormone), and finally “total polypharmacy” which means using more than two medications in the identical pharmacological category for the same condition at the same time.

Polypharmacy has become a common clinical practice for many psychiatric conditions. Up to one-third of the patients visiting outpatient psychiatry clinics have been found to be on three or more psychotropic medications.

Polypharmacy could increase medical risks (adverse effects, drug and food-interactions, morbidity, mortality, etc. ) and decrease quality of lives of the patients receiving it. Polypharmacy should be considered only after monotherapy has been tried and failed. It should also be based on evidence (when available) in addition to knowledge of mechanisms of action, pharmacodynamics, and pharmacokinetics of medications and should always keep the risk versus benefit ratio in perspective.

At times polypharmacy is applied based on anecdotal or personal clinical experience, which would be non-scientific and risky, but it should be rational and valid based on good evidence such as adding lithium in a treatment resistant depression case, which has been proven to be effective in several double blind controlled studies. When rational polypharmacy can address treatment resistance, then quality of life of the patients would be improved. However, irrational use of polypharmacy in practice poses very serious risks even death and might result in irreversible damage or morbidity to our patients. Moreover, irrational polypharmacy practices also wastes limited resources, can increase pharmaco-economic costs, and may result in lawsuits.

The principles of rational polypharmacy should be built on a solid knowledge and training on psychiatry and psychopharmacology. In addition, clinicians should update their knowledge, clinical skills, and abilities regularly by attending to psychopharmacology lectures, conferences, workshops, courses, etc. delivered by experts in their field throughout their careers.

**Keywords:** psychotropics, polypharmacy, monotherapy, concurrent medication use

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S49**

**[D-3]****Abstinence should be the goal in the treatment of alcohol use disorder**

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A debate about the possibility to return to controlled drinking in the treatment of alcoholism is implemented until 1960s in the addiction field. USA is dominated by those, who consider abstinence as the appropriate goal while service providers in UK favor controlled drinking. It is important to remember that problem drinking is not a single entity. It ranges from hazardous (or risky) drinking to alcohol use disorder of various severities. The definition of alcoholism is very critical in this debate. For example, according to the Alcoholics Anonymous (AA), anyone who can recover by drinking moderately, was not an alcoholic at the beginning.

Among those who consume alcohol, there is a wide spectrum of alcohol consumption. National Institute on Alcohol Abuse and

Alcoholism (NIAAA) recommends that adult men should not exceed four standard drinks of alcohol per day and women no more than three drinks. Below this level, alcohol consumption has a 'low risk' in terms of health or social harms. NIAAA advises to drink less than 14 standard drinks of alcohol per week in men and 7 standard drinks in women. Those people who drink above these limits but have not experienced negative consequences related to alcohol are regarded as hazardous (or risky) drinkers, because the level of their drinking increases the risk of harm in the future. But this group of people is not included in alcohol use disorder category.

Alcohol dependence syndrome or alcoholism, which is a part of alcohol use disorder, includes a craving to take alcohol, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to alcohol use than to other activities, increased tolerance, and sometimes a physical withdrawal state. Alcohol use disorder exists on a continuum of severity. It can be subdivided into categories of mild, moderate and severe.

In the general population, there is substantial remission from alcohol use disorders over time most of which takes place without any contact with alcohol treatment services. Although many young people who meet the criteria for alcohol use disorder in their 20s remit before their 40s, those who are still alcohol dependent in their 40s tend to stay that way. People typically enter specific alcohol treatment at this age period. People, who go under alcoholism treatment, are usually more severely ill and have more common psychiatric and medical comorbidities compared to nonclinical heavy drinkers. Most studies about treatment outcome of alcohol use disorder find that 70 to 80% relapse in the year following treatment

Hazardous (risky) drinkers may respond to a brief intervention without any further need for specialist treatment. In other words, for people who have not yet developed alcohol use disorder, but are in danger of crossing the line into it may benefit from moderation management. However, true alcohol use disorder patients need treatment services to assist the individual to stop drinking alcohol. It has been reported that clients, who initially stated that they preferred to get abstinent showed a better outcome than those who preferred a non-abstinent goal in treatment. This superior outcome was clearer at 3 months' follow-up but still evident at 12 months' follow-up

At the initial stages of treatment, patients may be ambivalent or resistant to changing their drinking behavior or dealing with their problems. At this stage, an approach that may increase the patient's motivation towards engagement with treatment is helpful. The clinician may set goals for moderate drinking for a patient who is still in denial of his inability to control drinking so that the patient may be convinced to go further in treatment. For most people who are alcohol dependent the most appropriate goal in treatment is complete abstinence. The higher the level of alcohol dependence, the lower the chance of returning to moderate or 'controlled' drinking. Further, for people with significant psychiatric or physical comorbidity, abstinence is the appropriate goal. If a patient asks for moderation but the clinician considers that it is risky, the clinician should give a strong advice that abstinence is most appropriate to prevent medico-legal problems.

**Keywords:** alcoholism, dependence, abuse, abstinence, controlled drinking, moderation

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**DUAL CONFERENCE****[DC-1]****Metabolic side effects of psychotropic drugs**

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Psychotropic drugs may have a variety of endocrine and metabolic side effects which may be harmful to patients, and which may lead to poor compliance with their medication regimen.

Lithium may inhibit thyroid function, particularly when given in combination with valproate, carbamazepine or quetiapine. Thyroid function tests should be periodically monitored in patients taking lithium, and thyroid hormone replacement therapy given if hypothyroidism develops.

Children taking stimulants or atomoxetine for ADHD may have anorexia and a resulting slowing of growth. Efforts to increase caloric intake, along with drug holidays, may be needed to counteract this tendency.

Several antipsychotic medications elevate serum prolactin, which may result in hypogonadism. Switching to a prolactin-sparing antipsychotic medication may be helpful; alternatively, addition of aripiprazole (an antipsychotic with partial dopamine agonist activity) to the patient's regimen may correct the hyperprolactinemia.

Atypical antipsychotics may produce insulin resistance, weight gain, hyperglycemia and hyperlipidemia. Switching to a more metabolically neutral drug may be beneficial, or initiation of weight loss programs or medications may help.

Finally, valproate has been shown to lead to the development of the polycystic ovary syndrome in young women. Monitoring the patient's menstrual history is necessary to detect this condition. Choosing a different mood stabilizer is helpful, and use of an oral contraceptive may avoid the development of menstrual irregularity and hirsutism in patients taking valproate.

**Keywords:** metabolic side effects, psychotropic drugs

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[PP-001]

## Denver Developmental Test findings and relation with sociodemographic variables in a large community sample of 0-4 years old children

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**Objective:** The aim of this study was to investigate prevalence of developmental problems and relationship with socio-demographic variables in a community sample of young children.

**Method:** Participants included 1000 children (558 males, 442 females, age range 1-48 months, mean 18.4 months, SD 7.8 months). Children were referred generally by their parents for developmental evaluation and consultation in response to a public announcement in a district area of Istanbul, Turkey. An interview form and Denver Developmental Screening Test II (DSST) were used for socio-demographic data and developmental evaluation. The  $\chi^2$  test and Pearson correlation were used for data analysis.

**Results:** 741 out of 1000 children (74.1%) had normal, 140 (14%) had risky and 119 (11.9%) had abnormal findings on DDST results. The probability of abnormal on DDST results was significantly higher in males ( $p=0.003$ ), 2-4 year-old group ( $p<0.05$ ), families with more than one child ( $p=0.001$ ), consanguineous marriages ( $p<0.01$ ), low parental educational levels and low household income ( $p<0.01$ ), and in children without a history of breastfeeding ( $p=0.000$ ). Immigration status and mode of delivery did not have a significant effect on the probability of abnormal DDST results ( $p>0.05$ ).

**Conclusion:** Socio-demographic factors have noteworthy impacts on development. Determining these factors is important especially during the first years of life.

**Keywords:** children, development, Denver Developmental Test, socio-demographic factors

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[PP-002]

## Plasma dopamine and noradrenaline levels in children diagnosed with attention deficit-hyperactivity disorder: a prospective treatment study

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**Objective:** Attention deficit-hyperactivity disorder (ADHD) is an important psychiatric illness with a prevalence of 5% worldwide, which is characterized by core symptoms like hyperactivity, attention deficit and impulsivity and its effects on the patients' and their families' quality of life. Even though the pathogenesis of ADHD is still greatly unknown, evidences from different researches point out primarily the dopaminergic and noradrenergic (NA) system. In this study, it was aimed to be compared plasma dopamine (DA) and NA levels in children diagnosed with ADHD in baseline and after two months methylphenidate OROS treatment.

**Method:** 50 children with the diagnosis of ADHD within the age range of 6-12 years were recruited in the study. The psychiatric diagnoses were determined by applying a semi-structured interview with Kiddies Schedule for Affective Disorders and Schizophrenia for School Aged Children- Present and Lifetime Version (K-SADS-PL). The symptom severity of ADHD was measured by Clinical Global Impression (CGI) ADHD severity scale. Clinicians filled up Du Paul ADHD scale. Plasma DA and NA levels were measured before methylphenidate treatment and two months after beginning methylphenidate OROS.

**Results:** According to a paired samples T-test, mean plasma DA levels in the baseline were 169.27 and 180.82 in the end point, ( $t=-1.339$ ,  $df=49$ ,  $p=0.187$ ) and baseline NA level was 232.03 and after methylphenidate OROS treatment it was 232.03 ( $t=1470$ ,  $df=49$ ,  $p=0.148$ ).

There were no significant changes for both DA and NA levels between pretreatment and post-treatment significant difference was not found between three subtypes of ADHD. The difference between DA and NA levels and comorbidity did not reach statistical significance and there was no correlation between DA and NA and Dupaul or CGI scores.

**Conclusion:** To our knowledge, this is the first study in which plasma DA and NA levels were measured pretreatment and two months after methylphenidate OROS treatment

Catecholaminergic pathways have been implicated in the neurobiological causes responsible for the emergence of ADHD. A better understanding of the possible roles of catecholaminergic and non-catecholaminergic systems in ADHD could advance our understanding of the disorder and help determine better treatment regimens.

**Keywords:** attention deficit hyperactivity disorder, children, dopamine, noradrenaline

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S53-S4**

[PP-003]

## The relationship between blood lipid levels, glucose level, thyroid function tests and cognitive functions in first episode schizophrenia patients

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**Objective:** There is an important relationship between chronic schizophrenia and cognitive capacity. There are several researches studying the relation between cognitive and metabolic parameters after antipsychotic use in literature; however there exists no study in first episode schizophrenia patients not using drugs. Early and proper treatment is very important for the prognosis of first episode schizophrenia patients.

**Methods:** 27 patients with the diagnosis of schizophrenia according to DSM-IV-TR were included into the study. Patients were recruited either from outpatient clinics or from inpatient wards between 2009 and 2013. Serum lipid profile (total cholesterol, HDL, LDL, VLDL cholesterol), free T3, free T4, thyroid stimulating hormone (TSH), and serum fasting glucose levels were obtained in all patients. All patients underwent neuropsychological tests (Wisconsin Card Sorting Test, Stroop Test, Rey Auditory Learning Verbal Test, Trail Making Test, Continuous Performance test, Serial Digit Learning Test, and N-back Test). The cognitive findings were evaluated in 3 fields: learning and memory, executive functions, and attention. Spearman's correlation analysis was performed to explore the relationship between serum lipid, thyroid profile, fasting glucose levels and learning-memory, attention, and executive functions.

**Results:** Demographic characteristics: Mean age ( $\pm$  standard deviation) was 23.9 $\pm$ 6 years; 56% of patients are men; the mean education in years was 9.6 $\pm$ 2.8. Learning and Memory: There was an inverse and significant correlation between Rey Visual Design Learning Test and free T4 levels ( $r=-0.200$ ;  $p=0.05$ ). An inverse correlation was observed between Rey Visual Memory Test and free T4 levels as well; however it has not reached the significant level ( $r=-0.431$ ;  $p=0.1$ ). Executive functions: Among executive functions, Wisconsin Card Sorting test and serum fasting glucose levels correlated inversely with no statistical significance ( $r=-0.464$ ;  $p=0.053$ ).

Attention: There was an inverse and significant correlation between CPT (2 day) scores and triglyceride levels ( $r=0.766$ ;  $p=0.010$ ). CPT percentage score and TSH level correlated positively but this association was not significant ( $r=0.643$ ;  $p=0.086$ ); on the other hand, it showed an inverse and significant correlation with serum VLDL levels ( $r=-0.737$ ;  $p=0.037$ ).

**Conclusion:** Serum lipid profile, glucose level, and thyroid function tests appear to have an impact on first episode schizophrenia patients. This research is the first study in literature exploring the association between blood lipid levels, glucose level, thyroid function and cognitive function on first episode schizophrenia patients. Yet more studies with larger sample size are needed for a definite conclusion.

**Keywords:** schizophrenia, first episode, cognitive functions, lipid levels, thyroid functions, glucose levels

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S54**

[PP-004]

## Increased neutrophil-to-lymphocyte ratio (NLR) and decreased mean platelet volume (MPV) values in acute mania: effect to inflammation?

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**Objective:** To determine whether presence of an inflammatory state by using values of Neutrophil-to-lymphocyte ratio (NLR) and mean platelet volume (MPV) in manic patients.

**Methods:** This retrospective study was performed on 76 acute mania patients admitted to the inpatients psychiatry clinic of university hospital of Afyonkarahisar in Turkey. Diagnoses were based on Diagnostic and Statistical Manual of Mental disorder (DSM-IV). The control group consisted of 74 healthy individuals recruited from the community. They were age- and sex- matched with the study group.

**Results:** The mean NLR value of patients was  $2.2 \pm 1.4$ , and  $1.6 \pm 0.5$  for control group. The NLRs were significantly higher in patients with manic episodes ( $p=0.004$ ) The MPV values of the manic patients were significantly lower than of the control group ( $10.0 \pm 1.2$  vs.  $10.9 \pm 2.3$ ,  $p=0.027$ ).

**Conclusion:** Inflammation may be a part of the complex pathophysiology of acute mania.

**Keywords:** neutrophil-to-lymphocyte ratio, mean platelet volume, acute mania

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[PP-005]

## The relationship between coping styles and personality traits in nurses

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**Objective:** Coping style and personality are related with stress management and became intriguing subjects for different disciplines interested in "stress", such as psychiatry, psychology, occupation management, business management, economics etc. This study aims to investigate the relationship between coping styles, temperament and character traits and anxiety and depression scores in nurses.

**Methods:** 94 nurses are included to the study. Sociodemographical data form, Temperament and Character Inventory by Cloninger, Coping Styles Scale and Hospital Anxiety and depression scale are performed.

**Results:** Lower harm avoidance scores and higher persistence and cooperativeness scores were predictors of self-confident style. Lower harm avoidance and higher cooperativeness scores were predictors of optimistic style. Higher harm avoidance, reward dependence, and self-transcendence scores were predictors of helpless style. The only predictor for submissive style was higher harm avoidance scores and for social support seeking style was higher reward dependence.

**Conclusion:** This study presents temperament and character traits as predictors of coping styles. Especially harm avoidance was highlighted in this study with its relation to unsatisfactory coping styles as submissive and helpless style and so anxiety and depression scores. Investigation of different dimensions of the relations between personality and coping may be subject for further studies.

**Keywords:** personality, coping, temperament, character, anxiety, depression

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S55**

[PP-006]

## The relationship between personality and burn out

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**Objective:** The question repeatedly asked is why, under the same working conditions, one individual burns out, whereas another shows no symptoms at all. We sought the answer between nurses, who are considered to be particularly susceptible to the danger of burnout due to the nature of their work.

**Methods:** This study is carried out with randomly selected 108 nurses working at Derince Training and Research Hospital. Maslach Burnout Inventory and Temperament Character Inventory were applied.

**Results:** Novelty seeking (NS) and harm avoidance (HA) scores showed positive correlation with high burnout level, it showed negative correlation with persistence (P), self directedness (SD) and cooperation (C) burnout levels. According to the regression analysis performed in order to asses if, the personality characteristics are predictive about burnout level, NS and HA were positive and C was negative predictors of total burnout levels.

**Conclusion:** This study proved that there was a relationship between the personality characteristics defined by Cloninger and burn out. While analyzing the structuring of the healthcare provider systems, individual specific evaluations and development of personality traits, which are protective against burnout of the individuals as well as the other relevant evaluations, shall be put on the agenda.

**Keywords:** burn out, personality, character, temperament, Cloninger

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[PP-007]

## Hormonal responses to psychological stress in alcoholic patients

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**Objective:** During the alcohol withdrawal period, it is known that there are some alterations in the stress response system such as increased basal cortisol levels, reduced basal adrenocorticotrophic hormone (ACTH) levels, and blunted ACTH and cortisol responses to stress tests in the alcohol-dependent patients. In this study, our purpose was to investigate the probable alterations in the responses of the HPA axis to psychological stress during the late alcohol withdrawal in alcohol-dependent males.

**Methods:** This study included 23 male patients with alcohol dependence and alcohol withdrawal according to DSM-IV-TR diagnostic criteria and 20 healthy male volunteers as a control group. In order to determine the severity of alcoholism, the Michigan Alcoholism Screening Test (MAST) was performed in the first week of hospitalization. The Clinical Institute Withdrawal Assessment for Alcohol (CIWA-A) scale was applied on the 1<sup>st</sup>, 8<sup>th</sup>, 21<sup>st</sup> and 28<sup>th</sup> days to determine the severity of withdrawal during follow-up. The Trier Social Stress Test (TSST) was used in order to evaluate responses to psychological stress in the patients and the controls. TSST was performed on patients on the 28<sup>th</sup> day of hospitalization. This is a test standardized to measure the stress response by creating a social stress in the laboratory. Basal serum levels of cortisol, ACTH, dehydroepiandrosterone-sulfate (DHEAS) and prolactin and the responses of these hormones to psychological stress were measured during the late withdrawal period (28<sup>th</sup> day of the withdrawal) in the alcohol-dependent males and in healthy controls. Blood samples from the subjects were collected for hormonal measurements at 15 minutes before and at 0, 30, 60, 90, 120 minutes after the social stress test. Peak,  $\Delta$  and area under the curve (AUC) values of the hormones following stress were calculated.

**Results:** Values of basal, peak, and AUC prolactin were statistically significantly higher in patients than in controls, and values of basal, peak, AUC cortisol and peak DHEAS were statistically significantly lower in patients than in controls.  $\Delta$  and AUC ACTH responses were also significantly lower in the patients.

**Conclusion:** ACTH, DHEAS and cortisol responses to psychological stress were found to be decreased in the late withdrawal period of the alcoholic patients compared to the controls, while prolactin responses were higher. Inadequate cortisol, ACTH and DHEAS responses to psychological stress during the late withdrawal period in the patients might have resulted from damages on the brain areas which are the parts of the stress-response cycle.

**Keywords:** alcohol withdrawal, hypothalamic pituitary adrenal axis, neurosteroids, trier social stress test

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[PP-008]

## Hormonal responses to physical stress in alcoholic patients

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**Objective:** During the alcohol withdrawal period, it is known that there are some alterations in the stress response system such as increased basal cortisol levels, reduced basal adrenocorticotrophic hormone (ACTH) levels, blunted ACTH and cortisol responses to stress tests in the alcohol-dependent patients. In this study, our aim was to investigate the probable alterations in the response of HPA axis to physical stress in early and late alcohol withdrawal, and if so, whether these alterations are “state” features restricted to the acute alcohol withdrawal or “trait” markers continuing during the protracted abstinence.

**Methods:** This study included 26 male patients diagnosed with alcohol dependence and alcohol withdrawal according to DSM-IV-TR diagnostic criteria, and 20 healthy male volunteers as a control group. In order to determine the severity of alcoholism the Michigan Alcoholism Screening Test (MAST) was performed in the first week of hospitalization. The Clinical Institute Withdrawal Assessment for Alcohol (CIWA-A) scale was applied on the 1<sup>st</sup>, 8<sup>th</sup>, 21<sup>st</sup> and 28<sup>th</sup> days to determine the severity of withdrawal during follow-up. The Cold Pressure Test (CPT) was applied on the 8<sup>th</sup> and 30<sup>th</sup> days of follow-up. CPT is a standardized test used in many studies to demonstrate the reactivity of the HPA axis. Blood samples were collected at 0, 30, 60, 90, 120 minutes after the test for hormonal measurements. Basal serum levels of cortisol, ACTH, dehydroepiandrosterone-sulfate (DHEAS) and prolactin and the responses of these hormones to the physical stress were measured two times during the early and late withdrawal periods in the alcohol-dependent males and once in healthy control male subjects. Peak,  $\Delta$  and area under the curve (AUC) values of the hormones were calculated.

**Results:** The data on the 8<sup>th</sup> day of withdrawal revealed that values of basal, peak, and AUC prolactin were statistically significantly higher in patients than in controls, and that values of  $\Delta$  cortisol and basal, peak, and AUC DHEAS were statistically significantly lower in patients than in controls. On the 30<sup>th</sup> day of withdrawal, values of peak,  $\Delta$ , and AUC prolactin were statistically significantly higher in patients than in controls, while values of cortisol, DHEAS, and ACTH were not statistically different between patients and controls.

**Conclusion:** There were some abnormalities in the HPA axis such as blunted cortisol and DHEAS responses to physical stress during the early withdrawal period in the patients with alcohol dependence. These abnormalities were normalized towards late withdrawal. It was also found that prolactin responses to physical stress during the early and late withdrawal periods were increased in the alcohol-dependent patients. Our findings of the cortisol and ACTH in the alcoholic patients suggests that the changes implying an insufficient response to stress might be originated from the adrenal level rather than pituitary and appeared to be limited to the early withdrawal period.

**Keywords:** alcohol withdrawal, cold pressure test, hypothalamic pituitary adrenal axis, neurosteroids

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[PP-009]

## The comparison of oxidative parameters in mania and remission period of patients with bipolar disorder

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**Objective:** The underlying mechanisms of bipolar disorder (BPD) have not been completely established. Oxidative imbalance is one possible mechanism of BPD. The aim of this study is to evaluate the effect of oxidative metabolism on BPD.

**Method:** The study included 50 patients diagnosed with type 1 BPD according to DSM-IV-TR criteria and 40 healthy controls. The Young Mania Depression Scale (YMDS), Hamilton Depression Rating Scale (HDRS), Brief Psychiatric Rating Scale (BPRS), Global Assessment Scale (GAS), and a sociodemographic form were administered to all patients in manic episodes and the control group. Blood samples were collected for assessment of the Total Antioxidant Level (TAL), Total Oxidant Level (TOL) and Oxidative Stress Index (OSI). After the remission period, clinical scales were applied, and blood samples were collected.

**Results:** In this study, TOL and OSI parameters were significantly higher in the mania period of patients with BPD than the control group. After response to the treatment, TAL parameters were similar between the groups, while TOL and OSI parameters were significantly lower in patients with BPD than controls.

**Conclusion:** Patients in the mania period of BPD had high levels of oxidants. After response to the treatment, patients' oxidative parameters were lower than the control group. This suggests oxidative metabolism is related to the mania period rather than the etiology of BPD. Antipsychotics and mood stabilizers, which are commonly used in the treatment of BPD, have an anti-oxidative effect, meaning they strengthen the anti-oxidative system. Further prospective studies are needed to evaluate the effects of the oxidative system on BPD.

**Keywords:** bipolar disorder, mania, oxidative parameter

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[PP-010]

## Proton magnetic resonance spectroscopy in Obsessive compulsive disorder: improvement of reduced neuronal integrity in the anterior cingulate and caudate by SSRI treatment

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**Objective:** Neuroimaging studies have suggested that the dysfunction of the cortico-striatal-thalamo-cortical circuit was a key pathophysiological feature of Obsessive compulsive disorder (OCD). Several studies have investigated abnormalities in the neural metabolite concentrations and metabolic changes after OCD treatments, using proton magnetic resonance spectroscopy (1H-MRS) among OCD patients. The aim of this study was to investigate the metabolic integrity of the anterior cingulate, caudate and putamen and the effects of the selective serotonin reuptake inhibitor (SSRI) treatment on neurochemical levels in OCD patients.

**Methods:** In the present study, 32 unmedicated OCD patients were compared with 32 healthy controls to assess metabolite levels in the anterior cingulate, caudate and putamen by using 1H-MRS. 19 of the patients underwent a sertraline treatment for 12 weeks. Baseline metabolite levels in the three brain regions of 19 patients with OCD were compared with the levels measured after 12 weeks of sertraline treatment. The Yale-Brown Obsessive Compulsive Scale (Y-BOCS), the Hamilton Anxiety Rating Scale (HAM-A) and the Hamilton Depression Rating Scale (HAM-D) were administered to the patients at baseline and after 12 weeks of sertraline treatment. In OCD patients, at baseline and after pharmacotherapy, and in all control subjects, conventional cranial MR imaging and 1H-MRS examinations were performed on a

1.5T superconducting whole-body MR imaging scanner and spectroscopic system. Levels of N-acetylaspartate (NAA), choline (Cho) and myo-inositol (ml) were measured in terms of their ratios with creatine (Cr). Student's t test was used for continuous demographic variables for comparisons between the OCD and healthy control groups. Paired t tests were employed to compare the metabolite ratios and the scores on the scales before and after 12 weeks of sertraline treatment. Pearson's correlation coefficients were computed between the clinical variables and levels of metabolites.

**Results:** The ratio of NAA/Cr was significantly lower in OCD patients than in healthy controls in the anterior cingulate ( $t=-3.17$ ,  $p=0.002$ ). There was a tendency for levels of NAA/Cr to be lower in the caudate in OCD patients compared with healthy controls ( $t=-1.98$ ,  $p=0.05$ ). NAA/Cr ratios were negatively correlated with the Y-BOCS-total scores in the anterior cingulate in OCD patients ( $r=-0.57$ ,  $p=0.001$ ). There were significant improvements in the Y-BOCS-total score after 12 weeks of sertraline treatment, compared with baseline assessments ( $t=8.44$ ,  $p<0.001$ ). There was a mean reduction of 41.6% on the Y-BOCS-total score after the treatment. NAA/Cr levels were significantly higher in OCD patients after 12 weeks of sertraline treatment compared to those at baseline in the anterior cingulate ( $t=-2.41$ ,  $p=0.027$ ) and in the caudate ( $t=-2.23$ ,  $p=0.039$ ).

**Conclusion:** Neuroimaging studies of OCD have suggested abnormalities in the orbitofrontal cortex, anterior cingulate, and caudate nucleus. It has been also proposed that OCD treatment with the aim of reducing symptoms may have a neuromodulatory effect leading to metabolic changes in the direction of normalization in these regions. Our results suggest that reductions in NAA in the anterior cingulate and caudate could be reversed with SSRI treatment, which may indicate an improvement in neuronal integrity in OCD patients.

**Keywords:** anterior cingulate, caudate, magnetic resonance spectroscopy, N- acetylaspartate, obsessive compulsive disorder

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[PP-011]

## Montreal cognitive assessment (MoCA) scale for the assessment of cognition in schizophrenia and its correlations with mini mental state examination (MMSE)

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**Objective:** Schizophrenia is a complex neurodevelopmental disorder and the cognitive deficit is central feature of the schizophrenia. Cognitive impairment is related to clinical symptoms, social and functional outcome. The aim of this study was to investigate the clinical usability of the Montreal Cognitive Assessment (MoCA) as a screening instrument for cognitive impairment in schizophrenic patients alone, and in correlation with the Mini-Mental State Examination (MMSE).

**Methods:** This clinical study included 31 patients diagnosed with schizophrenia. Patients were selected from Psychiatry Clinic, Erenkoy Research and Training Hospital for Psychiatric and Neurological Disorders in the period between March 2013 and June 2013. For the assessment of cognitive impairment we used Montreal Cognitive Assessment Scale (MoCA) and Mini-Mental State Examination (MMSE).

**Results:** From the total number of patients ( $n=31$ ), 6/30 (19.4%) were males and 25/30 (80.6%) were females; mean duration of the disorder was 23.5 year ( $S.D=6.69$ ). Seventeen patients (54.8%) of those on MMSE scale had a score greater or equal to 24 (normal range) and the MoCA scale had a normal score ( $>21$ ), while 11 (35.5%) patients reported moderate to severe cognitive impairment. Analysis of the correlation coefficient between the total score of MoCA and MMSE scale indicates a statistically significant positive correlation with Spearman  $\rho=0.81$  and  $p<0.001$ .

**Conclusion:** Our findings provide preliminary evidence that MoCA scale performed well in screening mild and moderate cognitive impairments of schizophrenia patients in outpatient clinics and more sensitive than MMSE.

**Keywords:** schizophrenia, cognitive impairment, MoCA, MMSE

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[PP-012]

## Marital impact of adult attention deficit hyperactivity disorder

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**Objectives:** Adult Attention deficit-hyperactivity disorder (ADHD) has profound disastrous effects on close relationships and marriage as well, through deficits in executive functions, attention and impulsivity. ADHD spouse fail to meet his/her responsibilities because of forgetfulness, disorganization and distractibility and may render a small conflict into a big quarrel because of impulsivity. Difficulty in listening may end up with conflicts remaining unresolved and result his/her spouse feeling neglected and unloved. As a clinician we observed that when the ADHD spouse is female, resulting problems are less tolerated by husband. We hypothesize that when the couple embraces traditional gender roles, ADHD causes more problems in relationship and this relationship between gender roles and ADHD related problems is more prominent when the ADHD spouse is female. We have tested this hypothesis present our preliminary results hereby.

**Methods:** Consecutive 26 couples one of which one of the spouses has ADHD were enrolled into this study. Study population consisted of 9 females (34.6%) and 17 males (65.4%) with ADHD. Quantitative data is collected by Gender Roles Attitude Scale (GRAS), The Marital Impact Checklist and Adult ADD/ ADHD DSM IV- Based Diagnostic Screening and Rating Scale.

**Results:** "Lose temper over unimportant things"; "Can't get things done unless there is an absolute deadline"; "Tolerates too much and then blows up inconsistently"; "Has trouble dealing with frustration"; "Has trouble getting started on a task" are DEHB features reported as having most negative impact on marriage as reported by both ADHD patient and the non-ADHD spouse. Severity of ADHD and patient reported "negative impact on marriage" was found to be statistically correlated as expected. Severity of both attention deficit and hyperactivity/impulsivity were correlated with non-ADHD spouse's "feeling unloved, unimportant, or ignored" and "negative impact" as reported by the ADHD spouse. Unexpectedly severity of ADHD and non-ADHD spouses ratings of "feeling unloved, unimportant, or ignored" and "negative impact" were not found to be statistically correlated. Patient's total GRAS scores, "Egalitarian gender roles", "Female gender roles", "Male gender roles" subscale scores of GRAS were statistically related with patients report of "negative impact". Patient's score of "Female gender roles" subscale is related with patient reported non-ADHD spouse's "feeling unloved, unimportant, or ignored". Difference of "gender role attitudes" between ADHD and non-ADHD spouses was separately analyzed. Differences of spouses' attitudes in "Egalitarian gender roles" subscale of GRAS was found to be correlated with non-ADHD spouse's report of "negative impact of ADHD on marriage". The more the female partner was egalitarian - as indicated by "Egalitarian gender roles" subscale - the more "negative impact" the non-ADHD spouse perceives.

**Conclusion:** These results partially supports our hypotheses that "gender role attitudes" mediates the negative impact of ADHD on romantic relationships and this mediation may emerge at least in some relationships when the female partner is more egalitarian.

**Keywords:** adult attention deficit hyperactivity disorder, gender, marriage

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[PP-013]

## Mood dysregulation in children with attention deficit-hyperactivity disorder: its effects on the response to methylphenidate treatment and functionality

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**Objective:** Attention deficit hyperactivity disorder (ADHD) is one of the most frequent psychiatric disorders of childhood. ADHD, which is a multifactorial and clinically heterogeneous disease, leads to socioeconomic burden and undesirable academic and occupational results. Other psychiatric disorders and mood problems are likely to accompany a substantial proportion of children admitted to a clinic with a

diagnosis of ADHD, and this enhances the severity of the clinical picture. It is a current debate whether ADHD and non-cyclical severe irritability is a variant of a development bipolar disorder or not. However, epidemiological and phenomenological data are needed about clinical risks, prognosis markers, protective factors and treatment options. In this study, we aimed to investigate the differences between ADHD with and without mood symptoms in terms of functionality and treatment outcome.

**Methods:** This study is a follow-up study with a naturalistic design. Patients who were diagnosed ADHD and were started methylphenidate treatment (n=44, mean age: 10.8) were included in the study. The irritable/dysphoric group (group with mood dysregulation) is defined as children who got 8 points and more from "oppositional defiant" portion of DSM-IV-Based Screening and Rating Scale for Child and Adolescent Behavior Disorders (CABD-S) and got points between 12 -18 in Child Depression Inventory (CDI). Functionality is measured by three Likert-type items (1-5 for each) including academic, social and behavioral functionality. Clinical Global Impression (CGI) were used to determine the clinical severity of ADHD. Follow-up measurements included the CGI-Severity, Functionality in the 6-12 weeks of treatment.

**Results:** ADHD + irritable/dysphoric group consisted of 11 children (9 boys, 2 girls, mean age: 10.9) and 33 children (18 boys, 15 girls, mean age: 10.8) in ADHD group. Functionality scores were significantly lower in the ADHD + irritable/dysphoric group compared to the control group (social: 2.5 vs. 3.0; behavioral: 2.7 vs. 3.3; academic 2.1 vs. 2.6) in the first clinical application ( $p<0,05$ ). However, CGI-S scores were not significantly different (irritable/dysphoric group: 5.7 vs. control: 5.6). Methylphenidate was used at a dose of 24.7 mg/day on average. In the follow-up CGI-S scores were found to be significantly different (irritable/dysphoric group: 4.4 vs. control: 3.9) ( $p<0.05$ ).

**Conclusion:** Comorbidity is a major problem in the clinical practice with ADHD patients. Especially irritability, defiance and depressive symptoms even without significant mood disorder diagnosis may interfere with treatment efficacy and have another burden for functionality of the patient. In this clinical sample with children, who were diagnosed with ADHD, we demonstrated that the irritability/dysphoria symptoms might decrease the level of social, behavioral and academic functionality and the response to methylphenidate treatment. More comprehensive assessments in terms of mood dysregulation in ADHD patients are needed in further studies.

**Keywords:** attention deficit hyperactivity disorder, mood dysregulation, methylphenidate, functionality

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[PP-014]

## Prodynorphin gene polymorphisms are not related with heroin dependency among Turkish men: a pilot study

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**Objective:** It is a known fact that dynorphin peptides and k-opioid receptor are important in the rewarding effects of drugs of abuse such as heroin. The effect of genetic polymorphisms may change according to the race and gender. The aim of the present study was to evaluate potential association between heroin dependence and four single nucleotide polymorphisms (SNPs) of prodynorphin (PDYN) gene (rs35286281 in promoter region and rs1022563, rs2235749, rs910080 in 3'UTR) among Turkish men.

**Method:** The study has been approved by Ethical Committee of the University. The study was conducted among heroin dependent inpatients (n=87, 49.4%) at Bakirkoy Training and Research Hospital for Psychiatry, Neurology and Neurosurgery, Alcohol and Drug Research, Treatment and Training Center (AMATEM). Voluntary Turkish healthy controls (n=89, %50.6) were included in the study by Turgut Ozal University Faculty of Medicine Department of Psychiatry. The peripheral blood samples were obtained from sample group and healthy controls were collected in EDTA tubes and 25 µl PCR mixture was prepared for amplification from the DNA samples. Genomic DNA was extracted from samples using a DNA isolation kit (Qiagen: Puregene Blood Core Kit B) according to the manufacturer's instructions and then stored at -20°C until polymerase chain reaction (PCR) was performed. The genotypic analysis of the PDYN gene polymorphisms were performed using PCR-RFLP, whereas only PCR was used for VNTRs on PDYN gene. Sociodemographic features, Genotype and allele frequencies and difference between two groups were analyzed by Chi-square.

**Results:** Smoking cigarette, suicidal attempts, self-harming behavior, prison and police station experience were higher in heroin dependence group. On the other hand, there was no significant difference between groups according to the PDYN 68bp VNTR (rs35286281).

**Conclusion:** Although a previous study showed that there was an association between PDYN polymorphisms and heroin dependence among Chinese population, the results of the present study did not support these previous findings. The main reason for this may be that gene polymorphism is not the only etiological factor for addiction, which has multifactorial etiology. The present study have some limitations; some important factors such as culture, drug availability, legislation etc., were not evaluated and the study was conducted in a small sample of Turkish men, a population which can be considered as heterogeneous. Moreover, previous studies results are controversial; some studies showed that high PDYN expressing alleles are more common among people with substance use disorders (SUDs), some showed low expression alleles in association with SUDs and others reported no association. Therefore, this study should be seen as a pilot study, so these findings cannot exclude the role of PDYN polymorphism in heroin dependents and it needs further studies in larger samples.

**Keywords:** prodynorphin, promoter, 3'Untranslated region, heroin addiction, polymorphism

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[PP-015]

## The relationship between alcohol dependence and prodynorphin gene polymorphisms among Turkish men

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**Objective:** It is a known fact that Prodynorphin (PDYN) binds to kappa-opioid receptors and regulate dopaminergic tone, making this system important for the reinforcing and rewarding properties of drugs of abuse such as heroin, cocaine, and last but not least alcohol. The present study's purpose was to evaluate potential association between alcohol dependence and four single nucleotide polymorphisms (SNPs) of PDYN gene (rs35286281 in promoter region and rs1022563, rs2235749, rs910080 in 3'UTR) among Turkish men.

**Method:** The Ethical Committee of the University approved the study and then the study was conducted with alcohol dependents (n=68, %43.3) at Bakirkoy Training and Research Hospital for Psychiatry, Neurology and Neurosurgery, Alcohol and Drug Research, Treatment and Training Center (AMATEM). Voluntary Turkish healthy control group (n=89, %56.7) was included in the study by Turgut Ozal University Faculty of Medicine Department of Psychiatry. The peripheral blood samples were obtained from patients and healthy controls were collected in EDTA coated tubes and 25 µl PCR mixture was prepared for amplification from the DNA samples. Genomic DNA was extracted from samples using a DNA isolation kit (Qiagen: Puregene Blood Core Kit B) according to the manufacturer's instructions and then stored at -20°C until polymerase chain reaction (PCR) was performed. The genotypic analysis of the PDYN gene polymorphisms were performed using PCR-RFLP, whereas only PCR was used for VNTRs on PDYN gene. Sociodemographic features, Genotype and allele frequencies and difference between two groups were analyzed by Chi-square.

**Results:** Smoking cigarette, suicidal attempts, self-harming behavior, prison and police station experience were higher in alcohol dependence group. Moreover, there was a significant frequency of the PDYN 68bp VNTR (rs35286281) Genotype and allele frequencies in between two groups, but statistical significance of PDYN polymorphism 68bp VNTR (1022563) Genotype (p=0.053) and allele (p=0.057) frequencies are the limit. However, the PDYN 68bp VNTR (rs2235749 and rs910080) Genotype and allele frequencies did not differ between the groups.

**Conclusion:** The present study's main finding is a significant higher frequency of the PDYN 68bp VNTR (rs35286281) L allele in alcohol-dependent subjects than in controls. Previous studies that have examined the relationship between PDYN polymorphism and substance use disorders (SUDs) but results are controversial, with some studies showing that high PDYN expressing alleles are more common among people with SUDs, some showing low expression alleles in association with SUDs and others reporting no association. The inconsistent results across studies can be attributed to a variety of factors such as sample sizes, ethnic diversity, culture, drug availability, legislation and the examination of different SUDs or alcohol dependence since gene polymorphisms is not the only etiological factor for addiction. Thus, further research is required.

**Keywords:** prodynorphin, promoter, 3'Untranslated region, alcohol dependence, polymorphism

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[PP-016]

## The degenerative effect of olfactory bulbectomy on dorsal raphe nuclei and leading depression on rats

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**Objective:** The removal of bilateral olfactory bulbs (OBs) can lead to serious behavioral alterations in rats. Olfactory bulbectomy (OBX) might lead to deficits on psychomotor and psychosocial behaviors by effecting raphe nucleus. Therefore, we investigated whether OB lesions led to dorsal raphe degeneration.

**Methods:** 48 rats were used (24 female and 24 male) for this study. Four male and four female rats were taken as the control group. Forty rats (20 male and 20 female rats) were taken as the study group, and frontal burr holes were performed at the OB level on these rats. OB cauterization was applied to 10 male and 10 female rats (n=10, 10; study group 1), mechanical OBX by compression was applied to 5 male and 5 female rats (n=5, 5; study group 2), and no procedure was performed on the remaining 10 rats (n=5, 5). Psychomotor condition, feeding, nutrition, pregnancy ratios, maternity and lactation behaviors, number of delivered offspring, and stillbirths, abortus prevalence were examined. Their OBs, olfactory cortices, raphe nucleus were extracted, fixed with 0.9% formalin solution, and examined by using histopathological methods. All tissue specimens were embedded in paraffin blocks and cut into 5- micrometer thick sections using a microtome. Hematoxylin-eosin staining was used to assess histological structures, S-100 staining for morphological changes and Tunnel staining for apoptosis. The morphologically deformed neuronal density of the dorsal raphe nuclei was estimated using stereological methods. Neurons stained with NSE were counted with a stereological method by means of detecting neuronal density. The Cavalieri volume estimation method was applied to evaluate the total number of neurons in each specimen by multiplying the volume (mm<sup>3</sup>) and the numerical density of the neurons in dorsal raphe nuclei. The numbers of normal, morphologically deformed and degenerated neurons in the dorsal raphe nuclei of each animal were counted. The differences between OB volumes and neuronal densities in the dorsal raphe nuclei were compared statistically and taken as the criteria for neuronal degeneration.

**Results:** All of the animals in the study groups, especially in the cauterization group demonstrated psychomotor retardation, sexual aversion, and nutritional deficiency, similar to depression symptoms in human beings. In the study groups the pregnancy rates, number of offspring per mother rat, and birth weights in the study groups were lower, whereas the number of stillbirths was higher than the control group. Histopathological examinations showed prominent neuronal loss due to apoptosis and morphological changes in the dorsal raphe nuclei in all study groups.

**Conclusion:** We detected a decreased neuronal density of the dorsal raphe nuclei and in olfactory bulbectomized rats. We emphasize that olfaction disorders might cause neuropsychiatric disorders by leading neuronal degeneration in dorsal raphe nuclei.

**Keywords:** depression, olfactory bulbectomy, raphe nuclei

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[PP-017]

## Evaluation of physical signs of prenatal testosterone exposure in homosexual men

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**Objective:** In recent years, studies regarding the biological etiology of homosexuality have focused on the sexually dimorphic development of the brain during fetal life. Prenatal testosterone may play an important role for the differentiation of the brain and sexual

orientation (1). Based on this view, homosexuality may be caused by inadequate testosterone levels during the development of the brain. Moreover, prenatal testosterone levels are thought to masculinize 2<sup>nd</sup> to 4<sup>th</sup> finger length ratio (2D:4D) as well as other sexually dimorphic features. Women usually have a higher 2D:4D than men. Thus the aim of the present study was to evaluate 2<sup>nd</sup> to 4<sup>th</sup> finger length ratio (2D:4D) that is claimed to indirectly reflect the effects of prenatal testosterone levels on brain in homosexual male individuals.

**Methods:** The study included 40 men aged 18-35 years, who defined themselves as homosexual and 40 men aged 18-34 years, who defined themselves as heterosexual. A personal questionnaire, which is developed by our group and involved some sociodemographic data of subjects, and Bem Sexual Role Inventory (BSRI) (2) were applied in both groups. Both hands of all participants were copied by using a standard copier and an electronic digital caliper with a 0.01 mm precision were used for the measurements of the digits. Second and fourth finger lengths of each hand were measured from the baseline up to the tip of the finger on the copy. The ratios were obtained by dividing the length of 2<sup>nd</sup> finger to that of the 4<sup>th</sup>.

**Results:** When gay men were compared to heterosexual men, BSRI femininity and masculinity scores of gay men were significantly higher and lower than those of heterosexual men, respectively. The lengths of the 2<sup>nd</sup> and the 4<sup>th</sup> fingers at right and left hands of the homosexual men were found to be shorter than those measured in the heterosexual men. However, no significant difference was found in 2D: 4D ratios of both groups.

**Conclusion:** The lack of significant difference in 2D:4D ratios of the groups does not support the hypothesis in the literature suggesting that 2D:4D ratio reflects the effects of prenatal testosterone levels.

**Keywords:** homosexuality, testosterone, 2<sup>nd</sup> to 4<sup>th</sup> finger length ratio (2D: 4D)

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[PP-018]

## Evaluation of cognitive functions in homosexual men

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**Objective:** Gender differences in certain cognitive functions are well known. Because women and men have different neural organizations, their skills such as information processing and problem solving are different. It is estimated that the development of the homosexual individuals is different from that of the heterosexual men from the prenatal period on; thus, it may be considered that they may also have some differences in their cognitive functions. This study aimed to determine whether there are differences in cognitive functions between homosexual and heterosexual men.

**Methods:** The study included 40 men aged 18-35 years, who defined themselves as homosexual and 40 men aged 18-34 years, who defined themselves as heterosexual. A personal questionnaire developed by our group and involved some sociodemographic data of subjects, Bem Sexual Role Inventory (BSRI), neuropsychological tests including Rey Auditory Verbal Learning Test (RAVLT), Weschler Adult Intelligence Test-R (WAIS-R) Digit Span Subtest (6), and Stroop Test were applied in both groups in order to assess cognitive functions.

**Results:** When gay men were compared to heterosexual men, BSRI femininity and masculinity scores of gay men were significantly higher and lower than those of heterosexual men, respectively. In homosexual men, when the age and the duration of education were taken as covariates, a significant difference was detected in only one score (Total recall scores in RAVLT) of the neuropsychological tests assessing cognitive functions such as memory, attention and learning in comparison to heterosexual men.

**Conclusion:** Our findings do not support the hypotheses that gay men displayed cognitive functions of opposite sex.

**Keywords:** homosexuality, cognitive functions

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[PP-019]

## T102C and 1438 G/A polymorphisms of the serotonin 2A receptor gene in etiology and course of Attention deficit hyperactivity disorder

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**Objective:** The aim of this study was to investigate -1438A>G and T102C polymorphisms of serotonin 2A (5-HT<sub>2A</sub>) receptor gene frequencies in patients with Attention deficit hyperactivity disorder (ADHD) in comparison with a healthy control group and to determine the effects of these polymorphisms on the course and outcome of ADHD.

**Methods:** Fifty adolescent and young adults who were diagnosed with ADHD in childhood (between the years 1994 and 2001) were included in this study. Patients were followed in the Child and Adolescent Psychiatry Department of Gazi University Medical Faculty for 7–14 years, and they completed this follow-up period. The control group consisted of 50 adolescent and young adults, who were healthy physically and mentally. In adolescence and adulthood, the diagnosis was reached after semi-structured interview based on DSM-IV criteria. Ten milliliters of blood was taken from each participant. Genetic evaluation was performed with Polymerase Chain Reaction method. SPSS 11.5 was used for the statistical analysis. Categorical variables were analyzed with chi-square and Fisher-exact tests, while the independent t-test was used for continuous variables for two-category variables. Statistical significance was accepted as a p value of <0.05.

**Results: a. Socio-demographic Features:** In this study, 50 adolescents and young adults (39 male, 11 female; age range 16-25 years), who were diagnosed as having ADHD while childhood (age range at the time of diagnosis 6–10 years) and 50 healthy adolescents and young adults (33 male, 17 female; age range 16-25 years) were evaluated. In adolescence and young adulthood, the diagnosis of ADHD remained in 44 (88%) cases, whereas six (12%) had remission after the 7–14-year follow-up.

**b. Relationship of the 5HT<sub>2A</sub> receptor gene T102C and -1438 A>G Polymorphisms with ADHD:** A significant difference in the frequency of CC, CT and TT genotypes of T102C polymorphism ( $\chi^2$ :1.629, p: 0.44) and AA, AG and GG genotypes of -1438A>G polymorphism ( $\chi^2$ : 0.065, p: 0.96) was not found between the ADHD and control groups.

A significant difference was not found between patients with ADHD with CC, CT or TT genotypes in terms of the outcome of illness ( $\chi^2$ :0.114, p: 0.94). Similarly, there was no difference between patients with ADHD having AA, AG and GG genotypes in outcome terms ( $\chi^2$ :0.530, p: 0.76).

**Conclusion:** A significant association between -1438A>G and T102C polymorphisms of 5-HT<sub>2A</sub> receptor gene and ADHD was not found in the present study. A significant effect of these two polymorphisms on the outcome of ADHD in adolescence was not detected. The results of this study do not support a role for the serotonergic system in the development and course of ADHD. As this study including children diagnosed as having ADHD in their pre-school and primary school periods evaluated in adolescence and adulthood periods, and was a follow-up investigation, the sample size was limited.

**Keywords:** attention deficit hyperactivity disorder, genetic factors, serotonin 2A (5-HT<sub>2A</sub>) receptor gene, -1438A>G polymorphism, T102C polymorphism

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[PP-020]

## Evaluation of oxidative metabolism and oxidative DNA damage in patients with Obsessive compulsive disorder

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**Objective:** There are limited literature data about the role of oxidative stress in the pathophysiology of Obsessive compulsive disorder (OCD). In addition oxidative stress and oxidative DNA damage has not been investigated together in OCD. In this study, we aimed to evaluate oxidative stress and oxidative DNA damage in patients with OCD.

**Methods:** Forty-two patients with OCD, who were diagnosed in Psychiatry Clinic of Gaziantep University of and 38 healthy volunteers, were enrolled in the study. Serum 8-hydroxideoxiguanosine (8-OHdG), Total Antioxidant Status (TAS), Total Oxidant Status (TOS) evaluation and Oxidative Stress Index (OSI) calculation were conducted in Gaziantep University Biochemical Laboratory.

**Results:** There were not significant differences of TAS, TOS and OSI levels between patients and control group. However, 8-OHdG levels were significantly higher in OCD patients than controls (p: 0.022). In addition, 8-OHdG levels were significantly lower in patients who took treatment than patients who are newly diagnosed (p: 0.016).

**Conclusion:** In our study, we found oxidative DNA damage increased in OCD despite oxidative stress was normal. In addition, DNA damage was lower in patients who treated when compared to without treatment.

**Keywords:** Obsessive compulsive disorder, oxidative stress, DNA damage

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[PP-021]

## Neuropsychological, electrophysiological and neurological impairments in patients with Obsessive compulsive disorder and their healthy siblings

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**Objective:** The aims of this study were to compare and investigate the relationships between cognitive functions, electrophysiological findings, which consist of auditory event related potentials (ERPs), the N100, N200, P200 and P300 and neurological soft signs in OCD patients, their siblings and control subjects and to determine potential endophenotypic markers.

**Methods:** Thirty-three in- and out-patients who were admitted to the Department of Psychiatry of the Hacettepe University Faculty of Medicine with diagnoses of OCD according to the DSM-IV-TR criteria, 18 siblings and 21 healthy control subjects, who were matched for age, gender and years of education, were included in this study. The Yale-Brown Obsessive-compulsive Symptoms Checklist Scale (Y-BOCS) and the Hamilton Depression Rating Scale (HDRS) were administered to all patients to determine illness severity and comorbid depression. A neuropsychological test battery that included the Trail Making Test Parts A and B (TMT-A, TMT-B, the Wechsler Memory Scale Revised Edition Digit Span Forward (DSF), Backward (DSB) and total (DST) tests, the Figural memory test (FMT), verbal fluency tests (the Controlled Word Association Test (CWAT) and the Category Fluency Test (CFT)), the Wisconsin Card Sorting Test (WCST), the Stroop Test (ST), the Block Design Test (BDT), the Rey Auditory Verbal Learning Test (RAVLT) and the Neurological Evaluation Scale (NES) were administered to all participants. Auditory event related potentials recordings, which consisted of the N100, N200, P200 and P300, were obtained from all subjects.

**Results:** Comparisons of the three groups indicated that patients performed worse in terms of executive functions and visual motor integration compared to siblings and healthy controls. P200 amplitudes sorted as follows: siblings>patients>controls. The absolute values

of the N200 amplitudes sorted as follows: siblings<patients<controls. P300 amplitudes sorted as follows: patients<siblings<controls. P300 latencies were comparable between patients and siblings and were decreased in controls. With the exception of complex sequencing motor acts, the NES subscales were significantly impaired in patients compared to controls. Logistic regression analyses revealed greater P300 amplitudes, better cube design performance and faster completion of ST test predicted membership in the control group, while greater P200 amplitude predicted membership in the case (patient and sibling) groups.

**Conclusions:** Neurological examination revealed that working memory, executive functions, verbal memory, verbal fluency, visual motor integration, motor speed, figural memory and P300 and N200 measurements were impaired in OCD patients, and working memory, executive functions and visual motor integration were impaired in the siblings of OCD patients. Thus, executive functions, visual motor integration and P200 and P300 amplitudes, among other factors, seem to be potential endophenotypes in OCD.

**Keywords:** obsessive compulsive disorder, cognitive, ERP, neurological signs, endophenotypes

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[PP-022]

## Cognitive operations in different emotional states

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**Objective:** Working memory (WM) can be described as a memory system that temporarily maintains and manipulates different types of information during a task. The overwhelming majority of studies examining the link between emotion and working memory have focused on emotional state.

Our study examines whether emotional state affects working memory processes. Of particular interest to us is which types of emotional states influence working memory and how.

**Method:** There are two components used in this project, working memory and emotion.

Brain activity was measured in 16 healthy subjects by functional magnetic resonance imaging (fMRI) while the subjects watched videotapes designed to elicit happy feelings, sad feelings, neutral feelings or blank (not feeling) states.

Different emotional stories told by an African American or a Hispanic actress, which showed the controls screen.

Each movie clips took approximately 200 second and every movie clips was started and ended by blank screen. Subject is given a five digit number sequence to learn and practice approximately 10 times before movie clips. They memorized true number sequences as `31232` and practiced.

There were used eight Video Clips 6 emotion states, 2 blank runs, which is in quick-time TM format. This video clips are including 4 different emotion states (Happy, Sad, Neutral, Blank (no emotion)). Yellow dot appeared randomly while watching clips. Each time a patient entered true sequence that he/she was thinking of, a dot appeared on the screen

After each run the subject was asked to rate how emotional, they felt during the video on a scale from 0 to 10 and asked to answer one or two questions about the video.

Brain images were acquired using a SIEMENS 3.0 T scanner at the MRI Center of Beijing Normal University. A single-shot T2\*-weighted gradient-echo, echo-planar image (EPI) sequence was used for the functional imaging acquisition (TR= 1500 ms, TE= 30 ms, matrix= 64x64, slice= 25, slice thickness= 4.5 mm (no skip), flip angle= 80°). To reduce movement, two foam cushions were used to immobilize the subjects' head.

After preprocessing, data from each subject were high-pass filtered, and then GLM analysis was applied to compute an individual statistical map. A one-sample t-test was performed to obtain the group activation map. Incremental statistical analysis was performed based on the general linear model (GLM). The threshold for statistical significance was set at p<0.001, with a minimum cluster size of 10 contiguous significant voxels.

**Results:** After comparing all trials to each other, we found that there were differences in activation between different emotional conditions. Relative to other conditions, the happy condition showed reduced activity in the left middle temporal gyrus (BA 21), left supramarginal gyrus

(BA 39), right middle temporal gyrus (BA 19), and fusiform gyrus (L). We found normal activity in the inferior frontal gyrus (BA 47) in relation to other conditions, while medial frontal area (BA 11) activity decreased in all emotional conditions, except during the happy condition. Only during the neutral condition was there increasing activation in the inferior temporal gyrus (BA20) and middle temporal gyrus (BA21).

**Conclusion:** The present study investigated how different emotion states modulate working memory from different pathways (3). Emotions are often conceptualized as positive and negative emotions, which often affect cognitive task states. In a comparison between the happy (positive) condition and sad (negative) condition, the difference in activation is less than when comparing happy and neutral conditions or sad and neutral conditions. These findings demonstrate an important dissociation between emotional type and working memory. Future studies will be needed to examine the effects of emotional variations on working memory states.

**Keywords:** FMRI, working memory, emotion

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[PP-023]

## Domestic violence predicts depression in both pregnancy and postpartum periods

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**Objective:** Pregnancy and postpartum periods are the most risky periods for occurrence of a mental illness and/or exacerbation of an existing disease. First trimester of pregnancy is important for adaptation for pregnancy and rapid hormonal changes. Pregnant women have many mental and emotional processes, conflicts and hesitations especially in first trimester. Postpartum period is a time which mothers have physiological changes and lots of new roles and responsibilities in the transition to parenthood. In women, depressive disorder is the most common mental illness and its occurrence is the highest level in this period. In this study, it is aimed to determine the related factors with depression in pregnancy and the postpartum.

**Method:** This study was executed with females, which have previously participated a research about the prevalence of depressive disorders in the first trimester period of pregnancy. 360 participants, who could be reached again at sixth week of postpartum were included to the study. A sociodemographic data questionnaire that we prepared was applied on the women who agreed to participate to the study and the women have been scanned for depression with The Edinburgh Postpartum Depression Scale. Women with 12/13 cut-off point of EPDS have been evaluated by SCID-I to confirm the diagnosis for clinical depression. Hamilton Depression Rating Scale was applied to determine the intensity of clinical depression.

**Results:** In this study, the frequency of depressive disorders at postpartum was found 35%. The factors associated with postpartum depression were determined as miscarriages, unscheduled pregnancy, smoking, unoccupied husband, baby's birth complications and low infant birth. The history of depression in the first trimester of pregnancy, anamnesis of a previous mental illness, a previous physical illnesses, exposure to violence in the current pregnancy, also the baby is staying in the incubator after birth and not breastfeeding baby were determined as predictors for postpartum depression. Unscheduled pregnancy, smoking and unoccupied husband were found to be associated with depression in the women who have depression both in the first trimester and postpartum period. The history of the previous mental illnesses and the violence in the current pregnancy were determined as predictors for being depressive both in the first trimester of pregnancy and postpartum period.

**Conclusion:** History of having a depressive disorder in the first trimester, previous mental illnesses and previous physical illnesses were determined as risk factors for depression at postpartum period. Additionally this study evaluated the risk factors for the period of the pregnancy and postpartum period together as a follow up study. The women in pregnancy and postpartum period are known to face with violence which is the common problem in the society. In this study, exposure to violence seems a step in front of the other risk factors because of the fact that it was a predictor for depressive disorder in both first trimester and postpartum period.

The results of this research suggest that exposure to violence is one of the most important problem for women and should be sought routinely in psychiatric interviews among all other facilities of both mother and baby.

**Keywords:** postpartum depression, violence

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[PP-024]

## The prevalence of depression and associated factors in pregnancy and postpartum period: a follow-up study

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**Objective:** Pregnancy and postpartum period are one of the most risky periods, which mental disorders appear the first time and/or exacerbate the terms of an existing disease. Depressive disorders in women are among the most common mental disorder and its prevalence is highest in this period. In this study, we aimed to determine the prevalence of depression in pregnancy and the postpartum period, in a city center where is the located in Eastern Anatolia Region, where the prevalence of depression of reproductive-age women is higher, compared to other regions.

**Method:** For this purpose, a total of 463 people in the first trimester of pregnancy were included in this study. In our study, these women were interviewed again six weeks after birth and providing criteria for inclusion were conducted with 360 people. The sociodemographic data form was applied to participants to determine related risk factors, The Edinburgh Postpartum Depression Scale was applied to scan depressive symptoms, the prevalence of depressive disorders was investigated with SCID-I (Structured Clinical Interview for DSM-IV). According to SCID, patients were diagnosed for having depressive disorder; Hamilton Depression Rating Scale was applied to determine the intensity of clinical depression.

**Results:** In our study, for women in the first trimester of pregnancy, the prevalence of depressive disorders was found to be 16.8%,12.3% with major depressive disorder, 2.6% minor depressive disorder, 0.4% dysthymia and with 1.5%.Participants were rated for each identified disorder. In our study, the prevalence of postpartum depression was 35%. The distribution according to the subgroups of depressive disorder was found as major depression in 26.1%, minor depression 7.5% and double depression in 1.4%. 0.8% of all participants have been identified Dysthymia. Also in the first trimester of pregnancy as well as postpartum depression has been identified as being 13.3% prevalence.

**Conclusions:** The prevalence of postpartum depression has been found significantly higher than the prevalence of depression in the first three months of pregnancy. This study emphasizes the importance of screening tests and high frequency of depression in women during the reproductive age, especially postpartum period.

**Keywords:** pregnancy, postpartum depression, prevalence

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## Oral Presentations

[OP-001]

## Modeling schizophrenia: Effects of a psychotomimetic MK-801 on behavioral flexibility and working memory in rats

Ales Stuchlik, Veronika Lobellova, Eva Brichtova, Anna Zemanova, Anna Stankova, Marie Entlerova, Tomas Petrasek, Iveta Vojtechova, Stepan Kubik, Karel Vales

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**Objectives:** Understanding of schizophrenia is incomplete and animal models can provide significant insight into mechanisms, outcomes and treatment of the disease. According to hypoglutamatergic/neurodevelopmental hypothesis of schizophrenia, chronic or acute administration of glutamate antagonists can elicit phenotypes in rodents resembling schizophrenia. The present study aimed at assessment of cognitive flexibility and working memory in acute and chronic MK-801-induced animal model.

**Methods:** Rats were treated systemically with a non-competitive blocker of NMDA receptors. Two administration schedules were used: acute and chronic. In acute experiments, a dose range of 0.05-0.15 administered 30 min prior to testing was used. In chronic experiments, doses 3 and 5 mg/kg were used and animals were tested several days later. Long-Evans rats from the breeding of Institute of Physiology were tested in two cognition tasks, the active place avoidance on Carousel and in the Morris water maze (MWM).

**Results:** Acute application of MK-801 doses as low as 0.08 mg/kg impaired reversal learning on the Carousel, higher doses (from 0.1 mg/kg) were required to induce a reversal deficit in the MWM. Visuospatial working memory tested in working memory version of Carousel was affected by higher doses (0.12 and 0.15 mg/kg). Administration of high doses (3 and 5 mg/kg) with delayed behavioral testing yielded significant mortality due to the application (cca 10-30% depending on treatment), which contrasted to data from literature and suggest strain-specific increased sensitivity. Delayed testing of surviving animals showed a deficit in acquisition of active place avoidance on Carousel, but the MWM learning was unaffected.

**Conclusions:** We conclude that association of animal model induction with advanced behavioral testing may provide detailed insight into nature of cognitive deficit in schizophrenia and suggest new ways of treatment of cognitive dysfunctions, which are only barely compensated by contemporary antipsychotics.

**Acknowledgements:** This work was supported by GACR grant 14-03627S, IGA MZ CR NT13386, AS CR M200111204 and by GACR P304/12/G069. We thank Jan Bures (1926-2012) for scientific education and inspiration.

**Keywords:** animal model, schizophrenia, learning and memory, dizocilpine, MK801, rat

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[OP-002]

## Neural substrate of place navigation in the moving world: brain circuits and dynamic tasks

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**Objectives:** Most of studies conducted on spatial navigation as a model of human declarative memory employ static settings. Nonetheless, our real world is endlessly dynamic and both animal and humans need to interact with moving object or even environments.

**Methods:** Our laboratory has a long-term tradition in experimenting with novel moving-world tasks and study behavior of rats facing dynamic condition such as place avoidance in Carousel maze or Enemy avoidance task. For neurophysiological studies, Long-Evans rats from the breeding colony of the Institute of Physiology AS CR were used.

**Results:** Active place avoidance on Carousel is a very versatile task that can be adopted for testing cognitive coordination, subthalididiosis, behavioral flexibility, working memory etc. The presentation will also show novel hippocampus-dependent Enemy avoidance task, utilizing a moving programmable robot. Specific effects of lesion and inactivation of brain structures will be also presented in the context of place avoidance, Morris water maze, recognition of object's position and working memory and cognitive flexibility.

**Conclusions:** We conclude that dynamic aspect of spatial navigation can be incorporated into behavioral studies of cognition using moving goals to navigate to or avoid, and also by incorporating dynamic substrates, e.g. rotating arena.

**Acknowledgements:** This work was supported by GACR grant 14-03627S and IGA MZ CR NT13386, by AS CR M200111204 and by GACR P304/12/G069. We thank Jan Bures (1926-2012) for scientific education and inspiration.

**Keywords:** spatial memory, place navigation, neurobehavioral studies, dynamic environments, animal models, rats

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[OP-003]

## The relationship between antioxidant capacity and antipsychotic treatment in patients with bipolar disorder

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**Objectives:** There are studies that suggested the drugs used in the treatment of schizophrenia and bipolar disorder reduced oxidative stress and demonstrated antioxidative effects. Especially atypical antipsychotics thought to be effective in this regard. We aimed to investigate the effects of mood stabilizers and antipsychotic medication on oxidative stress parameters in patients with bipolar disorder.

**Methods:** The effects of treatments on total antioxidant capacity (TAC) and total oxidative capacity (TOC) of 76 patients, who were diagnosed as bipolar disorder according to the Diagnostic and Statistical Manual of Mental Disorders IV (DSM IV) diagnostic criteria, and admitted to the clinic because of manic episode were assessed in this naturalistic follow-up study. The patients were receiving lithium or valproic acid as mood stabilizers and olanzapine, risperidone or quetiapine as antipsychotic.

**Results:** All of the patients have been hospitalized for at least three weeks. TAC and TOC measurements of patients getting olanzapine, quetiapine, and risperidone treatment were performed. TAC and TOC changes in groups of patients rated as "a" or "b", were not significant. But TAC measurements were significantly found to be increased in the group getting risperidone ( $p < 0.05$ ). In order to investigate the effects of mood regulators on oxidative stress, patients receiving olanzapine and risperidone were divided into two groups as receiving lithium or valproic acid. TOL levels were declined after treatment in lithium group. However, this effect was not observed in valproic acid group.

**Conclusion:** Olanzapine, clozapine and quetiapine but not risperidone were found to reduce oxidative stress in the studies. But the results of this study did not support the literature. Our study suggested that risperidone was effective on oxidative stress. Mood stabilizers might have superiorities each other in terms of their effects on oxidative stress. Studies with broad participation are needed about this issue.

**Keywords:** Antioxidant capacity, antipsychotic treatment, bipolar disorder

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[OP-004]

## Antipsychotic effects of atorvastatin and melatonin in a psychosis model in rats

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**Objectives:** Statins decrease cholesterol synthesis in liver by inhibiting HMG-CoA reductase -the rate controlling enzyme reversibly. Melatonin is a neurotransmitter, which is synthesized from tryptophan and it is released from pineal gland nocturnally. In this study our aim was investigating the effects of atorvastatin and melatonin in experimental psychosis model in rats.

**Methods:** Forty-two adult male Sprague Dawley rats (220–240 g) were used in the study.

Novelty-induced rearing behavior is assessed. Novelty-induced rearing was evaluated by placing the animals directly from home cages to a transparent Plexiglas cage (45 cm X 25 cm X 25 cm) containing sawdust. All rats were observed and assessed singly in the Plexiglas cage, 7 (n=6) groups of rat were administered atorvastatin (10, 20 mg/kg, i.p.), melatonin (10, 20 mg/kg, i.p.), 1% ethanol sham (1 ml/kg, i.p.) chlorpromazine (1 mg/kg; i.p.) or isotonic NaCl (1 ml/kg, i.p.) Novelty-induced rearing considered as a central excitatory locomotor behavior was counted as the number of times the rat was standing on its hindlimb with its forelimbs against the wall of the observation cage or in the free air. The number of rears was counted for 30 minutes. Apomorphine-induced stereotypic behavior test (n=6) groups of rats were administered atorvastatin (10, 20 mg/kg, i.p.), melatonin (10, 20 mg/kg, i.p.), 1% ethanol sham (1 ml/kg, i.p.) chlorpromazine (1 mg/kg; i.p.) or isotonic NaCl (1 ml/kg, i.p.). One hour later, apomorphine (2 mg/kg s.c.) was administered to each rat. Assessment of stereotyped behavior was done by two observers blind to the study groups. Following apomorphine administration, the rats were immediately placed back into the metal cages and observed for stereotypic behavior. Signs of stereotypy, which include mainly sniffing and gnawing, were observed and scored as follows: absence of stereotypy (0), occasional sniffing (1), occasional sniffing with occasional gnawing (2), frequent gnawing (3), intense continuous gnawing (4), intense gnawing and staying on the same spot (5). The stereotypic behavior was rated after each minute and mean of 15 min period was calculated and recorded.

**Results:** Comparison of rearing behavior: 20 mg/kg of atorvastatin decreased rearing behavior scores compared to saline group significantly ( $p<0.05$ ). 20 mg/kg of melatonin decreased rearing behavior scores significantly compared to saline group ( $p<0.05$ ). Additionally chlorpromazine decreased the rearing behavior scores most ( $p<0.00001$ ) and 1% ethanol caused a slight increase but did not reach to significant levels ( $p<0.05$ )

Comparison of stereotypy scores of groups: 10 mg/kgs of atorvastatin group had decreased stereotypy scores compared saline group ( $p<0.05$ ), but 20 mg/kg of atorvastatin caused a stronger decrease ( $p<0.001$ ). 10 mg/kg of melatonin did not show significant difference compared to saline group but upon administration of 20 mg/kg of melatonin, stereotypy scores were significantly decreased ( $p<0.005$ ). Like in rearing behavior scores chlorpromazine caused the most profound decrease in stereotypy scores ( $p<0.00001$ ), whereas ethanol group showed no difference.

**Conclusion:** As a conclusion, in this study, we have demonstrated antipsychotic efficacy of melatonin and atorvastatin.

**Keywords:** atorvastatin, melatonin, antipsychotic, apomorphine

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[OP-005]

## Neurox effectiveness in the treatment of withdrawal symptoms of heroin addiction

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**Objectives:** Neurox is an inhibitor of free-radical processes, membrane protector, having anti-hypoxic, stress-protective, repulsive, anticonvulsant and anxiolytic effects. The drug increases the organism resistance to the effects of various damaging factors and oxygen dependent pathology – shock, hypoxia and ischemia, cerebrovascular disease, narcotic and antipsychotic (neuroleptics) drugs intoxications. The Neurox improves cerebral metabolism and blood circulation of the brain, improves microcirculation and blood rheology, reduces platelet aggregation. Neurox showed high efficacy in the treatment of withdrawal symptoms in heroin addiction with somatic-neurological manifestations.

**Methods:** In a study conducted at a narcological hospital, 50 patients with heroin dependence in the state of withdrawal were recruited. The age of patients - 21-42 years. Duration of disease was 4-7 years with an average of 5.5 years. The severity of the abstinence status was assessed in 35 patients (70%) as average, 15 patients (30%) - as heavy. All patients were divided into two groups to 25 patients (main and backup). The main clinical-dynamic and socio-demographic groups did not differ. All patients of basic group were injected neuroxas instructed by the following scheme: 300 mg intravenous injection of 10 ml isotonic solution of sodium chloride 2 times daily for the first 3 days, then 300 mg intramuscularly once a day for 5 days with subsequent transition to the tablet formulation of 125 mg 3 times a day for 13 days. Treatment was carried out on the background of the basic treatment, including detoxification and restorative agents. Patients of the control group have conducted the only traditional complex therapy.

**Results:** Neurox demonstrated a high therapeutic efficacy in our study. The therapeutic effect of neurox started within the first hours of injection.

In neurovegetative disorders of withdrawal syndrome, neurox had a pronounced vegetal stabilizing effect. A higher therapeutic activity neurox was observed in relieving symptoms such as pain, insomnia, somatic complaints (already on the 2<sup>nd</sup> day of the treatment). On the 3<sup>rd</sup> day of the treatment, stabilized emotional state and significantly improved physical condition of patients were observed as disappeared uneasiness, anxiety, aggression, restored the sleep and appetite, decreased the severity of symptoms such as pain, insomnia, somatic complaints, and observed their full reduction to 5<sup>th</sup> day of treatment. In addition, in patients of main group tension, and irritability were quelled, resulting in daytime tranquility and lack of health complaints. Subjectively patients reported improvement in mood on the 10<sup>th</sup> day of the therapy. Pathological craving for the drug disappeared on the 3<sup>rd</sup> day of treatment.

Anxiety and a sense of inner tension were fully reduced in the control group, on the 10<sup>th</sup> day therapy; however the depressed mood and expressed craving for the drug throughout the treatment period, remained. No side effects were reported and no drop out was recorded in neurox group; 50 patients completed the study.

**Conclusion:** The study showed therapeutic efficacy and safety of neurox in relieving different variants of the withdrawal syndrome. It is established that neurox is most effective as a therapeutic agent for the relief of neurovegetative and psychopathic variants of withdrawal syndrome in connection with its expressed vegeto-stabilized and tranquilizing effect.

**Keywords:** neurox, treatment, heroin

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[OP-006]

## Comparison between clinical features and residual depressive symptoms of patients with bipolar depressive and unipolar depressive disorder in remission

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**Objective:** The purpose of this study was to examine the differences between the sociodemographic and clinical features and residual depressive symptoms in the unipolar depressive and bipolar depressive disorder groups.

**Method:** The study consisted of patients, who applied to psychiatry and were diagnosed with Bipolar Affective Disorder and Recurrent Major Depression according to SCID-I. Ninety-six patients with bipolar and 58 patients with Recurrent Major Depression, who were stable according to CGI, received a score of 7 and below from the Hamilton rating scale for depression and a score of 5 or below from the young mania rating scale, were included in the study.

**Results:** The comorbidity rate of psychotic features was statistically significantly high in the BAD group (<0.001). The episodes of patients in the BAD group were statistically significantly higher, in terms of seasonal cycle compared to the MD group (<0.001). Considering the Hamilton depression subscales individually; the scores of psychic anxiety, general somatic symptoms and suicide (consideration of life not worth living) were higher in the MD group, compared to the BAD group. In the BAD group, on the other hand, scores of the genital symptoms and retardation were statistically significantly higher, compared to the MD group.

**Conclusion:** As a consequence, this study revealed different residual symptoms in the bipolar affective disorder and major depression groups in remission, which shows a parallelism with the previous data. While psychic anxiety, general somatic symptoms and suicidal ideation were generally observed in unipolar depression, sexual side effects and retardation were in the forefront in the BAD group.

**Keywords:** bipolar, unipolar, depression, residual symptom

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[OP-007]

## Childhood and adolescent sexual abuse and relationship between attachment to parent and peer

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**Objective:** The sexual abuse of children has been gaining attention as a serious problem over the last several decades. Childhood sexual abuse (CSA) is any sexual contact with a child by force, threat, or deceit to secure the child's participation, or any sexual contact with a child, who is incapable of consenting by virtue of age, disability, or power differential. Although children of both genders are vulnerable to CSA, girls are considered at a higher risk. There is undeniable evidence that CSA is associated with a substantial increased risk of psychopathology, especially post-traumatic stress disorder (PTSD), depression, and substance abuse. Interpersonal problems are some of the most common issues among people who were sexually abused as children. Particularly when the parent perpetrates the sexual abuse, it harms a child's lifelong ability to establish trusting and intimate relationships. Attachment is a condition that affects both individual's inner self and affiliations. There are studies reporting that there is insecure attachment in abused children rather than secure attachment. In this study we are going to see the effects of abuse on peer and parent attachment.

**Method:** Among patients presented to Child and Adolescent Psychiatry Department of Erciyes University, Medicine School, 30 abused children aged 11-15 years were included to the study. Sociodemographic data sheet about children and abuse were completed by child psychiatrist. Relationship Scale Questionnaire and Parental and Peer Attachment Scale were applied to abused children.

**Results:** There were 24 girls and 6 boys. The mean age of groups was  $13.57 \pm 1.1$ . 3 of the children were in primary school, 18 children were in secondary school and 9 children were in high school. 12 of them had no psychopathology. 6 of them were PTSD, 6 of them were adjustment disorder, 5 of them were suffering from acute stress reaction and 1 of them was in depression. The mean score for fearful attachment was  $3.84 \pm 1.12$  and it was the highest one. Then respectively, preoccupied attachment was  $3.81 \pm 1.07$ , dismissing attachment was  $3.53 \pm 1.32$ , secure attachment was  $3.30 \pm 1.15$  in the group. The mean score of attachment to mother was  $60.10 \pm 14.4$ , and to father was  $59.53 \pm 15.35$ .

**Conclusion:** In our study, insecure attachment to peers was found to be significantly higher than healthy peers. The highest rate was found in fearful attachment to peers in both girls and boys. The mean score of attachment to parents were lower than non maltreated children. The scientific literature categorically holds that CSA has severe, negative effects on mental health, increasing the probability of developing some form of psychopathology, whether short-, medium-, or long-term. The literature on attachment maintains that CSA negatively affects the quality of children's attachment representations, which has important repercussions for later psychological development study reported child victims of CSA to exhibit a lower proportion of secure attachment and a higher proportion of disorganized attachment than their non maltreated peers. Further studies with a larger sample size are needed in this topic.

**Keywords:** abuse, attachment, parent, peer

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[OP-008]

## Interaction of biological rhythm variables and internet addiction in patients with ADHD

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**Objectives:** Internet addiction is an ever-increasing problem among adolescents and young adults and it impairs life quality and functionality. Although a relationship between inattention/ hyperactivity symptoms and internet addiction has been reported, there is no previous study that assessed the contribution of biological rhythm variables to ADHD and internet addiction comorbidity. In this study, we hypothesized that internet and social media addictions are frequent in adult ADHD patients and this comorbidity is associated with impairment in biological rhythm variables. We also hypothesized that eveningness chronotype is frequent among adult ADHD patients and this trait is associated with Internet addiction.

**Method:** Sixty adult subjects, who were being followed at the Adult ADHD outpatient unit, were included in this study. They were administered a sociodemographic form, Adult ADHD Self Report Scale (ASRS), Biological Rhythm Interview of Assessment In Neuropsychiatry (BRIAN), Internet Addiction Test (IAT), Bergen Facebook Addiction Scale and Motives For Using Facebook Scale. Internet-addicted group consisted of patients, who had 50 or more score in IAT. Eveningness group consisted of patients whose sum of nineteenth and twenty first items in BRIAN were five or more. Comparisons were made between internet addicted/non-addicted, eveningness/ morningness chronotype groups with Chi square and Mann Whitney U tests. Correlations were calculated with Spearman test.

**Results:** Mean age of the whole sample was 22.9 (75% male). 20.9% of the sample was grouped as internet-addicted. 47.7% of the sample had eveningness chronotype. Total ASRS score was correlated with total BRIAN score ( $r=0.70$ ,  $p=0.001$ ) and its subscales, internet ( $r=0.50$ ,  $p=0.001$ ) and Facebook ( $r=0.40$ ,  $p=0.009$ ) addiction scores. Inattention ( $p=0.038$ ), hyperactivity ( $p=0.021$ ) and total ASRS ( $p=0.005$ ) scores were higher in internet addicted group. Facebook addiction scores were also higher in internet-addicted group ( $p=0.02$ ). Internet addiction score was correlated with eating, activity and social subscales of BRIAN. Internet addiction scores were correlated with inattention ( $r=0.43$ ,  $p=0.004$ ), hyperactivity ( $r=0.42$ ,  $p=0.004$ ) and Facebook addiction ( $r=0.48$ ,  $p=0.001$ ). Total BRIAN score ( $p=0.003$ ) and subscales were higher in eveningness chronotype group. No differences were found in motives for using Facebook between groups.

**Conclusion:** To our knowledge, this is the first study assessing the relationship between ADHD, internet addiction, Facebook addiction and biological rhythm variables. We found 20.9% prevalence of internet addiction in adult ADHD patients. Impairment in biological rhythm variables was associated with both ADHD and internet addiction. Assessing and targeting internet and social media addiction may improve treatment response and functionality in adult ADHD patients.

**Keywords:** attention deficit hyperactivity disorder, biological rhythm, internet addiction

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[OP-009]

## The problems of using psychotropic medications in family practice

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**Objective:** With the assistance of the WHO a survey was conducted, the OBJECTIVE of which was to identify the level of competence of family physicians in outpatient mental disorders and their motivation and need for conducting the workshops and trainings on major mental disorders encountered in primary care practice.

**Methods:** A questionnaire was developed and 150 family physicians were interviewed (25 family physicians from each of the 6 FMCs).

**Results:** While analyzing the obtained data, it has been found that more than 30% of physicians in the FMC have not been using psychotropic medications in their practice, and in the two FMCs only 8-12% of family physicians use psychopharmacological drugs.

The survey has demonstrated unequal use of psychotropic medications in the different FMCs. The greater percentage of these medications has been identified in those FMCs, where the working psychiatrist conducts the training seminars on the basics of psychiatry for family physicians.

Family physicians, who prescribe psychotropic medications, prefer using the old generation drugs. Thus, the most often mentioned medications were Amitriptylinum (Lat.), Carbamazepine, Diazepam, Phenobarbital, and Clonazepam. In the single instances, the more modern anxiolytics and antidepressants were mentioned such as ISRS and drugs from other groups. As psychotropic medications the dietary supplements and homeopathic medicines were mentioned.

With widespread prevalence of anxiety disorders and depressions more than half of family physicians in actual fact do not diagnose them, determining the other diagnoses.

Over 45% of respondents mentioned that they "did not know" how to treat patients with such disorders.

**Conclusions:** The survey results have shown considerable difficulties faced by family physicians in identifying and managing patients with mental disorders. The causes of the problems identified are as the following: insufficient level of family physicians' competence in using clinical protocols in practice; insufficient provision of district pharmacies with psychotropic medications; restrictions on prescribing psychotropic medications by family physicians; extensive use of old "traditional" treatment patterns; low paying capacity of the population; high degree of stigma with regard to psychotropic medications.

As a positive aspect of the survey results, there can be mentioned the willingness of the remarkable part of family physicians (90%) to provide medical assistance to the outpatient forms of mental disorders and gain knowledge and experience in this area.

Thus, the survey has enabled the identification of the problems of using psychotropic medications in family practice and the development of measures to address them.

**Keywords:** psychotropic medications, family physicians, psychiatric education

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## [OP-010]

## The relationship between vitamin D deficiency and mental development, behavioral problems and autism

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**Objective:** The effects of vitamin D on human brain has begun to attract more attention; more extensive research has been carried out to understand the role of this vitamin on the development of human brain and childhood psychiatric disorders. The aim of this study is to examine whether Vitamin D deficiency is related to mental development, autism and behavioral problems. We also aimed to examine the relationship between global developmental delay and autism and Neural Growth Factor (NGF), Glial Cell Line-Derived Neurotrophic Factor (GDNF) levels, which are candidate biomarkers for explaining the possible relationship. Patients aged two-five years, who were admitted with developmental delay, constitute the sample of the study. There were two phases in the study. In the first phase, cases were classified due to vitamin D levels as low level of vitamin D and normal level of vitamin D groups. NGF and GDNF levels of cases were measured. Ankara development scanning inventory (AGTE) and Denver II development test were applied to the cases. Parents were asked to fill out autism behavioral checklist (ABC), and child behavior checklist (CBCL) 1.5-5 form. Psychiatric assessments regarding cases were carried out based on DSM-5. Later, global development delay (GDD) and global development delay- autism spectrum disorder (GDD- ASD) were created as two diagnostic subcategories. Both cases with normal vitamin D level and cases diagnosed with vitamin D deficiency were directed to special education program. The latter group also received vitamin D replacement treatment. After six months, control assessments of cases were carried out for the second phase of the study. Changes of checklist scores and in NGF and GDNF levels between groups receiving and not receiving vitamin D treatment were analyzed in control assessment.

**Results:** No significant difference in checklist scores and NGF and GDNF levels between patients with a normal vitamin D level and the ones with deficiency of vitamin D was observed. No difference in NGF and GDNF levels was observed among patients diagnosed with GDD and GDD-ASD. Significant negative relationship was found between vitamin D level and NGF levels. In addition, it was observed that only patients diagnosed with global development delay had a significant positive relationship between AGTE scores and GDNF levels. In control assessment, decrease in scores of ABC and progress in Denver II development scores were determined in the group receiving vitamin D replacement. Besides, more significant increase of NGF levels in GDD-ASD group and of GDNF levels in GDD was determined.

**Conclusion:** Findings of this study make us think that NGF could mainly intervene the effects of vitamin D in patients with ASD diagnosis while GDNF has more probability of intervening this effect in patients with GDD diagnosis and again It can be concluded from these findings that GDNF might be considered as an indicator of cognitive development, whereas NGF might be a more related to autistic disorders.

**Keywords:** autism, glial cell line-derived neurotrophic factor (GDNF), mental development, neural growth factor (NGF), vitamin D

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## [OP-011]

## Discharge against medical advice in a psychiatric unit

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**Objective:** Inpatient treatment in psychiatric practice is an important component of treatment both in our country and all over the world. The termination of inpatient treatment despite of medical recommendations is a common problem in psychiatric wards. That problem causes labor loss and it triggers disappointment on the side of mental health professionals. This issue has addressed broadly in English literature under the term, which is called "Discharge against Medical Advice (DAMA)". DAMA rate ranged from 36% to 6% for psychiatric inpatient treatment. Rate of discharge against medical advice among psychiatric inpatients has increased due to the relative increase in

patients' autonomy in making decisions for treatment processes. We did not find any studies conducted in this field for our country. In this study, we aimed to examine DAMA data of our clinic, and review the literature on the subject.

**Method:** This study has been carried out in A1 clinic (an open ward psychiatric unit) of the Erenkoy Research and Training Hospital. Two hundred and eighty-six female patients who were accepted inpatient treatment with their own request, between January-December 2013, were enrolled. Patients who were enrolled in the study were divided into two groups according to whether they were DAMA or not. The age of the patient, length of the hospitalization and data related to the diagnosis according to DSM 5 were examined.

**Results:** Rate of DAMA patients was 27.9% (n=80), rest of the patients (n=206, 72.1%) were discharged according to cooperation of medical staff and patient's will. The average age DAMA group was  $37.3 \pm 12.1$ , the difference between two groups was statistically insignificant ( $p=0.24$ ). There were no significant differences between the groups with respect to the DSM-5 diagnosis ( $p=0.221$ ). However, obsessive compulsive disorder had predictive feature for being in the DAMA group ( $p=0.32$  among all data). The average time for the length of hospitalization for the DAMA group it was  $10.7 \pm 11.5$  days, and for the normally discharged group it was  $25.9 \pm 15.1$  days, and the difference between two groups was statistically significant ( $p: 0.00$ ).

**Conclusion:** This study assessed an annual service data and it has revealed that DAMA rate was quite high. DAMA risk was similar among all diagnostic groups, except there was an increase at DAMA risk for Obsessive compulsive disorder. However, clinical features of two groups were quite similar. Perhaps, the increase in the number of studies in this field will obtain new data, which would provide a better guidance for clinicians.

**Keywords:** discharge, medical advice

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#### [OP-012] Autism

### Comorbid psychiatric disorders and clinical characteristics in children and adolescents with Obsessive compulsive disorder: a Turkish referred sample

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**Objective:** Obsessive-compulsive disorder (OCD) is characterized by distressing intrusive thoughts and time-consuming repetitive rituals. High rates of comorbidity are reported in pediatric OCD, mainly with anxiety disorders, major depression, tic disorders and disruptive behavior disorders. Some comorbid neurodevelopmental problems such as tic disorders and attention deficit-hyperactivity disorder (ADHD), are among the most relevant distinctive features of pediatric OCD, compared with adult OCD. OCD is a heterogeneous disorder with possible phenotypical differences, so there has been increased interest in identifying more homogeneous subtypes with distinct patterns of comorbidities. This study aimed to examine the sociodemographic, clinical and comorbidity patterns in a large sample of pediatric OCD subjects and to examine the cross-cultural similarities and differences, if any.

**Method:** Participants were 110 children and adolescents, who were consecutively referred to our outpatient clinic between March 2011 and September 2013 and diagnosed as having OCD according to DSM-IV. Subjects, who have a psychotic disorder, mental retardation or pervasive developmental disorder were not included in the study. A sociodemographic and clinical data form was filled by the all authors themselves by interviewing the parents and the child. This form covers the current age of the child, the main reasons for the referral, age at onset of OCD symptoms, type of obsessions and compulsions, duration of time child spends performing obsessions and compulsions, family history of OCD and other psychiatric disorders. Schedule for Affective Disorders and Schizophrenia for School Age Children-Present and Lifetime-Turkish Version (K-SADS-PL-T) was used to assess comorbid psychiatric disorders. WISC-R was administered to assess intellectual abilities.

**Results:** Totally 110 children and adolescents with OCD (62 girls and 48 boys) were included in the study. The mean age of the sample was 12.17 years (SD: 3.13, range: 6-18) and the mean full-scale IQ score was 95.66 (SD: 13.73, range: 71-137). The mean age at onset of OCD symptoms was 9.14 years (SD: 3.44, range: 2-16). Ninety-two subjects (83.6%) had at least one comorbid psychiatric disorder. The most common comorbid psychiatric disorders were anxiety disorders, depression and ADHD, respectively. The most common obsession types were contamination/somatic, symmetry and religious obsessions, the most common compulsion types were cleaning, repeating and checking compulsions respectively. 94.6% of the subjects had both obsessions and compulsions at the same time. 55% of the subjects were spending more than 2 hours/day performing their obsessions and compulsions and 25% were spending more than 6 hours/day.

79.1% of the subjects were primary referred for OCD symptoms. Eighty-seven subjects (79%) had a family history for any psychiatric disorder. 44.5% of the subjects had a family history of OCD.

**Conclusion:** Comorbidity seems to be a rule in subjects with OCD. Therefore a detailed assessment of the other psychiatric disorders should be a routine part of the assessment of children and adolescents referred for OCD symptoms.

**Keywords:** Obsessive compulsive disorder, children, comorbidity, family history

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Turkish Association for Psychopharmacology

# 6<sup>th</sup> International Congress on PSYCHOPHARMACOLOGY

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## Poster Presentations

**[PP-001] Cultural psychiatry****The relationship of mental state, attitude and behaviors with colors**Ahmet Ozturk<sup>1</sup>, Sayit Altikat<sup>2</sup>, Ali Emre Dursun<sup>3</sup>, Erdem Deveci<sup>3</sup>, Etem Soyucok<sup>1</sup><sup>1</sup>Dumlupinar University, Faculty of Medicine, Department of Psychiatry, Kutahya-Turkey<sup>2</sup>Dumlupinar University, Faculty of Medicine, Department of Biochemistry, Kutahya-Turkey<sup>3</sup>Bezmi Alem Vakıf University, Faculty of Medicine, Department of Psychiatry, Istanbul-Turkey

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**Objective:** Color is the effect of light on the eye depending on its core structure or spreading/absorbing object. It exists everywhere at the same moment; it is a primary and nonsocial aspect of human environment. There has been limited research published about connotations of colors on humans, the relationship between the colors of a person's clothing and his/her mental state and what person perceives from colors when he/she designs own life. In this study, we aimed to measure the tendencies of a group of university students on this subject.

**Method:** One hundred students (50 male, 50 female) from Dumlupinar University College of Healthcare Professionals participated in our study. The participants have been given a questionnaire developed by the researchers examining the attitude about colors.

**Results:** While the most common colors preferred on clothes were black (%30) in females and blue (%32) in males, the least common colors were yellow (%28) and pink (%50), respectively. The question of comforting and soothing color has been mostly answered as green (%40) by females and white (%42) by males. While females and males preferred black (%52 and %36 respectively) on emotional and somber moments, the color representing peace was white (%40) in females and blue (%42) in males. The question about the color representing harmony, joy and cuteness has been mostly answered as pink (females: %65 and males: %62). While the most eye-catching color was red (females: %82 and males: %58), the color representing cleanness and honesty was white (females: %86 and males: %84). The color most relaxing on eyes and the body was blue as indicated by the participants (females: %32 and males: %34). The color elevating motivation has been found as red (females: %38 and males: %28), and the color elevating self-confidence was the same (females: %34 and males: %32). The color preferred when one is angry was black (%50) in females and red (%44) in males. The color preferred on uncertainty was black (%30) in females and white (%32) in males. While the participants usually preferred black (females: %54 and males: %34) when they are full of hatred, the color black was preferred by %38 of females and %42 of males on fear.

**Conclusion:** The colors have a two-way relationship with participants' mental state, attitude and behaviors. There are some studies suggesting that our color preference might reflect our personality or the color we prefer might have positive or negative effects on us. Taking color preferences of patients into account in mental state examinations would be beneficial.

**Keywords:** color, preference, mental status

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**[PP-002] Schizophrenia and other psychotic disorders****Turner-syndrome and psychosis: a case report**

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Turner Syndrome is a genetic syndrome in which a woman lacks one X chromosome, giving a karyotype of 45XO, or, alternately, a mosaic genotype with both 45XO and normal 46XX cells. Physical features include short stature, failure or reduction in secondary sex characteristics development, gonadal dysgenesis, and superficial features including neck webbing, hair loss, and cubitus albus. Women with Turner syndrome (TS) are of generally normal intelligence, but may have some specific defects in spatial orientation. Psychiatric condition has not been defined traditionally to TS, and TS is not mentioned in DSM-IV. Studies about the psychological aspects of TS have focused on the influence of the physical stigma of TS on psychological development in young female population, highlighting short stature, failure in sexual maturation compared to age peers, the issue of infertility, and how these issues relate to self-image and femininity. A "TS personality" characterized by immaturity, depressiveness, passivity, distractibility, and docility is suggested, although no rigorous scientific study has confirmed these claims. Psychosis is relatively rare, but some authors have hypothesized that psychosis could be associated with TS.

We present here a case of 20 years old, single woman, who was diagnosed TS, and had psychosis. At the age of 19, she had social withdrawal, insomnia, decreased self care and auditory and visual hallucinations, delusions of persecution. After risperidone 1 mg treatment, extrapyramidal symptoms began. So her treatment changed to olanzapine, olanzapine dose was increased up to 20 mg. However, extrapyramidal symptoms began and psychotic symptoms didn't decrease. Therefore olanzapine was stopped, and clozapine was started, clozapine dose was increased up to 100 mg. Extrapyramidal symptoms recovered, auditory and visual hallucinations, delusions of persecution decreased, communication with people was normalized, she returned to premorbid functionality. TS is a unique syndrome; it is important to identify it in order to avoid labeling patients with a more severe diagnosis, to determine its frequency and epidemiology, to understand its biological basis, and most importantly, to identify optimal treatment strategies. The majority of TS patients are of normal intelligence, social functioning and employment, yet the case reports of psychiatric disorders in this syndrome are similar and were considered unique enough to warrant description. Despite the descriptive information, the literature lacks rigorous, statistical analysis directed toward identifying the described syndrome in TS. Our case is about the treatment of a patient, who has both TS and psychosis. TS patients may have different sensitivity to antipsychotics, as observed with our patient. She had extrapyramidal symptoms with low dose risperidone and olanzapine, which we don't expect in common. This case report suggests that the use of clozapine in TS following the recommended precautions could be safe and effective.

**Keywords:** psychosis, turner syndrome, X-chromosome

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### [PP-003] *Dementia*

## Aripiprazole for the treatment of behavioral and psychiatric symptoms of frontotemporal dementia: a case report

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Frontotemporal dementia (FTD) is the second most common cause of early onset dementia and is clinically characterized by progressive behavioral change, executive dysfunctions, and language difficulties. Clinical features of FTD include changes of personality, restlessness, loss of inhibition, apathy, social withdrawal and impulsiveness. Most patients with FTD display socially inappropriate behaviors, compulsive-like acts, poor insight and psychiatric features including hallucinations and paranoid delusions. FTD has not any specific treatment yet. Treatments for control of behavioral symptoms constitute majority of treatment approaches. Slowing progression of the disease is aimed with neuroprotective treatments. The management of FTD, a disorder characterized by varied behavioral symptoms, primarily involves the use of psychoactive medications. Although there are no approved treatments for the disorder; selective serotonin receptor inhibitors such as sertraline, paroxetine, or fluoxetine can decrease disinhibition-impulsivity, repetitive behaviors, and eating disorders in FTD. Low doses of trazodone or an atypical antipsychotic such as aripiprazole can also help manage significantly disturbed or agitated behavior. Case reports and open-label studies reported that aripiprazole, risperidone and olanzapine exert positive effects to control behavioral symptoms of FTD. This is a case report of FTD in a 69-year-old man. His symptoms started 7 years ago and he has been using sertraline 100 mg/day, quetiapine 100 mg/day, donepezil hydrochloride 10 mg/day. His compulsive behaviors and paranoid delusions did not respond to this treatment. Aripiprazole was added on existing treatment and after 4 weeks his compulsive behaviors and psychiatric symptoms regressed. We reported a patient with behavioral and psychiatric symptoms successfully treated with aripiprazole.

**Keywords:** frontotemporal dementia, aripiprazole, behavioral and psychiatric symptoms

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**[PP-004] Mood disorders****Is the onset of the psychotic depression later than nonpsychotic depression?**Osman Ozdemir<sup>1</sup>, Adem Aydin<sup>1</sup>, Aysel Milanlioglu<sup>2</sup>, Pinar Guzel Ozdemir<sup>1</sup>, Zafer Tapanci<sup>1</sup>, Damla Kement Timucin<sup>1</sup><sup>1</sup>Yuzuncu Yil University, Faculty of Medicine, Department of Psychiatry, Van-Turkey<sup>2</sup>Yuzuncu Yil University, Faculty of Medicine, Department of Neurology, Van-Turkey

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**Objective:** Although psychotic depression is very common among older depressed patients, studies have generally failed to find any socio-demographic differences between psychotic depression patients and nonpsychotic patients with depression. A comparison of the age related factors of psychotic depression and nonpsychotic depression could contribute to a better understanding of the clinical features of psychotic depression and its management as well.

**Methods:** The sample comprised 42 inpatients, 21 unipolar major depression with psychotic features, and 21 unipolar major depression without psychotic features. The diagnosis made after consensus of two psychiatrists by means of Structured Clinical Interview for DSM-IV Axis I Disorder (SCID-IV). Hamilton Depression Rating Scale (HDRS), and concomitantly Hamilton Anxiety Rating Scale (HARS) were performed to assess the severity of depression

**Results:** The average age of the patients with psychotic depression (49.8 years) was higher than that of non-psychotic depression patients (31.8 years). There were no significant differences between the patient groups in number of episodes and duration of illness. Also, patients with psychotic depression had higher mean total HDRS and HARS scores. There were no significant differences in gender, suicide attempt, family history, and stressful life events between groups.

**Conclusion:** These findings suggest that the onset of the psychotic depression was later than nonpsychotic depression.

**Keywords:** psychotic depression, nonpsychotic depression, early onset, late onset

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S84****[PP-005] Posttraumatic stress disorder****Relationship between posttraumatic stress disorder, dissociation, quality of life, hopelessness, and suicidal ideation among earthquake survivors**Osman Ozdemir<sup>1</sup>, Murat Boysan<sup>2</sup>, Pinar Guzel Ozdemir<sup>1</sup>, Ekrem Yilmaz<sup>2</sup><sup>1</sup>Yuzuncu Yil University, Faculty of Medicine, Department of Psychiatry, Van-Turkey<sup>2</sup>Yuzuncu Yil University, Faculty of Art and Science, Department of Psychology, Van-Turkey

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**Objective:** Previous studies have shown that mental health disorders including posttraumatic stress disorder (PTSD), other anxiety disorders, and depression as well as poor health status and functional impairment are common after earthquake. In the present study, we examined relations of PTSD with dissociation, quality of life, hopelessness, and suicidal ideation among a community sample of which greater proportion experienced a severe earthquake.

**Method:** Five hundred eighty-three subjects participated in the study, who were recruited from Van, Turkey which was hit by a 7.2 magnitude earthquake in October 2011. Subjects were administered a socio-demographic questionnaire, the Dissociative Experiences Scale (DES), Short Form Health Survey Questionnaire (SF-36), Posttraumatic Diagnostic Scale (PDS), Beck Depression Inventory (BDI), Beck Hopelessness Scale (BHS), and Scale for Suicide Ideation (SSI).

**Results:** We found that being female, being single, experiencing earthquake; having dissociative disorders and suicidal ideation were significant antecedents of PTSD symptom severity. Role-Physical, Bodily-Pain, General Health and Role-Emotional subscales of the SF-36 were inversely associated with PTSD symptoms.

**Conclusion:** Our findings suggest that pathological dissociation, poor quality of life and suicidal ideation were significantly linked to PTSD symptom severity. General health and perception of physical and emotional functioning seem to be preventive factors for PTSD symptom severity.

**Keywords:** PTSD, dissociation, depression, hopelessness, suicidal ideation, quality of life

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**[PP-006] Psychosomatic medicine - Consultation liaison psychiatry****Affecting factors of depression in acute phase after stroke**Baise Tikir<sup>1</sup>, Emine Merve Akdag<sup>1</sup>, Sahin Gurkan<sup>1</sup>, Songul Arslan<sup>1</sup>, Emine Yildizgoren<sup>1</sup>, Erol Goka<sup>1</sup>, Zeynep Nese Oztekin<sup>2</sup><sup>1</sup>Ankara Numune Education and Research Hospital, Department of Psychiatry, Ankara-Turkey<sup>2</sup>Ankara Numune Education and Research Hospital, Department of Neurology, Ankara-Turkey

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**Objective:** Stroke is one of the diseases, which cause morbidity mostly. In addition to impairment of motor function, there are problems with respect to mood changes especially depression, which frequently decreases participation of the rehabilitation process and functional improvement. In this study, we aimed to investigate affecting factors of depression in acute phase after stroke.

**Method:** Hundred thirty-one patients in two weeks after stroke were included in the study. Beck Depression Scale (BDS), Mini-Mental State Examination (MMSE), Barthel Scale (BS), Rankin Disability Scale (RDS), National Institute of Health Scale (NIHS) were applied to patients. Beck Depression Scale and Beck Anxiety Scale (BAS) were applied to caregivers. Sociodemographic features of patients, history of chronic diseases, psychiatric diseases, stroke and delirium/agitation, intensive care unit treatment, type of lesion (ischemic/hemorrhagic) were also recorded.

**Results:** Forty-nine of 131 patients (37.4%) were female and 82 (62.6%) were male. Mean age was 62.6±15.1 years and interval of age was 23-90 years. Mean of BDS scores was 14.72±11.2, mean of MMSE scores was 24.6±4.57. 35 percent of patients were depressed. Mean of BDS scores of females was higher than that of males. Economic status of depressed patients was lower than the others. Patients living alone and agitated after stroke were more depressed. MMSE scores were negatively correlated with BDS scores. BDS scores were positively correlated with BDS scores of caregivers. BS scores were higher than the others.

**Conclusion:** According to these results, economic status, living alone, agitation, early impairment of cognition are risk factors for depression after stroke and mood status of caregivers are affected to mood status of stroke patients. Functional dependence facilitates being depressed. Not only rehabilitation of motor function but also depressive symptoms and cognition must be handled as early and exactly as possible. Patients must be considered physically, psychologically and socially as a whole.

**Keywords:** stroke, depression

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**[PP-007] Psychosomatic medicine - Consultation liaison psychiatry****The relation between depression after acute stroke and lesion location**Emine Merve Akdag<sup>1</sup>, Baise Tikir<sup>1</sup>, Sahin Gurkan<sup>1</sup>, Songul Arslan<sup>1</sup>, Emine Yildizgoren<sup>1</sup>, Makbule Cigdem Aydemir<sup>1</sup>, Fikri Ak<sup>2</sup><sup>1</sup>Ankara Numune Education and Research Hospital, Department of Psychiatry, Ankara-Turkey<sup>2</sup>Ankara Numune Education and Research Hospital, Department of Neurology, Ankara-Turkey

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**Objectives:** Stroke which is one of the major causes of morbidity, affects functional improvement negatively because of mood changes especially depression after stroke. There are articles in the literature about relationship between poststroke depression and lesion location. But this relationship is still unclear. In this study, we aimed to investigate the relation between depression after stroke and lesion location in acute phase after stroke.

**Method:** A hundred thirty-one patients in two weeks after stroke were included in the study. Beck Depression Scale, Brief Symptom Inventory (BSI) were applied to recruited patients. Sociodemographic features of patients, side of lesion (right or left) and lesion location were also recorded.

**Results:** 49 of 131 acute stroke patients (37.4%) were female and 82 of patients (62.6%) were male. Mean of age was 62.6±15.1 years and interval of age was 23-90 years. Mean of BDS points was 14.72±11.2. Depression levels of 49.6 percent of patients were mild to moderate, 13 percent of patients were severe according to BDS scores. 35.1 percent of patients were depressed according to the cut off score of BDS (cut off score=17). Left sided lesions and subcortical lesions were more in the depressed group. According to lobar location, patients who had frontal, temporal, parietal, occipital and caudal lesions had higher BDS scores. This relation was statistically significant for parietal lesions (p<0.05).

**Conclusion:** According to these results, left sided lesions and subcortical lesions can predispose to depression more. Patients who have parietal lesions must be handled exactly in terms of depression. Studies about relationship between depression and parietal lobe are few and further investigations must be done

**Keywords:** stroke, depression

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### [PP-008] Neuroscience

## Seizures associated with quetiapine and lithium combination treatment: a case report

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It is well known that antipsychotic drugs could lower the seizure threshold. It has been shown that quetiapine causes significantly less EEG abnormalities compared to other antipsychotics. Lithium is a proconvulsant agent but apparently used safely in epileptics with bipolar disorder. Although lithium and quetiapine monotherapies seem to be safe in epileptic bipolar patients, the combination therapy of lithium with antipsychotics needs to be used cautiously because of induced seizure risk. In this article we presented a case of epileptic seizures induced by a combination therapy of quetiapine and lithium.

The patient was 28 years old and had been admitted to our psychiatry clinic because of depressed mood, loss of energy, fatigue, irritability, loss of interest, insomnia and psychomotor retardation. He has had epilepsy for 16 years. He had used valproic acid for 5 years. He has got no seizure for 4 years. His depressive episode was exacerbated 6 months ago. At the time of admission, the patient was not under medical treatment. His first medical treatment was lithium. He has gone under lithium monotherapy for only 2 months. He had no seizure while he was using lithium monotherapy. In his recent history; he underwent seasonal mood fluctuations with the symptoms of insomnia, decreased need for sleep, elevated mood, increased energy, distractibility, irritability and impulsivity. He became extremely talkative, hyperactive and he began to squander money in spring and summer. Bipolar disorder I, depressive episode was diagnosed according to the (DSM)-IV-TR. Lithium and quetiapine treatment was started. After 2 weeks of treatment the patient had many seizures in a day. He had a humeral fracture due to an epileptic seizure and his EEG showed generalized epileptiform activity. Lithium and quetiapine were stopped and valproic acid was started.

In a study that investigated the risk of EEG abnormalities associated with the use of various antipsychotic drugs; EEG abnormality risk was particularly high with clozapine and olanzapine, moderate with risperidone and typical neuroleptics, and low with quetiapine. In another study, the effects of the atypical antipsychotics quetiapine and olanzapine and the typical antipsychotic haloperidol on EEG patterns were retrospectively investigated in 81 patients. EEG abnormalities seemed to occur rarely in patients treated with quetiapine comparable to the control group. In a clinical trial with 3700 patients, the occurrence of seizures in patients treated with quetiapine was no greater than that observed in patients receiving placebo. Although lithium-neuroleptic combination treatment is largely safe, there is growing evidence that some patients were sensitive to such combination and at increased risk of significant and disturbing side-effects. The most important hypotheses are that lithium- antipsychotic treatment might cause neurotoxicity by increasing dopamine receptor blockade. Our patient was using lithium and quetiapine concurrently. He has not had any epileptic seizures for the last four years until the seizures were induced with the use of quetiapine and lithium. We suggest that Lithium- antipsychotic treatment should be used with caution, as this combination treatment might be associated with a relatively greater risk of seizures. The probability of induction of seizures with Lithium- antipsychotic treatment should always be kept in mind.

**Keywords:** epilepsy, antipsychotic, bipolar disorder, quetiapine

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**[PP-009] Mood disorders****Is there any relationship between sodium and depression?**Osman Ozdemir<sup>1</sup>, Yasemin Usul Soyoral<sup>2</sup>, Mesut Isik<sup>1</sup>, Pinar Guzel Ozdemir<sup>1</sup>, Ragip Balahoroglu<sup>3</sup><sup>1</sup>Yuzuncu Yil University, Faculty of Medicine, Department of Psychiatry, Van-Turkey<sup>2</sup>Yuzuncu Yil University, Faculty of Medicine, Department of Nephrology, Van-Turkey<sup>3</sup>Yuzuncu Yil University, Faculty of Medicine, Department of Biochemistry, Van-Turkey

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**Objective:** Some authors have suggested that abnormalities in electrolyte metabolism could cause mood disorders. A few studies have demonstrated relationships between the metabolism of electrolytes and affective symptoms. In this study, we aimed to investigate whether there is any relationship between sodium and depression.

**Method:** The study sample comprised of 42 patients with depressive disorders, who were consecutively admitted to the inpatient psychiatric service. In the patients group, thirty-five patients (83.3%) had major depression, three (7.1%) had psychotic depression, three (7.1%) had catatonic depression and one (2.3%) had seasonal depression. The serum sodium and serum creatinine levels were measured in a blood sample before eating anything in the morning. Urine sodium, urine creatinine and density of urine were studied in the first morning spot urine sample.

**Results:** Patients with depression had significantly lower serum sodium than healthy control subjects ( $p=0.04$ ). No significant differences between the groups in terms of plasma creatinine, urine sodium, urine creatinine and density of urine were recorded.

**Conclusions:** The present study suggests that there was a relationship between sodium and depression.

**Keywords:** depression, sodium

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S87****[PP-010] Attention deficit-hyperactivity disorder****Evaluation of miR18a-5p, miR22-3p, miR24-3p, miR106b-5p, miR107, miR125b-5p and miR155a-5p levels in child and adolescent patients with attention deficit hyperactivity disorder**Hasan Kandemir<sup>1</sup>, Mehmet Emin Erdal<sup>2</sup>, Salih Selek<sup>3</sup>, Ozlem Izci Ay<sup>2</sup>, Ibrahim Fatih Karababa<sup>4</sup>, Sultan Basmaci Kandemir<sup>5</sup>, Mustafa Ertan Ay<sup>2</sup>, Senay Gorucu Yilmaz<sup>6</sup>, Huseyin Bayazit<sup>4</sup>, Bahar Tasdelen<sup>7</sup><sup>1</sup>Harran University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Sanliurfa-Turkey<sup>2</sup>Mersin University, Faculty of Medicine, Department of Medical Biology, Mersin-Turkey<sup>3</sup>Medeniyet University, Faculty of Medicine, Department of Psychiatry, Istanbul-Turkey<sup>4</sup>Harran University, Faculty of Medicine, Department of Psychiatry, Sanliurfa-Turkey<sup>5</sup>Balikli Gol State Hospital, Department of Psychiatry, Sanliurfa-Turkey<sup>6</sup>Mersin University, Faculty of Medicine, Department of Medical Biology and Genetics, Mersin-Turkey<sup>7</sup>Mersin University, Faculty of Medicine, Department of Biostatistics, Mersin-Turkey

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**Objective:** Attention deficit hyperactivity disorder (ADHD) is one of the most prevalent childhood disorders. Although disorders etiology and pathogenesis have remained unknown, several theories about ADHD development have been proposed and many researchers believe that it might be caused by both genetic and environmental factors. In this study we evaluated miR18a-5p, miR22-3p, miR24-3p, miR106b-5p, miR107, miR125b-5p and miR155a-5p levels in child and adolescent ADHD patients.

**Method:** The research sample consisted of a group of 52 ADHD patients, and 52 healthy volunteer controls. Total RNA was extracted from Peripheral Whole Blood using Tri-Reagent. The hsa-miR-26b-5p was used as endogenous control microRNA. The mixed RNAs generated from the control group were used as a Reference RNA sample.

**Results:** There was no significant difference in age and sex between the two groups ( $p>0.05$ ). Mirna 18a-5p, 22-3p, 24-3p, 106b-5p and 107 levels were statistically significantly decreased in ADHD patients ( $p<0.05$ ). Mirna 155a-5p levels were increased in patients group

( $p < 0.05$ ). In the ROC curve Mir 107 levels under 0.4480 were highly predictive (PPV: 70.6) for the disease state and negative predictive value was 86,5%.

**Conclusion:** We found decreased mir 18a-5p, mir 22-3p, mir 24-3p, mir 106b-5p and mir 107 levels in patients. Previous studies examined relationship between miR-18a and reported this can be an important susceptibility mechanism for stress-related disorders. Dysregulation of mir22, mir 106b, mir107 and mir24 in schizophrenia, bipolar disorders and autism has been reported. MiR-107 also has been studied in traumatic brain injury and neurodegenerative disease and fronto temporal dementia. We found increased mir 155a-5p in ADHD patients. mir155 dysregulation in depression patients and also Increased mir155 levels during lithium treatment has been reported. There could be a close relationship between levels of circulating miRNAs and ADHD. If we could understand how the signaling pathways were arranged by miRNAs, impact on CNS development, function and pathology, this could improve our knowledge about ADHD etiology and treatment.

**Keywords:** mirNA, attention deficit hyperactivity disorder, mir 18a-5p, mir22-3p, mir24-3p, mir 106b-5p and mir 107

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### [PP-011] *Addiction and related disorders*

## Cannabis intoxication delirium: a case report

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Cannabis use is a pervasive and increasing substance abuse particularly among adolescents and young adults. There is a strong association between cannabis exposure and psychiatric disorders. Delta-9-tetrahydrocannabinol (THC), the major psychoactive component of cannabis, has dose dependent effects and has a potential to induce psychotic symptoms in genetically vulnerable individuals, especially at high doses. The main clinical symptoms of cannabis intoxication include impaired motor coordination, euphoria, anxiety, sensation of slowed time, dry mouth, conjunctival injection, and tachycardia. Additionally, although cannabis intoxication delirium is described in DSM-IV-TR, it is a rarely reported as a clinical condition. In this presentation we report a case, which developed delirium shortly after cannabis use. Our case is a 21 year-old male, with diagnosis of "Borderline Personality Disorder+Anxiety Disorder" and with treatment of escitalopram 20 mg/day and olanzapine 5 mg/day. He has been under this medication for 2 months in his referral. He was transported to our emergency department due to the rapid changes in his consciousness, bizarre movements and behaviors like talking to himself, moving his arms and legs purposeless, trying to catch something in front, sleepiness and probably hyperesthesia. We were informed that he was normal and he took his medication of olanzapine 5 mg p.o. two hour prior to arrival. He had also history of substance abuse. His blood tests were performed and all parameters found to be in normal range whereas his vital signs, cranial CT were normal. He was not oriented and not cooperating. There was no response to verbal stimulation while he responded to painful stimuli. His consciousness was fluctuating between agitation and somnolence. Toxicological analysis was performed in order to clarify probable substance intoxication. The metabolite of tetrahydrocannabinol (THC) was detected in his urine whereas other drugs were negative. He was diagnosed to have "Cannabis Intoxication Delirium" and taken under clinical observation and follow-up in the emergency department. His symptoms ceased and his mental status returned to the normal level spontaneously within 48 hours. He was cooperating, oriented, had ability to testing reality but had anterograde amnesia including delirium period before discharge.

Cannabis is the most consumed illicit drug in the world. This patient had a long period of cannabis use history but no cannabis induced disorder before. As we concluded that the delirium he experienced was induced by cannabis use, the possibility of the medication he used might have interacted with cannabis and caused delirium manifestation should be considered. Therefore, although there is sufficient data confirming that cannabis use was associated with onset of psychotic symptoms, clinicians should be aware of other clinical presentations of cannabis intoxication such as delirium, especially in patients under psychotropic medications.

**Keywords:** cannabis, intoxication, delirium

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**[PP-012] Mood disorders****Can rTMS resistance predict bipolarity?: report of two cases**Onur Durmaz<sup>1</sup>, Recep Tutuncu<sup>2</sup><sup>1</sup>Van Military Hospital, Department of Psychiatry, Van-Turkey<sup>2</sup>Gulhane Military Medical Academy Haydarpasa Training Hospital, Department of Psychiatry, Istanbul-Turkey

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Treatment resistance in depression is a common and compelling clinical condition. As there are several treatment methods including augmentation, combination, switching strategies in management of refractory depressed cases, stimulation methods are also one of these favorable options. Repetitive Transcranial Magnetic Stimulation (rTMS) is a wide spreading therapeutic tool approved by FDA in treatment of depression and has been shown to be effective as an add-on treatment to pharmacotherapy. There are different application methods of rTMS in clinical practice whereas high frequency(HF) to left dorsolateral prefrontal cortex (DLPFC) and low frequency (LF) to right DLPFC are the most studied methods in particular of depression treatment. Mechanism of antidepressant (AD) efficacy of rTMS still remains unclear but neuromodulation, neuroendocrinological and neurotransmitter pathways are likely responsible. Although neurobiology and underlying mechanisms of AD resistance in depression is not well known yet, inadequate response to several AD trials is considered to be a predictor of subsequent bipolar disorder. AD use in bipolar depression is another aspect in management of bipolar depression and is strongly debated. Beside to pharmacological AD interventions, there are some cases switches to hypomania/mania by rTMS application. Furthermore, current data with regard to long-term efficacy of rTMS is limited. In this report we present two cases of refractory depression that developed mania and hypomania in follow up one month after of rTMS course.

**Case 1:** Our first case was a 38 year-old female diagnosed to have non-psychotic depression and had been using venlafaxine 75-150 mg/day for nine months. Due to inadequate response to her current medication, left sided HF-rTMS course (including 20 Hz frequency, 1000 pulse/day, 15 sessions, applied to left DLPFC) was administered as an add-on treatment but her depressive symptoms didn't improve in clinical follow-up. Hence, right-sided LF rTMS, another effective rTMS protocol has been applied to right DLPFC with 1 Hz frequency and 1000 pulse/day for 15 sessions but treatment response was not sufficient again. She has continued her treatment with receiving cognitive behavioral therapy in addition to her current medication. One month after her last rTMS course, she was admitted to our clinic with psychotic mania. She has been hospitalized with olanzapine 10 mg/day treatment and her AD treatment was stopped. In clinical follow up she was discharged with diagnosis of bipolar disorder in partial remission.

**Case 2:** The second case, a 24-year-old female, was diagnosed to have nonpsychotic depression under escitalopram 20 mg/day and olanzapine 5 mg/day medication for five months. Left sided HF-rTMS was applied with same protocol as previous case but similarly, response to TMS treatment was not sufficient. Nearly after one month of her last rTMS session, she was admitted to outpatient clinic with hypomanic symptoms. As escitalopram was ceased and olanzapine was titrated to 20 mg/day, her affective symptoms improved gradually. Both cases had neither family history nor history of manic/hypomanic episodes.

ADs are known to have a potential of inducing mania/hypomania in bipolar patients. rTMS has been reported to have a similar potency as well. It was suggested that rTMS has delayed effects on mood in depressed patients. In these reported cases we can't conclude whether manic/hypomanic symptoms developed in consequence of rTMS therapy or as a natural course of disease. There are some promising results supporting efficacy of rTMS in bipolar depression. Although rTMS is an effective therapeutic tool in depression, it could be suggested that rTMS resistant depressed patients, as similar to those pharmacotherapy resistant patients, should be evaluated as to be vulnerable to bipolar disorder and monitored in terms of manic shift.

**Keywords:** rTMS, bipolar disorder, manic shift

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**[PP-013] Conduct disorders****An atypical self-mutilation: skin-burn with a lighter**Onur Durmaz<sup>1</sup>, Recep Tutuncu<sup>2</sup><sup>1</sup>Van Military Hospital, Department of Psychiatry, Van-Turkey<sup>2</sup>Gulhane Military Medical Academy Haydarpasa Training Hospital, Department of Psychiatry, Istanbul- Turkey

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Non-suicidal self injury (NSSI) or self mutilation is deliberate self harming behavior to body tissue for the purpose of emotional relieving, punishment, getting attention or escaping a compelling situation. Estimated NSSI prevalence is %4 of general population whereas the rate is higher in adolescents and among individuals with psychiatric history as well as alcohol/substance abuse. Psychiatric comorbidities are common among individuals who are prone to self-harm. Bipolarity, personality disorders, particularly borderline and antisocial personality disorder are the risk factors for NSSI. There are different methods of NSSI including cutting, biting, hitting and skin picking or burning. Cutting is considered to be the most encountered form of self-mutilation in clinical practice. In this case report, we present a 21-year-old male with the diagnosis of bipolar II disorder, who burnt some parts of his body by using a lighter for self mutilation.

Our patient was referred to outpatient clinic with restlessness, sleeplessness, racing and reference thoughts, and increased psychomotor activity. In his history, he had the diagnosis of Cluster B Personality Disorder before his last referral and had no current medication. In clinical evaluation, in addition to his mood disorder symptoms, conduct problems and substance use have been investigated due to his self-mutilation and substance abuse history. He reported no recent and current substance use while in his examination some red areas were seen on his forearms, neck and pectoral region. He reported that he had burnt his skin via a lighter to relieve his anxiety but he couldn't have remembered how and when he had made these lesions. His prior form of self-mutilations was cutting his skin whereas he had no burning type of self-harm before. He had no current suicidal thought and no suicidal attempt before. After clinical assessment, risperidone 2 mg/day and valproate sodium 1000 mg/day were administered as medication.

Self-mutilation is increasingly becoming a more remarkable clinical condition in psychiatric practice. Whereas it was described as criteria of borderline personality disorder in DSM-IV TR, there is a tendency to consider it as distinct clinical entity. Several forms of self-harm have been reported in literature such as genital self-injury. Self-mutilation is not only a clinical symptom of personality disorders but also associated with mood disorders such as depression or bipolar disorder, anxiety disorders such as PTSD, OCD and a range of psychotic spectrum disorders. As self mutilation may be seen as in uncommon form like burning, clinicians should be aware of its probability in assessing individuals, particularly those with the diagnosis of mood disorders and personality disorders and evaluation should include all forms of self injury, rather than common forms such as cutting and hitting, only.

**Keywords:** self-mutilation, differential diagnosis

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S90**

**[PP-014] Anxiety disorders****The effects of childhood trauma on sexual function in patients with social anxiety disorder**Ceren Meric<sup>1</sup>, Atila Tekin<sup>2</sup>, Ezgi Sagbilge<sup>1</sup>, Julide Kenar<sup>1</sup>, Omer Akil Ozer<sup>1</sup>, Oguz Karamustafalioglu<sup>3</sup><sup>1</sup>Sisli Hamidiye Etfal Training and Research Hospital, Department of Psychiatry, Istanbul-Turkey<sup>2</sup>Cizre State Hospital, Sirnak-Turkey<sup>3</sup>Uskudar University, NPIstanbul Hospital, Istanbul-Turkey

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**Objective:** The aim of this study is to investigate the relationship between childhood traumatic experiences and sexual functioning in patients with social anxiety disorder.

**Method:** A hundred and thirteen patients with social anxiety disorder, who applied Anxiety Disorders Outpatient Clinic of Sisli Hamidiye Etfal Training and Research Hospital between the dates of Jan 2009 and June 2011, were included in the study. Participants were evaluated by using Childhood Abuse and Neglect Questionnaire, sociodemographic form and Arizona Sexual Experiences Scale (ASEX).

**Results:** The frequency of physical abuse history was 45.1% and the frequency of sexual abuse was 14.2% in the sample. Female participants with a history of physical abuse had significantly higher scores in the items of sexual desire, arousal, ability to reach orgasm

and satisfaction from orgasm and total ASEX scores than those without a history of physical abuse. Female participants with a history of sexual abuse also had significantly higher scores in the items of sexual desire, arousal, ability to reach orgasm, satisfaction from orgasm and total ASEX scores than those without a history of sexual abuse. No significant difference was found between male participants with regard to physical abuse history in the items of total ASEX scores and sub-scale scores. Male participants with a history of sexual abuse had significantly higher scores in the item of satisfaction from orgasm score than those without a history of sexual abuse. No significant difference was also found between male participants with regard to sexual abuse history in the items of sexual desire, arousal, and ability to reach orgasm and total ASEX scores.

**Conclusion:** Childhood trauma history is frequently observed in patients with social anxiety disorder and childhood traumatic experiences can cause sexual function problems in patients with social anxiety disorder.

**Keywords:** childhood trauma, sexual function, social anxiety disorder

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### [PP-015] *Psychopharmacology*

## Neuroleptic malignant syndrome Induced with haloperidol decanoate: a case report

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The development of depot antipsychotics has facilitated incompatible patient's treatment process for in terms of the course of chronic disease. Several kinds of antipsychotics with varying dosing ranges are commercially available. An interval of fifteen days to one-month period has increased the effectiveness of depot antipsychotics. One of them is haloperidol depot. Haloperidol depot, generically named as haldol decanoate has been used in abroad (Europe-US) since 1986. Medications in depot form have some advantages such as reducing drug incompatibilities, preventing relapses, reducing hospitalizations and health costs, EPS incidence of side effects is low, providing the clinician to ensure compliance to treatment, reducing psychotic symptoms and need for dose reduction, providing a steady blood level and so preventing blood level fluctuations in oral administration. Whereas the depot form is an advantage for compliance, it brings a disadvantage because of lack of possibility to wash out the administered dose if an adverse effect is observed. . In addition, they have got some disadvantages such as lack of dose flexibility and patients feeling under constant self-control. As known, one of the disadvantages of depot antipsychotics is the high rates of NMS (neuroleptic malignant syndrome). NMS is not common but can be fatal once seen. Our literature search revealed nine NMS cases with oral administration in Turkey. None of these cases of NMS were associated with haloperidol depot administration. In our case, a schizophrenia patient, who was suffering neuroleptic malignant syndrome upon the recent use of haloperidol depot was reported.

**Keywords:** haloperidol decanoate, neuroleptic malignant syndrome

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**[PP-016] Schizophrenia and other psychotic disorders****Treat the patient, not the illness: excessive weight gain with quetiapine and weight loss with olanzapine**Esra Sena Genc<sup>1</sup>, Abdullah Genc<sup>2</sup>, Tevfik Kalelioglu<sup>1</sup>, Mustafa Akkus<sup>1</sup>, Hicret Kan<sup>1</sup>, Gokhan Umut<sup>1</sup><sup>1</sup>Bakirkoy Prof. Dr. Mazhar Osman Research and Training Hospital, Department of Psychiatry, Istanbul-Turkey<sup>2</sup>Sisli Hamidiye Etfal Training and Research Hospital, Department of Psychiatry, Istanbul-Turkey

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It is well-known that second generation antipsychotics (SGAs) might cause a number of metabolic side effects, including impaired glucose tolerance, high insulin resistance, weight gain and type 2 diabetes mellitus. H1 and 5-HT<sub>2c</sub> antagonisms cause increased appetite and weight gain. These side effects are reported mostly with clozapine and olanzapine among SGAs. In this paper we report a case of dramatic weight gain with quetiapine but decrease with olanzapine.

42 year-old female has been followed up in psychotic disorders outpatient clinic since 2007. She has a history of 18 years of "chronic schizophrenia" and has been hospitalized for 3 times. She had used antipsychotics such as risperidone, sulpride, amisulpride, fluphenazine, aripiprazole in various periods. She had gained 20 kg upon use of 600 mg quetiapine over a period of 3 months in 2009 and quetiapine had been stopped. In 2010, at the time of re-use of quetiapine 600 mg she had gained 48 kg within 13 months and had hyperlipidemia. Quetiapine was stopped and 10 mg olanzapine was started. She had lost 3 kg also with diet. In the interview with the patient, she strongly refused using quetiapine. Her treatment was rearranged as aripiprazole 30 mg/day, sulpride 200 mg/day, sertraline 100 mg/day, trazodone 50 mg/day. She was clinically stable with this treatment.

According to the literature, clozapine and olanzapine cause the most common metabolic imbalances while risperidone and quetiapine cause moderate weight gain and increased insulin resistance. In contrast to the literature, weight gain was severe and very discomfoting in this case. As a commonly used SGAs in clinical practice, weight gain and metabolic side effects of quetiapine should not be ignored.

**Keywords:** metabolic syndrome, quetiapine, weight gain

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**[PP-017] Obsessive compulsive disorder****Cognitive flexibility in an animal model of Obsessive compulsive disorder (OCD) induced by quinpirole**

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**Objectives:** This study was designed to assess cognitive learning and flexibility in Obsessive compulsive disorder (OCD) animal model induced by chronic administration of dopamine D<sub>2</sub>/D<sub>3</sub> agonist quinpirole (QNP). Main focus was to explore potential defect of cognitive flexibility in this model, as it is often claimed to be present in Obsessive compulsive disorder.

**Methods:** Cognitive flexibility was tested by reversal in Carousel maze place avoidance task. Animal is to avoid entering a stable room-frame sector (North) on the rotating arena. Four acquisition sessions were followed by four reversal sessions, where to-be-avoided sector was relocated to the opposite side of the arena (South). Number of entrances was considered a main parameter by which performance was assessed. Cognitive flexibility was evaluated by the number of entrances in the first reversal session. Perseverance, a tendency to abide by no longer valid strategy was also assessed. QNP was applied subcutaneously 30 min prior to testing at the dose 0.5mg/kg.

**Results:** Results show unaltered acquisition in acquisition learning following chronic quinpirole treatment. However, during reversal learning a robust but transient increase of number of entrances in QNP-treated group was observed. This deficit was not associated with perseverance.

**Conclusion:** In conclusion, we detected a significant reduction in cognitive flexibility manifested by impaired reversal learning.

**Acknowledgments:** This work was supported by GACR grant 14-03627S and IGA MZ CR NT13386 and by AS CR M200111204.

**Keywords:** obsessive compulsive disorder, quinpirole, behavior, learning, flexibility, rat

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**[PP-018] Attention deficit-hyperactivity disorder**

## Elevated thyroid stimulating hormone (TSH) level after initiating therapy with methylphenidate: a case report

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Thyroid hormones, triiodothyronine (T3) and thyroxine (T4), have many physiological actions and are essential for normal behavioral, intellectual and neurological development. Although not much work has been published on the effect of stimulants on thyroid hormone secretion, a stimulant medication has been shown to cause a statistically significant drop in thyroxine (T4) in children taking these drugs. Similarly, repeated amphetamine exposure has been shown to cause a decrease in rat plasma T4 levels. Moreover, it appears that dopamine infusion decreases the response of thyroid stimulating hormone (TSH) to thyroid releasing hormone (TRH). Therefore, it would appear that the increase in dopamine caused by stimulant usage could very well result in an attenuation of thyroid hormone release and thereby a stunting of growth.

A 7 year-old mild mentally retarded girl taking special education for five years presented with hyperactivity, attentional problems and academic failure to our outpatient clinic. She was diagnosed Attention Deficit /Hyperactivity Disorder (ADHD) according to The Diagnostic and Statistical Manual of Mental Disorders (DSM) V. Then we prescribed short acting methylphenidate 5 mg twice daily. After fifteen days at next medical appointment, she was clinically improved and no side effect was reported. At two months after commencement of this medication during routine laboratory evaluation done by pediatricians, elevated TSH level (7.218 mIU/ml, upper limit of normal TSH assay in the laboratory is 5.50 mIU/ml) was detected. Afterwards, she was consulted to the pediatric endocrinology department. They made further investigations including thyroid ultrasonography, Anti- thyroglobulin antibody test, thyroid peroxidase test and other hormone levels affecting the thyroid gland physiology in order to identify the etiology of elevated TSH level and results of observations revealed that elevated TSH level stemming from stimulant medication. Then methylphenidate treatment was stopped and after two months TSH level became normal (4,64 mIU/ml).

This case is considerable because it is important to check thyroid functions in ADHD children on methylphenidate treatment due to its effect on the thyroid gland physiology and importance of thyroid hormones in developing brain.

**Keywords:** methylphenidate, metabolism, thyroid gland physiology

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**[PP-019] Neuroscience****Optimization of temozolomide dose for blockade of adult neurogenesis in laboratory rat**

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**Objectives:** One of the main adult neurogenesis regions is located in subgranular layer dentate gyrus of hippocampus. New neurons which are created here are integrated into the hippocampal network. The exact function of adult neurogenesis in hippocampus is yet unknown, although it was proved to play a role in some forms of hippocampal learning and memory. Ablation of neurogenesis provides a powerful tool to look into the function of neurogenesis in adult brain. Cytostatic temozolomide has negative effects on quickly dividing cells in all organism, therefore is important to determine minimal dose, which would successfully block formation of new neurons.

**Methods:** This project aims at determining the optimum dose of temozolomide in laboratory Long-Evans rat, which effectively blocks proliferation of new cells but has minimal side-effects of the treatment. Fifty mg/kg dose, which has been previously used in mouse, had destructive effects to organism of laboratory rat. Temozolomide was administered intra-gastrically for four weeks, three times in week. We had four groups with different doses: 10.25 and 40 mg/kg. Neurogenesis was detected by BrdU staining and fluorescence. During the experiment, blood tests with cell counting and control motor tests were conducted at several time points to determine the health of animals and assess the degree of recovery.

**Results:** The results of this dose-response study suggest that a dose of 25 mg/kg was optimal for Long-Evans rats, since it successfully ablates neurogenesis while causing minimal negative symptoms (despite the blood cell recovery was not complete), which were observed in 40 mg/kg dose.

**Conclusion:** We conclude that optimum dose for blocking adult neurogenesis and recovery of somatic function was found in 25 mg/kg

**Keywords:** adult neurogenesis, temozolomide, blockade, learning, rat

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**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S94****[PP-020] Schizophrenia and other psychotic disorders****A case of ileus in a psychotic patient under paliperidone palmitate treatment**Serdar Suleyman Can<sup>1</sup>, Esra Kabadayi<sup>2</sup><sup>1</sup>Ankara Atatürk Training and Research Hospital, Department of Psychiatry, Ankara-Turkey<sup>2</sup>Yildirim Beyazit University, Faculty of Medicine, Department of Psychiatry, Ankara-Turkey

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Constipation is a side effect of antipsychotic drugs that have high affinity to muscarinic cholinergic receptors. In some severe cases, constipation progresses to ileus and bowel ischemia, and causes multiple morbidity and mortality related to sepsis and perforation especially among patients with schizophrenia. In this report, a colonic ileus case is described in a patient diagnosed with schizophrenia under the treatment of paliperidone palmitate.

A 38-year-old, single, unemployed man, graduated from primary school was brought to Ankara Ataturk Hospital Psychiatry Clinic by police in November, 2013. His relatives told about his problems as abstaining from being out of home, having weight loss, diminishing his self-care skills and stacking the waste. Paliperidone palmitate 150 mg intramuscular and biperiden 2 mg/day treatment was given to the patient and he was hospitalized for further treatment. With the diagnosis of schizophrenia, second dosage of paliperidone palmitate 100 mg intramuscular treatment was given to the patient one week after first dosage. Due to the fact that the patient had constipation, nausea, vomiting, abdominal distention and colonic liquid-gas level finding in his abdominal x-ray, he was counseled to the general surgery department. Loop ileostomy operation was performed and the patient was discharged after operation.

In conclusion, ileus is an important side effect of antipsychotic treatment, with potentially morbid and mortal consequences if early

detection fails. Complete physical examination and close screening of side effects are recommended when antipsychotics are prescribed. In addition, preventive actions should be promoted and appropriate interventions should be provided when needed.

**Keywords:** ileus, paliperidone palmitate, schizophrenia

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### [PP-021] Psychosomatic medicine - Consultation liaison psychiatry

## Disability and anxiety-depressive states in patients with chronic heart failure

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**Objective:** Anxious and depressive symptoms are frequent in cardiac disorders. This study estimates the prevalence of disability among patients with chronic cardiac disorder and identifies important correlates of disability among this population.

**Method:** Disability was assessed among 51 participants of the Marmara University Cardiology Clinics outpatient department at the 2013 follow-up using the brief disability questionnaire-BDQ

Demographic and health measures were related to disability status using logistic regression models (none or mild vs. moderate, severe, or extreme disability). When the sex, education, occupation, the hospitalizing clinic and the HAD mean points were compared, the difference was found to be statistically significant ( $p < 0.01$ ).

**Results:** Patients with Coronary Artery Disease had a depression score of  $10.5 \pm 2.7$  and an anxiety score of  $11.5 \pm 2.3$  on the applied scale. Mostly patients reported moderate to extreme global disability. Economic constraints and depressive symptomatology were associated with global disability. Obesity, and hypertension were only associated with disability for the mobility domain (getting around).

**Conclusion:** The prevalence of disability is relatively high among the selected population of chronic cardiac patients. While planning the treatment of patients with cardiac illness, evaluating them mentally will help to provide optimal treatment and care services

**Keywords:** disability, depression, anxiety, brief disability questionnaire-BDQ

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### [PP-022] Attention deficit-hyperactivity disorder

## Serum levels of brain-derived neurotrophic factor changes in children diagnosed with attention deficit hyperactivity disorder: after 2 months OROS-methylphenidate treatment

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**Objective:** Attention deficit hyperactivity disorder (ADHD), characterized by core symptoms like hyperactivity, attention deficit and impulsivity far beyond the developmental levels is an important psychiatric illness with a prevalence of 5% worldwide and the effects on the patients' and their families' quality of life. Even though the pathogenesis of ADHD is still greatly unknown, evidences from different researches point out primarily the dopaminergic system. As a member of the neurotrophin family, brain-derived neurotrophic factor (BDNF) is a widely expressed neurotrophin in the brain. BDNF has an important role in the survival, differentiation and synaptic plasticity of a series of neuronal systems including dopaminergic neurons. For this reason, it is proposed that BDNF might play a role in the ADHD pathophysiology. In this study, a comparison was aimed to be made between serum BDNF levels in children with diagnosed ADHD for pretreatment and posttreatment with methylphenidate.

**Method:** Fifty children with diagnosis of ADHD within an age range of 6-12 years were recruited in the study. The psychiatric diagnoses were determined by applying a semi-structured interview with Kiddies Schedule for Affective Disorders and Schizophrenia for School Aged Children- Present and Lifetime Version (K-SADS-PL). The symptom severity of ADHD was measured by Clinical Global Impression (CGI) ADHD severity scale. Clinicians filled up Du Paul ADHD scale. The levels of serum BDNF were assessed before and after eight weeks treatment with effective dosages of methylphenidate.

**Results:** In present study mean plasma BDNF levels in the baseline were 2626.3 pg/ml and 3255.8 pg/ml in the end point, thus showing significantly higher mean serum BDNF levels at post-treatment than pretreatment ( $t=-2.147$ ,  $df=49$ ,  $p=0.037$ ). There was statistical significant difference between three subtypes of ADHD ( $p=0.004$ ). After Bonferroni correlation it was found that there were significant differences between both mixed subtype and predominantly attention deficit subtype ( $p=0.03$ ) and between predominantly attention deficit subtype and predominantly hyperactivity-impulsivity subtype ( $p=0.14$ ). Significant difference was not found in BDNF levels with or without comorbidity ( $p=0.671$ ) and there was no correlation between BDNF and Du Paul or CGI scores.

**Conclusion:** The results showed a significant increase in serum BDNF in children with ADHD after 8 weeks treatment with methylphenidate. Also we observed an improvement in attention deficit symptoms with increasing baseline serum BDNF levels. Serum BDNF can be an indicator for prediction of treatment response, prognosis.

**Keywords:** attention deficit hyperactivity disorder, brain-derived neurotrophic factor, methylphenidate

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### [PP-023] Stress

## Characteristics associated with the level of caregiver burden

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**Objective:** The concept of "caregiver burden" is mentioned as subjective and objective unfavorable outcomes caused by the care giving such as psychological and physical health problems, economic and social problems, and disruption in family relations. The level of burden was shown to be affected by the features of the illness and the patient as well as by intrinsic factors of the caregiver. The aim of the present study was to investigate the association of caregiver burden with the characteristics of the caregivers and the psychotic patients.

**Methods:** Thirty-three patients, who had been recorded in Çorum Community Mental Health Center (CMHC) with the diagnosis of psychotic disorders (schizophrenia, schizoaffective disorder, non-organic psychosis) and their caregivers were recruited in this study. A sociodemographic data form, Scale for the Assessments of Positive Symptoms (SAPS), Scale for the Assessments of Negative Symptoms (SANS), Clinic Global Impressions (CGI), Global Assessment of Functioning (GAF), Side Effect Rating (UKU), Hospital Anxiety and Depression, Beck Anxiety and Depression, Short Form 36 (SF 36) and Zarit Caregiver Burden Scales were used for the evaluation of the patients and caregivers.

**Results:** Sociodemographic characteristics of the patients and their caregivers are shown in Table 1 and Table 2. Caregiver burden was found to be positively correlated with the age ( $p=0.03$ ), Scores of the Beck Anxiety ( $p=0.03$ ) and Depression ( $p=0.006$ ) scales, anxiety ( $p=0.001$ ) and depression ( $p=0.009$ ) subscales of HAD and negatively related with education level of the caregivers ( $p=0.007$ ), physical functioning ( $p=0.005$ ), role limitation due to physical problems ( $p=0.042$ ), bodily pain ( $p=0.002$ ), vitality ( $p=0.00$ ) and social functioning ( $p=0.00$ ) subscales of SF-36. Those correlations were statistically significant and weak. Burden of the caregivers whose patients were smoking was found to be significantly higher than that of the non-smokers ( $p=0.04$ ).

**Conclusion:** The level of caregiver burden was not significantly different in patients, who attended regular follow-up in the center compared to the patients who did not. This finding was attributed to the small number of patients in the present study.

The finding that the quality of life decreases with increasing burden and higher incidence of depression and anxiety findings is consistent with the literature. A positive correlation was found between the age of caregiver and the level of burden and this finding was attributed to the decrease in the physical strength. Negative correlation was found between the age and the level of burden, and this was attributed to the difficulties in accepting the disease and treatment commonly experienced at the initial exacerbations of the disease.

**Keywords:** caregiver burden, caregiver burden and psychiatry, caregiver burden and psychosis

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**[PP-024] Psychopharmacology****The combined treatment of paliperidone palmitate injection and ECT in schizophrenia spectrum disorders: four case series**

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The combination of ECT and antipsychotic medications can be considered as an option for people with schizophrenia when the goal is rapid global improvement and symptomatic reduction, as well as in patients who show a limited response to medication alone. To our knowledge, there are many reports of successful treatment of schizophrenia and schizoaffective disorder with ECT and long-acting injectable (LAI) antipsychotics. To date there is no report about the combination of paliperidone palmitate injection (PLP LAI) and ECT. We aimed to describe 4 cases of schizophrenia spectrum disorder patients safely treated with a combination of PLP LAI and ECT.

EU was a 43-year-old male, married, and has been retired due to the illness for 9 years, with a diagnosis of schizoaffective disorder. At the admission, he refused treatment from oral route. So we decided to use PLP LAI for his treatment. No improvement was noted; he continued to display psychotic symptoms and psychomotor agitation. We decided to add ECT on. He was acutely started receiving ECT and went under 8 sessions of ECT.

OS was 46-year-old, unmarried female, left school of medicine because of her illness, psychotic disorder and Obsessive compulsive disorder since 23 years old. Her medications at the time of her admission included fluvoxamine 300 mg/day, quetiapine 400 mg/day, and lorazepam 3 mg/day. Over the first several days, she routinely refused to take her medications, to take food and to leave her room in the hospital. Her treatment was changed to PLP LAI and ECT. She received totally 15 sessions of ECT.

SI is a 39 year-old, married female, a housewife who has been suffering schizoaffective disorder for 3 years. Her admission treatment included valproic acid 1000 mg/day combined with chlorpromazine 200 mg/day and quetiapine 600 mg/day. Her treatment was continued for 10 days; there was no clinical improvement and a treatment with PLP LAI and ECT was planned. She went under 10 sessions of ECT.

BD was a 30-year-old male, unmarried, unemployed, who had a history of schizoaffective disorder. Since the patient did not show clinical improvement and enough response to a variety of pharmacological treatment approaches, (paliperidone long action injection 100 mg/month, valproic acid 1000 mg/day, lorazepam 5 mg/day), ECT was planned and valproic acid and lorazepam were stopped. He went under 8 sessions of ECT.

All patients were free from any comorbid medical condition; the physical examination and routine blood tests were normal

To our knowledge, there were studies about clinical use of tablet form of paliperidone and ECT together but this is the first report of using PLP LAI with ECT. As a result, PLP LAI and ECT can be a safe and effective treatment choice in patients diagnosed with schizophrenia spectrum disorders, who don't want to use oral medications regularly and who have resistance to contribute to the treatment like we presented above.

**Keywords:** electroconvulsive therapy, long acting antipsychotic, safety, paliperidone palmitate

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**[PP-025] Electroconvulsive treatment****The 7-year evaluation of acute and maintenance ECT in the psychiatric clinic of a university hospital: a retrospective study conducted between 2007 and 2013**

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**Objective:** ECT can be given as the form of acute, continuation or maintenance ECT according to the process of administration There is limited number of studies in the literature on maintenance ECT, with most of them are being in the form of case reports and review of the case reports. We report our 7 years' observation with acute and maintenance ECT in a university hospital in Turkey.

**Methods:** The medical records of the hospitalized patients treated with acute or maintenance ECT between the years 2007 and 2013 was

retrospectively analyzed. The sociodemographic characteristics, diagnosis, data of ECT and the co-administered psychotropic drugs were recorded. The frequency of ECT was calculated by identifying the total number of the hospitalized patients during the study period from the hospital records.

**Results:** A total number of 1432 female and 1141 male (female/male ratio 1.25:1) patients hospitalized in a period of 7 years, with a total number of 111 patients (100 acute and 11 maintenance) treated with ECT. The ratio of ECT was 4%, maintenance/acute ECT 11%. Of treated with ECT patients, male/female ratio was 1.31:1. For acute ECT, affective disorders (65.3%) and psychotic disorders (21.6%) were among the leading diagnoses. Maintenance ECT, the diagnosis was; 6 affective disorders, 4 psychotic disorders and 1 obsessive compulsive disorder. Of the patients, 33 (29.7%) were using one, 46 (41.4%) two and 32 (28.8%) three or more psychotropic drugs in addition to ECT. There was a significant difference between the patients receiving acute and maintenance ECT in terms of age, duration of illness, and number of previous hospitalizations and ECTs.

**Conclusions:** The percentage of patients treated with acute ECT is lower in our institution than that in many other institutions from our country. ECT was mostly given to patients with affective disorder. No deaths occurred during ECT sessions, and no severe adverse events were observed. Acute and maintenance ECT should be considered as an important treatment option particularly for patients with long disease duration, a high number of hospitalizations and a history of benefiting from previous ECTs.

**Keywords:** modified ECT, maintenance, indication, frequency

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### [PP-026] Others

## A case of self-mutilation: the man who eats himself

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Self-mutilation is a general term for a variety of forms of intentional self-harm without the wish to die. Despite many patients have been reported to have self-mutilation injuries, literature search do not yield any data on self-eating after self-mutilation. Here, a patient with self-eating following self-mutilation is reported.

A male patient in his 34 was brought in the emergency department from the prison due to a laceration on the right leg. Physical examination revealed stable vital signs and a well-demarcated rectangular 7x11 cm (7 mm thick) soft tissue defect on his right anterior femoral area although calm in appearance, he did not respond to physicians' questions. The prison authorities told that the prisoner had cut his thigh with a knife and had eaten the flesh in around one hour. They also added that the prisoner had done the same thing in his left arm a year ago.

Psychiatric evaluation was also done in the emergency department. Psychiatric presumptive diagnosis was psychosis based on indifferent attitude, limited collaboration, low-toned speech with short questions and answers, mystic delusions (thinking himself as a devil), auditory sensory delusions such as hearing commands and inappropriate affection. Diagnosed with psychotic disorder, the patient was transferred to a contained psychiatric ward.

Self-mutilating injuries are encountered predominantly in male patients in the emergency department. This pattern of behavior is seen prevalently in patients with personality disorders, acute and chronic psychotic disorders, major affective disorder, and gender disorders. Self-harm behavior is mostly encountered in patients with personality disorders, especially in borderline personality disorder. Self-harm behavior represents a rescue attempt triggered under circumstances in which expression of aggression is inhibited due to physical constraints. The present case is a typical example of this behavior seen frequently among prisoners. A variety of major self-mutilation attempts have been cited in the literature such as finger mutilation, tongue and penis amputation, enucleation.

The present case has unique difficulties hampering a thorough evaluation leading to psychiatric formulation: presenting in an emergency setting, imprisonment and thus retrieval of history and other relevant data from prison officers and poor collaboration of the patient. The psychiatric presumptive diagnosis was psychosis.

Imprisonment status of the patient, secondary gain such as getting away from prison for admission to hospital due to "illness", probable decrements in the penalty to be received from the court warrants further investigation in terms of simulation, personality disorders and

substance abuse.

**Keywords:** self-mutilation, psychiatric disorder, emergency department

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**[PP-027] Attention deficit-hyperactivity disorder**

## Effect of adult type attention deficit hyperactivity disorder on smoking cessation

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**Objective:** The aim of this prospective study was to evaluate the effects of attention deficit hyperactivity disorder (ADHD) on smoking cessation and other smoking related factors.

**Methods:** This study was carried out at the Smoking Addiction Centre of Pamukkale University Faculty of Medicine. The individuals, who had been admitted for smoking cessation met the diagnostic criteria for nicotine dependence according to the DSM-IV. In this study, all participants were evaluated by using the sociodemographic data form prepared by the researchers, the Wender Utah Rating Scale (WURS) for Attention Deficit Hyperactivity Disorder (ADHD) in adults and Fagerstrom Tolerance Test for Nicotine Dependency (FTND). The tests were administered at the beginning of the study and routine follow-up and the treatment has begun. Six months after the commencement of the treatment program, all participants were questioned about smoking cessation status by face-to-face interview or phone call. The participants with a score of 36 and over on WURS were classified as having ADHD and the participants with and without ADHD were compared in terms of smoking cessation success and other parameters.

**Results:** A total number of 356 smokers were enrolled in the study. 99 patients had 36 or higher scores from Wender Utah scale. For the 356 participants, mean FTND score was  $5.19 \pm 2.20$  and mean WURS score was  $26.11 \pm 18.95$ . Of the 99 patients 11 (%11.1) had quit smoking while 68 (%26.5) of non ADHD (257) quit smoking during six month period. The statistical differences found between the two study groups are shown in Table 1.

**Conclusions:** In addition to the age of onset of smoking, daily amount of the cigarettes smoked and the continuation of regular cigarette smoking, ADHD can also affect the smoking cessation rates. Our results suggest that individuals with and without ADHD may have differences in the rate of smoking cessation and in the ability to maintain smoking abstinence. The mechanisms underlying negative effects of ADHD on smoking cessation remains to be elucidated. In fact, it may be possible that individuals with ADHD use nicotine as a self-medication because of its cognitive and behavioral effects.

**Keywords:** attention deficit hyperactivity disorder, smoking, nicotine addiction

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**[PP-028] Schizophrenia and other psychotic disorders**

## Very early onset schizophrenia: a case report

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Schizophrenia is an extremely rare condition in prepubertal children; psychotic symptoms in this age group need careful evaluation and may be due to many other disorders. Childhood onset schizophrenia, where children's symptoms meet criteria for schizophrenia and where symptoms start before the age of 13, is a very rare disorder with a prevalence of less than 1/10,000. Childhood schizophrenia is essentially the same as schizophrenia in adults, but it occurs early in life and has a profound impact on a child's behavior. Childhood schizophrenia includes hallucinations; delusions; irrational behavior and thinking; and problems carrying out routine daily tasks, such as bathing. With childhood schizophrenia, the early age of onset presents special challenges for diagnosis, treatment, educational needs, and emotional and social development. It is rarely reported less than 6 years of age in the literature. Here we present a 4.5 -year-old

boy, who developed psychosis and discuss the clinical and familial features, diagnostic and treatment processes and 8 years follow-up of this particular case. He showed mild regression in speech, decrease in social relation, visual hallucinations (vision of spiders), smell hallucinations, aggression, lack of interest in toys, clapping his hands, swinging, seeing a penguin looking at him, seeing a man looking at him from wardrobe, talking to shadows, laughing idly. He was consulted to neurology department, all routine investigations and EEG results were normal.

**Keywords:** child-onset schizophrenia, very early onset schizophrenia

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**[PP-029] Psychosomatic medicine - Consultation liaison psychiatry**

## Early onset conversion disorder: a case report

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Conversion disorder is a condition in which a person has blindness, paralysis, or other nervous system (neurologic) symptoms that cannot be explained but medical evaluation. Although it is often thought that the frequency of conversion might be higher outside the West, perhaps in relation to cultural and medical attitudes, evidence of this is limited. A community survey of urban Turkey found a prevalence of 5.6%. Many authors have found occurrence of conversion to be more frequent in rural, lower socio-economic groups, where technological investigation of patients is limited and individuals may be less knowledgeable about medical and psychological concepts. Conversion disorder may occur at any age but is rare in children younger than 10 years on in the elderly. This case report presents a 4-years 3-months-old patient with the diagnosis of conversion disorder, whose complaints started at 30-months of age. Her symptoms included contraction of hands and feet, fainting, unable to open her eyes. Her symptoms occurred generally in stressful situations or when she was with her father. She was consulted to neurology department, all routine investigations and EEG results were normal.

**Keywords:** child, conversion disorder, somatoform disorders

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**[PP-030] Addiction and related disorders**

## Delirium by synthetic cannabinoids acute intoxication: a case report

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Synthetic cannabinoids not being "herbal" or "natural" at all contain one or more representatives of several hundred different types of synthetic cannabinoids produced in laboratories. In the last few years, the use of synthetic drugs of abuse has grown, with little information available for healthcare providers about these drugs and how they act on patients using them. The use of synthetic cannabinoids is driven by several factors. After the introduction of new compounds, their use initially was not restricted by law. Moreover, their consumption cannot be verified by standard drug tests, which is particularly interesting for people going under regular drug testing. Easy access via the internet and affordability also contribute to the popularity of these drugs. Use of synthetic cannabinoids appeared in various types in our clinical experience. Our case, that we hope to contribute to this area, is 20 years old, single male, unemployed and has been using synthetic cannabinoids for nearly 1.5 years. He was hospitalized in our clinic, because of treating his family, aggressiveness, sleeplessness and talking to own self. One day after hospitalization, he became confused, agitated and he had visual hallucinations. In his laboratory examinations there was no pathology except high ACT levels, which is considered clinically significant by internal medicine consultation. There was also no pathology in the case of cranial MRI and neurological consultation. This situation was termed as delirium by synthetic cannabinoids acute intoxication and treated with antipsychotic, benzodiazepines and fluid replacement. On the fifth day of the treatment,

place, person and time orientation was full and all psychotic symptoms disappeared. Using of synthetic cannabinoids was also confirmed by our case.

**Keywords:** synthetic cannabinoids, intoxication, clinical manifestation

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### [PP-031] *Psychopharmacology*

## Orgasm during sleep: bupropione HCL-SR induced seizure

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Bupropion HCl, is a second-generation-antidepressant, a dopamine-noradrenaline reuptake-inhibitor, has two forms; extended-release (ER) and slow-release (SR). Its' positive features are that having little side-effects like sexual-dysfunction, weight-gain and attention-deficit. But bupropion may lower the epileptic seizure threshold. The seizure risk was reported to be associated with the peak level, peak numbers and doses due to SR-form. In the literature epileptic-seizure due to the form of bupropion-SR is rare; there are some case reports with generalized tonic clonic seizures. In this article an epileptic case report that occurred with spontaneous orgasm with bupropion-SR form is presented.

RA is a 67-year-old-married female, who applied to psychiatry outpatient clinic with symptoms of generalized anxiety disorder; she has been treated with sertraline 100 mg/day and alprazolam as needed. Sertraline and alprazolam doses were lowered by half. Venlafaxine and quetiapine were started and in a month time venlafaxine dose was increased to 150 mg/day while quetiapine to 100 mg/day. She was in remission and after one year, quetiapine was stopped because of the patient's complaints like sedation, weight-gain. Due to permanence of her symptoms, venlafaxine's dosage was decreased to 75 mg/day and bupropion HCL-SR was added on the treatment. A month later, venlafaxine was stopped and bupropion-SR, increased to 300 mg/day. It reduced the patient's complaints. In the third month of the treatment, the patient reported orgasm at any episodes of the sleep without dreams about sexuality or stimulation, every night. EEG was taken with the prediagnosis of ictal orgasm. There were "slow-wave activity in both frontal lobes and sharp-slow-wave in the left temporal lobe. The result was possibly a frontal seizure and bupropion HCL-SR was stopped. The brain-MRI findings were normal. In a month the frequency of her spontaneous orgasm decreased to two in a week and disappeared in three months. There wasn't epileptiform activity in control EEG findings.

The ictal-orgasms in female patients were reported in literature were usually epileptic and there were sharp-wave-spike complexes in parietal and temporal regions. Epileptic-seizure is one of the serious side-effects of drugs. Bupropion usage is contraindicated in the patients using MAOIs and in when there is anorexia, bulimia, head injury and a family history of epilepsy. Epilepsy cases due to the use of bupropion-SR are often in generalized- tonic-clonic form. To our knowledge, the case is the first about ictal orgasm induced by bupropion-SR.

The case took our attention with these features: no history of epilepsy or a cause of predisposition to epilepsy, the occurrence of seizure after using bupropion-SR 300 mg/ per day, epileptiform activity in EEG and with the recovery after stopping the drug.

In cases which use Bupropion, seizures must be in consideration or when investigating the etiology of seizures, asking about the use of Bupropion is important.

**Keywords:** bupropion, seizure, ictal orgasm

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**[PP-032] Dementia****A case report: normal pressure hydrocephalus diagnosis after being followed as dementia**Ezgi Hanci<sup>1</sup>, Melike Ceyhan Balci Sengul<sup>1</sup>, Ibrahim Sendur<sup>1</sup>, Serkan Civlan<sup>2</sup><sup>1</sup>Pamukkale University, Faculty of Medicine, Department of Psychiatry, Denizli-Turkey<sup>2</sup>Pamukkale University, Faculty of Medicine, Department of Neurosurgery, Denizli- Turkey

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Normal pressure hydrocephalus (NPH) was first described by Hakim and Adams in 1965. At the time NPH was first described, it also took attention with being the first treatable type of dementia. It is now thought to be the reason nearly for the 6% of all dementia cases. NPH has the special triad of the symptoms consisting of gait disturbance, cognitive impairment and urinary dysfunction with accompanying ventricular dilation. NPH is often seen in elderly people and diagnosis in the early stage is difficult because of its insidious progress. Our aim is to present a case, which was first diagnosed with dementia and after 3 years of being followed, with occurrence of new symptoms NPH was defined.

A62-year-old, married, farmer, male patient living with his family, who had a family history of Alzheimer's Disease is our case. He had memory impairments 3 years ago. His brain MRI revealed only cerebral atrophy and he has got the diagnosis "dementia" from neurology outpatient clinic. He was treated with donepezil and memantine. A year ago, when his new complaints like disorganized behaviors, visual hallucinations were started, he applied to psychiatry outpatient clinic of Denizli State Hospital with this new clinic presentation; valproic acid 500 mg/per day, rivastigmine 10 mg/per day and piracetam 1600 mg/per day were added on his treatment. For the last 6 months before coming to our hospital's outpatient clinic, he had been suffering from new problems such as gait disturbance, urinary incontinence and also self-mutilative behaviors. He was hospitalized in our inpatient psychiatry clinic. His brain MRI provided evidence for cerebral atrophy, ventricular enlargement and hydrocephalus. The patient was consulted from neurosurgery clinics. Neurosurgeons, with the prediagnosis of NPH, his CSF has been drained out with lumbar drainage kit for four days, and there was a significant improvement in his gait and in his disorganized behaviors. Neurosurgeons offered the patient to have the ventro peritoneal shunt operation but his family refused this advice. He was discharged with the diagnosis of "Adams Hakim Syndrome". Unfortunately his cognitive impairment did not change like the most cases in literature.

In the literature, there are case reports, which at the end had the diagnosis of normal pressure hydrocephalus, of patients who applied psychiatry outpatient clinics with psychiatric symptoms accompanying with a diagnosis of dementia for a long time.

In dementia presented with atypical symptoms in relatively early ages and in which the cognitive status impairs dramatically, even if there may not yet be all of the three symptoms of NPH in the patient's clinic presentation, NPH can be one of the possible etiologic factors.

**Keywords:** normal pressure hydrocephalus, dementia, atypical

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**[PP-033] Psychopharmacology****Mirtazapine induced priapism: a case report**Nese Ozturk<sup>1</sup>, Melike Ceyhan Balci Sengul<sup>1</sup>, Huseyin Cagdas Atkaya<sup>1</sup>, Aykut Baser<sup>2</sup><sup>1</sup>Pamukkale University, Faculty of Medicine, Department of Psychiatry, Denizli-Turkey<sup>2</sup>Pamukkale University, Faculty of Medicine, Department of Urology, Denizli-Turkey

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Priapism is an abnormal prolonged, painful erection without sexual stimulation. Antipsychotics, valproate, trazodone, methylphenidate, citalopram-induced priapism have been reported in the literature. Mirtazapine-induced-priapism has not been reported yet. We aimed to report a case of mirtazapine-induced-priapism

He is a 47-year-old-married male, who applied to a psychiatrist with abuse of alcohol and the contamination obsessions, washing hands excessively. His medications at the time of admission were mirtazapine 30 mg/day and diazepam 10 mg/day. On the first day of treatment he had painful erection. Department of Urology confirmed priapism and planned an emergency treatment. He had a 37-year history of alcohol-cigarette use. He had his last alcohol use three weeks ago and cigarette fifteen months ago. He had no use of illicit-drug or another medication, disease like sickle-cell-anemia, perineal-trauma, that are known to cause priapism. His medications were stopped

and penile corporal aspiration was made. He was medicated with diazepam 5mg/day as recommended by an urologist, post-operatively. And no priapism has been seen later.

Mirtazapine is a commonly used presynaptic-alpha-2-antagonist that has dual-action by increasing noradrenergic-serotonergic neurotransmission. It has only a weak affinity for 5-HT<sub>1</sub>-receptors and has very weak muscarinic-anticholinergic and histamine antagonist properties. In contrast to SSRIs, mirtazapine has no sexual-side-effects. However, we thought that in this case priapism was associated with mirtazapine. No other risk factors was detected for priapism. Priapism occurred after initiation of mirtazapine and diazepam. Diazepam was continued for two weeks after operation and priapism was not seen again. Patient had a history of regular alcohol use but in the last three weeks, he did not use any alcoholic beverage. According to our investigation there is only one case of priapism induced by the combination of mirtazapine and trazodone. Erection control is provided by neurotransmitters affecting smooth muscle tone, hormones, vasoactive substances, signal transmission systems, corporeal tissue, cellular and molecular factors (i.e. nitric-oxide (NO) activity). Alpha-2 antagonists increase NO level and thus contribute to the relaxation of the smooth-muscles, arterioles of corpus cavernosum. Alpha-1-adrenergic-blockade decreases local adrenergic activity and venous-drainage is interrupted. The most important mechanism that causes unevenness on penile-vascular structures is Alpha-1 adrenergic-receptor-blockade and it is also the reason of priapism depending on psychotropics. Mirtazapine may be causing priapism by its alpha-2-adrenergic-receptor antagonist and muscarinic anticholinergic effects. In conclusion, priapism, a relatively uncommon disorder, is a medical emergency. Although mirtazapine is known to have low sexual side effects, priapism due to mirtazapine may rarely be seen.

**Keywords:** mirtazapine, priapism, side effect

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#### [PP-034] Anxiety disorders

### Unexpected impact of agoraphobia on family life: county type agoraphobia

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Agoraphobia (AG) is defined as having feelings of anxiety and fear related to be at places or in conditions, which escape from may not be available. Comorbid situations such as anxiety disorders or major depressive disorders (MDD) with agoraphobia might be more difficult in terms of treatment period and quality of life. A case of AG with MDD will be presented.

A 50-year-old male living in a small county in Erzurum/Turkey with AG was examined at home. Twenty years ago, he had suddenly experienced flushing, dizziness, a feeling of weakness and feeling like going to die while he was driving to the city center and therefore, he went back home. After that day, he had never gone anywhere outside of his county for 20 years. A couple of years ago, symptoms such as reluctance, inability to enjoy life, feeling worthless and loss of concentration were added to his symptoms. Hence, he had used citalopram 20 mg/day for 2-3 months 2 years ago, on the advice of a psychiatrist. His symptoms decreased but after he stopped using that medication, his symptoms increased again. Also, he didn't allow his son to work in downtown and his daughter to continue high school. He didn't want his family to be anywhere except the county. He explained this situation that he thought that bad things could happen to his family members. Furthermore, restlessness, palpitation, difficulty in breathing and anxiety were occurred when any one of the family members were not at home. For the last 3-4 months, some complaints such as reluctance, inability to get pleasure from anything, insomnia and loss of appetite arose. On psychiatric examination; he was conscious, oriented and his cooperation was fluent and understandable. He was anxious and thought content was related to anxiety. His thought speed was normal, anhedonia was detected and there were no hallucinations and delusions. The diagnosis was compatible with AG comorbid MDD according to DSM-V. Mirtazapine 30 mg/day, Alprazolam 2 mg/day (only for first week) were initiated and treatment was reinforced with cognitive behavioral therapeutic approach. He was evaluated biweekly with Penn State Worry Questionnaire, Beck Depression Inventory and Beck Anxiety Inventory. The significant response has occurred at the end of the 4<sup>th</sup> week of the treatment in these scales. At the 5<sup>th</sup> week of the treatment his son returned to work and daughter started back to her school. Patients with AG such as our case may complicate their life and their family members' lives. Treatment of these patients improve quality of life of themselves as well their family members.

**Keywords:** agoraphobia, depression, mirtazapine, quality of life

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**[PP-035] Mood disorders****Can paroxetine increase creatine kinase?: a case report**Dicle Yenilmez<sup>1</sup>, Murat Ilhan Atagun<sup>2</sup>, Serdar Suleyman Can<sup>1</sup>, Ali Caykoylu<sup>2</sup><sup>1</sup>Ankara Atatürk Training and Research Hospital, Department of Psychiatry, Ankara-Turkey<sup>2</sup>Yildirim Beyazit University, Faculty of Medicine, Department of Psychiatry, Ankara-Turkey

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This case report aims to present a case that had elevated Creatine Kinase (CK) levels during paroxetine treatment and returned to normal range after discontinuing paroxetine. This case may provide an insight with regards to paroxetine's side effects, drug interactions, and mechanisms of action at subcellular level.

The patient was 57 years old, married, unemployed female; graduated from primary school, was consulted at rheumatology outpatient unit due to CK increase 2 months after the initiation of paroxetine treatment. The patient herself began to take paroxetine 20 mg/day cope with feelings of unhappiness, lack of feelings of joy, and intense pain in August 2013. The patient had major depressive episodes in 2004 and 2008 and has used paroxetine for 6 months previously. She had no smoking, alcohol intake and substance use history. There is no connective tissue disease or psychiatric disease in her family history. An undifferentiated connective tissue disease was diagnosed in 2007 with no abnormalities in CK levels. Blood CK levels in July 2013 were observed as 714 U/l and colchicine was discontinued as decided by the department of rheumatology. However, serum CK levels remained 506 U/l in August 2013. Since then, the patient was referred to psychiatry outpatient unit and paroxetine was discontinued. After discontinuing paroxetine, CK values reduced to 311 U/l in September 2013 and then 146 U/l in the next month.

In conclusion, it was considered that CK increases observed in this case were related to paroxetine. However, it is not possible to propose a causal relationship because of the present connective tissue disease and its treatment. Yet, it can be recommended that choice of paroxetine should be made carefully when an antidepressant has to be used together with medications for rheumatologic diseases.

**Keywords:** paroxetine, antidepressant, creatine kinase

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**[PP-036] Others****Prevalence of metabolic syndrome in patients who are recorded in Corum Community Mental Health Center with the diagnosis of psychotic disorders**

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**Objectives:** The prevalence of metabolic syndrome (MS) is reported to be between 28.9% and 29.6%. It is considered to be an important risk factor for cardiovascular disorders and diabetes. The reports indicate that it has become a significant health problem in Turkey with a prevalence rate of 34.9%. A higher prevalence of metabolic syndrome in patients with schizophrenia and other psychotic disorders is known as compared to normal population. In the present study, our aim was to investigate the prevalence of MS and obesity in patients, who regularly visited Corum Community Mental Health Center (CMHC) and their distribution according to sociodemographic features.

**Method:** We reviewed the results of patients' blood tests, which had been ordered in CMHC visits during last three months for routine controls of the metabolic parameters. We used 20 patients' test results, which we could have access to.

**Results:** The 20 patients whose test results used in our study included 8 (40%) women and 12 (60%) men. Their mean age was 40,25±10,64. Seven (35%) patients were found to have the diagnosis of metabolic syndrome. Number of patients who were obese, overweight, or normal by body mass were found 14 (70%), 5 (25%) and 1 (5%) respectively. Obese patients were found to have more MS than others and this difference was statistically significant ( $p=0,03$ ). There was a statistically significant difference for marital status according to being obese.

**Conclusion:** The prevalence of MS in the study population (35%) was similar to the prevalence rate of the syndrome in the Turkish population (39.4%). The patients included in the present study regularly attended their follow-ups in the CMHC and they were able to easily access health services when they needed.

We found the lack of difference between smokers and non-smokers in terms of the prevalence of MS ( $p=0.88$ ), which suggests that increased cardiovascular risk attributed to smoking might be independent from its effects on MS. Significantly higher rate of MS in obese patients compared to non-obese patients was considered to be a strong indication for the presence of MS in obesity.

**Keywords:** metabolic syndrome, metabolic syndrome and psychosis, obesity and psychosis

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### [PP-037] *Anxiety disorders*

## Complicated case of trichotillomania: management and follow-up

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Trichotillomania (hair-pulling disorder) is characterized by the persistent and excessive pulling of one's own hair, resulting in noticeable hair loss. It is classified as obsessive-compulsive and related disorders in DSM-5 and there has been a set of changes in diagnostic criteria for trichotillomania. The word 'noticeable' is deleted from criterion A and concluded that there were insufficient data to justify the inclusion of diagnostic criteria describing the rising tension before hair-pulling or pleasure, relief, and gratification after a hair-pulling. In one study, excluding the criteria building tension and relief while pulling and not meeting the full criteria necessary for a trichotillomania, hair-pulling behaviors have been reported 3.4 %in females and 1.5% in males. In another study, relatively small percentage (1.4%) of the sample reported having been hospitalized for hair pulling. In this case report, a 29-year-old female trichotillomania patient is presented. She was pulling hair from the scalp and various body parts such as pubic area and skin picking almost from the entire skin. She has started with pulling from her eyebrow twelve years ago and she is pulling hair from scalp for the last four years. She had depressed mood, loss of appetite, insomnia, and fatigue for the last month. In addition, she could not take care of her children and house, and she had hair-loss near baldness. She had attempted suicide a week before her admission and she was hospitalized for suicide risk. She was treated with risperidone and fluvoxamine as an inpatient. Her psychotherapy was planned as cognitive restructuring and habit reversal training. After her hospitalization she has been followed-up for six months.

**Keywords:** hair-pulling disorder, skin picking, trichotillomania

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### [PP-038] *Psychopharmacology*

## Restless leg syndrome induced by quetiapine: a case report

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Restless legs syndrome (RLS) is a sensory-motor disorder with unknown etiology that is characterized as a strong sensation of moving legs and other extremities during resting. This unpleasant sensation has a strong circadian rhythm, which gets worse at nights and calms down after sleep, especially in the mornings. There are two types: One being idiopathic and the other being secondary. Anti-emetics, anti-psychotics, anti-histaminics, some anti-epileptics, tricyclic anti-depressants, and serotonin or serotonin-noradrenaline reuptake inhibitors may all cause RLS or lead to exacerbation of present symptoms. In this paper we report of a bipolar patient, who had RLS induced by quetiapine. Our patient was a 53 years old female. She applied to our clinic in 2007 reporting symptoms of depressive mood, anhedonia, asthenia, pessimism, distress, anxiety that had been going on since 1998. She was describing short hypomanic episodes after these depressive periods. Bipolar manic disorder type 2 was diagnosed according to DSM-IV and the patient has been in partial remission for the last 2 years with 150 mg/day venlafaxine and 900 mg/day Lithium bicarbonate treatment. Her lithium levels and thyroid function tests were checked monthly. She developed compensated hypothyroidism that had been got under control with low dose levothyroxine sodium. Despite having most of her symptoms revealed, insomnia and anhedonia were persistent. At this point quetiapine 300 mg/day

was added on her treatment. 2 weeks after daily quetiapine administration, she started to complain about a weird feeling on her legs at nights and had a need to move them. Thus having her insomnia symptoms getting worse, she had stopped having her daily quetiapine after 5 days. All the organic reasons causing restless leg syndrome were ruled out by clinical and laboratory tests and patients symptoms were thought to be due to dosage of quetiapine. The dose had been reduced to 150 mg/day and was started again. She was called for supervision the week after. During her supervision she reported continuing her drug for only 2 days because of having her previous discomfort. The patient was started zopiclone 7.5 mg/day treatment. On her next control she had no symptoms of restless leg syndrome and her insomnia was partially relieved.

Although the etiopathogenesis of restless leg syndrome is yet to be identified, the effectiveness of dopaminergic drugs in treatment gives a hint about its cause to be about abnormal functioning in central nervous system. Advanced radiological imaging shows decreased dopamine D2 receptor binding in striatum of restless leg syndrome patients. In our case, we think restless leg syndrome symptoms are induced by quetiapine's weak blockage of dopaminergic pathway. Current literature reveals very few reports of RLS caused by quetiapine. With this aspect, we think our report will provide valuable information to literature.

**Keywords:** restless legs syndrome, quetiapine, antipsychotic

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### [PP-039] *Psychopharmacology*

## Akathisia related to very low dose risperidone: a case report

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Akathisia is a neurological disorder characterized as needing of continuous movement accompanied by endogenous feeling of anxiety. Even though Akathisia is generally accepted to be a side effect of typical antipsychotics, it may also be caused by new generation antipsychotic drugs. Risperidone is an atypical antipsychotic. It has a low extrapyramidal system (EPS) side effects with low doses. In this paper, we report a female patient with EPS side effects caused by a dose of risperidone as low as 1 mg/day. MG was a 78 years old female patient. The patient had anxiety symptoms for the last 33 years and in the last 20 years she has been using 5 or 10 mg/day diazepam. Upon reporting to a psychiatrist with benzodiazepine addiction 2 years ago, she was given risperidone 1 mg/day. 6 or 7 months after receiving the drug she had complaints of not being able to sit still, moving her legs repeatedly while sitting, moving her arms unintentionally, sweating, burping. She applied to neurology clinic with these symptoms besides her anxiety. During her interview, she was observed to be not able to sit still and was repeatedly moving her feet. Her steps were obviously short and were approximately half of normal. Because of low social-cultural level of the patient and her family, a proper story could not be obtained. Laboratory tests revealed no significance and the patient was concluded to suffer from as tardive akathisia caused by risperidone. The dose of risperidone was gradually decreased while quetiapine was increased. Also 0.375 mg/day alprazolam was added to the treatment. During her first month supervision, she had her anxiety resolved, was observed to be more interested to the interviewer, was free of involuntary feet movement.

At present, antipsychotics are frequently used agents. Atypical antipsychotics are more preferred than typicals due to their less extrapyramidal side effects. Besides psychosis they have also indications as treatment augmenting drugs in dementia, depression, anxiety disorder or Obsessive compulsive disorder. It must not be forgotten that atypical antipsychotic agents might lead to very discomforting side effects like akathisia, may be much rarer compared to typical antipsychotics, and also these side effects may appear with unexpectedly low doses in elderly patients. Thus we targeted to alert the clinicians for akathisia symptoms that may be neglected or confused with other psychiatric disorders.

**Keywords:** akathisia, risperidone, extrapyramidal system

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S106**

**[PP-040] Psychosomatic medicine - Consultation liaison psychiatry****Sexual dysfunction and quality of life in HIV-positive patients**Esra Ozdil<sup>1</sup>, Bahadır Bakim<sup>2</sup>, Atilla Tekin<sup>3</sup>, Alper Gunduz<sup>4</sup>, Dilek Yildiz<sup>4</sup>, Ahmet Sanli Konuklar<sup>4</sup>, Omer Akil Ozer<sup>1</sup>, Nuray Uzun<sup>4</sup><sup>1</sup>Sisli Hamidiye Etfal Training and Research Hospital, Department of Psychiatry, Istanbul-Turkey<sup>2</sup>Canakkale Onsekiz Mart University, Faculty of Medicine, Department of Psychiatry, Canakkale-Turkey<sup>3</sup>Cizre State Hospital, Sirnak-Turkey<sup>4</sup>Sisli Hamidiye Etfal Training and Research Hospital, Department of Infectious Diseases, Istanbul-Turkey

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**Objective:** The aim of this study is to investigate sexual dysfunction and the quality of life in HIV-positive patients.**Method:** 70 HIV-positive patients, who applied to Sisli Hamidiye Etfal Training and Research Hospital Infectious Diseases outpatient clinic between January 2013 and January 2014 were enrolled in the study. All patients were evaluated with the Mini International Neuropsychiatric Interview (MINI) and the Childhood Trauma Questionnaire (CTQ), Quality of Life Questionnaire (WHOQOL-BREF), Arizona Sexual Experience Scale (ASEX) and a sociodemographic form.**Results:** 47.1% (n=33) of the HIV-positive patients had at least one current psychiatric disorder and 52.9% (n=37) of them didn't have any comorbid psychiatric disorder. In HIV-positive patients with a comorbid psychiatric disorder, there have been statistically significant higher rates in physical, psychological and social domains of WHOQOL-BREF, compared to HIV-positive patients with no comorbid psychiatric disorder (p=0.004, p=0.001, p=0.002 respectively). In HIV-positive patients with a comorbid psychiatric disorder, sexual drive and satisfaction from orgasm scores were higher than HIV-positive patients with no comorbid psychiatric disorder, and these differences were all statistically significant (p=0.005, p=0.004, p=0.006 respectively).**Conclusion:** Comorbid psychiatric disorders in HIV-positive patients have a negative effect on quality of life and sexual function.**Keywords:** comorbidity, quality of life, sexual dysfunction**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S107****[PP-041] Psychosomatic medicine - Consultation liaison psychiatry****Comorbid psychiatric disorders and childhood traumas in HIV-positive patients**Bahadır Bakim<sup>1</sup>, Atilla Tekin<sup>2</sup>, Esra Ozdil<sup>3</sup>, Alper Gunduz<sup>4</sup>, Dilek Yildiz<sup>4</sup>, Ahmet Sanli Konuklar<sup>4</sup>, Merve Tekin<sup>2</sup>, Omer Akil Ozer<sup>3</sup>, Nuray Uzun<sup>4</sup><sup>1</sup>Canakkale Onsekiz Mart University, Faculty of Medicine, Department of Psychiatry, Canakkale-Turkey<sup>2</sup>Cizre State Hospital, Sirnak-Turkey<sup>3</sup>Sisli Hamidiye Etfal Training and Research Hospital, Department of Psychiatry, Istanbul-Turkey<sup>4</sup>Sisli Hamidiye Etfal Training and Research Hospital, Department of Infectious Diseases, Istanbul-Turkey

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**Objective:** The aim of this study is to investigate the prevalence of comorbid psychiatric disorders and history of childhood traumas in HIV-positive patients.**Method:** 70 HIV-positive patients, who applied to Sisli Hamidiye Etfal Training and Research Hospital Infectious Diseases outpatient clinic between January 2013 and January 2014 were enrolled in the study. All patients were evaluated with the Mini International Neuropsychiatric Interview (MINI), Childhood Trauma Questionnaire (CTQ) and a sociodemographic form.**Results:** 58.6% of the HIV-positive patients were heterosexual males (n=41), 34.2% were homosexual males (n=24) and 7.2% were heterosexual females (n=5). 47.1% of the patients had at least one current psychiatric disorder. The most common psychiatric disorder was major depression (31.4%). Comorbid psychiatric disorders other than depression in order of frequency were psychoactive substance abuse or dependence (15.7%), alcohol abuse or dependence (12.8%), obsessive-compulsive disorder (10%), panic disorder (8.6%), bipolar disorder (7.5%), agoraphobia (7.1%), antisocial personality disorder (7.1%), social anxiety disorder (4.3%), generalized anxiety disorder (4.3%), bulimia nervosa (1.4%). 38.6% of the patients reported at least one type of childhood trauma and 25.7% of the patients reported two or more types of childhood traumas. The most frequent childhood trauma was emotional neglect (25.7%). In HIV-positive patients with diagnosed depression, there have been statistically significant higher rates in emotional abuse, physical neglect, emotional neglect, compared with HIV-positive patients with no diagnosed depression (respectively p=0.009, p=0.012, p=0.001).

**Conclusion:** HIV-positive patients have variable comorbid psychiatric disorders. History of childhood trauma is common among HIV-positive patients.

**Keywords:** childhood trauma, comorbidity, HIV, psychiatric disorder

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**[PP-042] Neuroscience**

## The evaluation of the effect of depression in Behçet's Disease on oxidative stress

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**Objective:** Behçet's disease (BD) was first identified by the Turkish dermatologist Hulusi Behçet as a triad of hypopyon, uveitis, and oral and genital ulcers. Evidence that free oxygen radicals play an important role in the pathophysiology of BD has been increasing in recent years. Psychosomatic symptoms are said to be present in 86% of BD patients at the time after diagnosis with depression developing afterwards. Recent studies suggest that the disorder in free radical metabolism or deficiency in the antioxidant defense system have important roles in the pathology and clinical picture of depression. We aimed to compare oxidative and antioxidative parameters in two groups consisting of BD patients and healthy controls and then in three groups consisting of BD patients with depression, BD patients without depression and healthy controls. Evaluation of the effects of depression on the oxidant/antioxidant balance in BD is important in terms of providing guidance for future studies.

**Methods:** A total of 34 BD patients with depression, 46 BD patients without depression and 53 control group subjects were included in our study. We measured the total antioxidant capacity (TAC), paraoxonase (PON), arylesterase (ARE), glutathione (GSH) antioxidants and malondialdehyde (MDA) oxidant levels in the blood samples obtained from the three groups.

**Results:** When three groups consisting of the BD group with depression, BD group without depression and the control group were compared, a significant difference was found only for the TAC and GSH antioxidants and MDA oxidant. The two-way comparisons we performed to reveal the group that created the difference showed no significant difference in TAC, ARE, GSH antioxidants and MDA oxidant between the BD group with depression and BD group without depression, indicating that the difference between the three groups was due to the control group.

**Conclusions:** The findings of this study show that the oxidant/antioxidant balance is disrupted in BD and oxidative stress is increased even in the inactive period. In addition, the deterioration in oxidative/antioxidative mechanisms in BD is not caused by the depression that often accompanies this disease. Our findings contribute to the information available on the pathogenesis and prognosis of the disorder while indicating the need for further studies. It will thus be possible to define the negative results of chronic disorders such as BD and provide a broader approach to the disorder during the therapeutic process.

**Keywords:** antioxidant, Behçet's disease, depression, oxidative stress

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**[PP-043] Mood disorders****Quetiapine use-related ischemic brainstem stroke: a literature review with case report**Selma Bozkurt Zincir<sup>1</sup>, Fatma Betul Ozdilek<sup>1</sup>, Serkan Zincir<sup>2</sup><sup>1</sup>Erenkoy Mental Health and Neurology Training and Research Hospital, Department of Psychiatry, Istanbul-Turkey<sup>2</sup>Golcuk Military Hospital, Department of Psychiatry, Kocaeli-Turkey

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Previous research suggests a link between atypical antipsychotic use and stroke. In the present paper, we report a case of ischemic pontine stroke that is closely related with the use of a second generation antipsychotic, quetiapine. A 42 year-old male patient -with a diagnosis of bipolar depression- who had been receiving quetiapine 300 mg/day over a period of 2 months, developed ischemic stroke involving pontine part of brainstem. Different pathophysiological pathways may be involved, ranging from the facilitation of thrombosis, reduced peripheral arterial compliance, orthostatic hypotension and a common diathesis for stroke of affective illness. This case report provides valuable support of previously published studies demonstrating that even brief exposure to antipsychotics can trigger stroke. Weighing the potential risks and benefits of antipsychotic treatment is particularly important for providers treating patients with multiple comorbid risk factors for stroke.

**Keywords:** antipsychotic, brainstem, ischemic stroke, pons, quetiapine**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S109****[PP-044] Psychosomatic medicine - Consultation liaison psychiatry****Evaluation of feeling of stigmatization in patients with alopecia areata and comparison with patients with mental disorder**Seval Dogruk Kacar<sup>1</sup>, Erman Bagcioglu<sup>2</sup>, Kerem Senol Coskun<sup>2</sup>, Pinar Ozoguz<sup>2</sup>, Ahmet Hakki Asik<sup>2</sup>, Serap Polat<sup>1</sup>, Hasan Mayda<sup>2</sup><sup>1</sup>Afyon Kocatepe University, Faculty of Medicine, Department of Dermatology, Afyon-Turkey<sup>2</sup>Afyon Kocatepe University, Faculty of Medicine, Department of Psychiatry, Afyon-Turkey

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**Objectives:** We aimed to measure the perceived stigma especially in patients with alopecia areata (AA) and to compare the results with patients with mental disorder (MD).**Methods:** This study included 40 patients with AA, who were consecutively recruited from Dermatology outpatient clinics and 42 patients with mental disorder, who were consecutively recruited from psychiatric outpatient's clinic. The presence of a mental disorder was assessed by the Diagnostic and Statistical Manual of Mental Disorder (DSM-IV). All Participants were asked to complete the 28 items modified stigmatization questionnaire developed by Ginsburg and Bink.**Results:** Total and all subscales scores of stigmatization questionnaire were higher in the group of patients with the AA than that in the patients with MD.**Conclusion:** Alopecia areata is a condition that leads to more self-stigmatization than MD.**Keywords:** alopecia areata, mental disorder, perceived stigma**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S109**

**[PP-045] Schizophrenia and other psychotic disorders****A case of visual, tactile and olfactory hallucinations occurred as a long-term complications of cerebral sinus venous thrombosis**Nukhet Yigitbasi<sup>1</sup>, Hamza Sahin<sup>2</sup>, Fatma Ozlem Orhan<sup>1</sup>, Mustafa Gokce<sup>2</sup><sup>1</sup>Kahramanmaraş Sutcu Imam University, Faculty of Medicine, Department of Psychiatry, Kahramanmaraş-Turkey<sup>2</sup>Kahramanmaraş Sutcu Imam University, Faculty of Medicine, Department of Neurology, Kahramanmaraş-Turkey

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Cerebral sinus venous thrombosis (CSVT) is a rare disease. CSVT is almost 0.5%-3% of all the types of stroke, and typically occurs in young-to-middle-aged females. In this case report, we present a male patient who has visual, tactile and olfactory hallucinations occurred as a long-term complications of CVST.

A 19 years old, male patient was admitted to neurology outpatient clinics with the complaints of headache and blurred vision. In his neurological examination, bilateral papilledema was detected. CT venography showed thrombus in cerebral venous sinus, Anticoagulant therapy was started. 9 months after the onset of his symptoms; he had visual, tactile and olfactory hallucinations. He had seen spider or a big balloon figure in front of his face and had feelings like somebody punching him. He was always crying, his appetite was poor, and he was sleeping too much. He was feeling as if he smelled some kinds of unpleasant odors especially sour ones. In the psychiatric examination patient seemed age-appropriate. Self-care was normal. He had bilateral visual loss. His mood was depressed and he was reluctant to respond to questions. The flow of his speech was slow. The content of his thoughts was focused on pessimism and religiousness. The patient's visual, tactile, and olfactory hallucinations were present. Physical examination was normal. On neurological examination, there were no abnormal findings except bilateral papilledema. He had no history of any psychiatric and organic diseases. He had no any trauma or history of substance use. In his family history his father had as the diagnosis of Obsessive compulsive disorder. The patient's clinical features were diagnosed as psychotic disorder caused by an organic etiology. For psychotic symptoms olanzapine 5 mg / day and for depressive symptoms sertraline 50 mg / day were started. And antipsychotic level was gradually increased. The patient's hallucinations and depressive symptoms were decreased in later stages with sertraline 50 mg / day and olanzapine 20 mg / day treatment. Patients were still in follow-up by psychiatry and neurology departments, and the latest medical treatment was consisting of warfarin, asetozalomid, olanzapine, sertraline and topiramate.

Long-term complications of CVST are: recurrent sinus thrombosis, other thrombotic events (limb or pelvic venous thrombosis, pulmonary embolism, stroke, TIA, acute limb ischemia), seizures, severe headache and mild depression. However, there hasn't been any case reported previously as our case presented with visual-tactile-olfactory hallucinations during CVST course. Therefore, it should be considered that hallucinations can occur as a long-term complication of CSVT.

**Keywords:** cerebral sinus venous thrombosis, hallucinations, headache, papilledema

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**[PP-046] Eating disorders****Is pica classified in OCD spectrum?: a case report**

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Pica has been described as persistent ingestion non-nutrient substances for at least one month-period and it has been classified as adult eating disorder instead of child feeding and eating disorder in DSM-V. There are opinions that pica could be classified in Obsessive compulsive disorder (OCD) spectrum or impulse control disorder spectrum. In this case a 19 year-old patient with eating pencil nib for four years was presented. She had started pencil nib eating four years ago and increased step by step because of feeling mental relaxation after eating behavior. If she had eaten pencil nib, she would have relaxed; otherwise she would have craving in her mind, trouble thoughts about something is missed and concentration difficulty. There was no psychiatric family history and EEG and cranial MRG findings were interpreted as normal. In routine tests, iron and vitamin B12 deficiency were determined. The clinical presentation was interpreted as OCD and pica. Iron and vitamin-B12 replacement therapy was started. As the symptoms were persistent after completion of iron and

vitamin-B12 replacement treatment; sertraline 50 mg per day and behavioral psychotherapy were administered. On 6-months treatment and follow up visits, it was observed that OCD symptoms and pica, characterized by eating pencil nib, completely improved with sertraline 50 mg per day treatment. In our case, previously unreported pencil nib eating and OCD comorbidity completely responded to sertraline treatment. Although pica is believed to be associated with iron deficiency, in this case pica was not improved despite iron and vitamin B12 replacement. Response of pica and other eating disorders as well as OCD to SSRIs implies that the serotonin system dysfunction was the underlying mechanism in these disorders. As a result this case is supportive data that pica can be a disorder in OCD spectrum.

**Keywords:** obsessive compulsive disorder, pencil nib, pica

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### [PP-047] *Psychopharmacology*

## Levetiracetam-associated weight loss: a case report

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Levetiracetam is an antiepileptic drug with a broad clinical spectrum, effective in focal epilepsy as well as in idiopathic generalized epilepsy. Preclinical animal models and several case reports have found that levetiracetam reduced dystonia. Common adverse effects are asthenia, somnolence, headache and dizziness. We report a case of weight loss associated with the use of levetiracetam.

BK is a 21-year-old man, who was presented to a movement disorders clinic of a university hospital for the treatment of primary idiopathic cervical dystonia. Findings of detailed investigations were within normal limits. A medical history and review of his medical records revealed that there was no response to anti-spasticity medications, dopaminergic medications, or benzodiazepines. The patient was treated with levetiracetam in monotherapy, starting with 500 mg daily. After starting levetiracetam, he has lost 8 kg in two months. There was no interference with other medications that are known to have an effect on body weight. Several biological tests were normal. Psychiatric evaluation for weight loss was normal. We identified no other cause of weight loss except using levetiracetam. The patient continued treatment because the body weight trend tended to follow a plateau in the course of long term treatment and his complaints has been reduced.

Although levetiracetam is considered to be neutral on body weight, we should keep in mind that levetiracetam could cause weight loss. The mechanisms of weight loss are not exactly known. In our opinion, further data with larger series might provide more information about the weight loss associated with levetiracetam.

**Keywords:** levetiracetam, weight loss

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### [PP-048] *Addiction and related disorders*

## Interrater reliability and validity of Turkish version of the clinical opiate withdrawal scale (COWS)

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**Objectives:** The Clinical Opiate Withdrawal Scale (COWS) is an observer scored assessment of eleven signs of clinical withdrawal. The aim of the study was to examine the interrater reliability and validity of the Turkish version of the COWS.

**Methods:** In order to adapt the COWS for the Turkish population, the authors' permission was obtained. The scale was translated independently into Turkish by three physicians who are fluent in English and was then back translated by an instructor who is also fluent in English. English and Turkish versions of the scale were given to a bilingual individual to verify the consistency between the

original and translated versions. Thirty-five consecutive opioid-dependent inpatients were enrolled. The participants were carefully monitored until they demonstrated signs of opioid withdrawal. All subjects were assessed with COWS by two observers independently and simultaneously. The COWS is a clinician-administered, pen and paper instrument that rates 11 common opiate withdrawal signs or symptoms, each of which is rated from 0 to 4 or 5. The maximum achievable score is 48. The patients were also asked to complete the Addiction Profile Index (API). The API is a self-report questionnaire consisting of 37 items and the following 5 subscales: characteristics of substance use; dependency diagnosis; the effects of substance use on the user; craving; motivation to quit using substances. The study was carried out in accordance with the latest version of the Declaration of Helsinki and the study protocol was approved by the local ethical committee (Akdeniz University Ethical Committee of Clinical Investigations).

The interclass correlation coefficient was used to determine agreement between two observers. Cronbach's alpha coefficients and item total score correlations were computed for the reliability of the scale. For the validity of the scale, correlations between the scales were calculated with Pearson's correlation method.

**Results:** Correlation analyses indicated that API was significantly correlated positively with the COWS. Correlations of the total scores based on the psychiatrists' ratings were found to be high; the interrater reliability coefficient of the items and total COWS score ranged between 0.703 and 0.938 and all correlations were highly significant ( $p < 0.001$ ). A Cronbach's alpha coefficient of 0.874 was obtained for the COWS according to the first observer and of 0.842 according to the second observer, which suggests that the internal validity of the Turkish version of the COWS is acceptable. Item-total correlations ranged from 0.27 to 0.74 ( $p < 0.001$ ).

**Conclusions:** Our results indicate that the Turkish version of COWS yielded good interrater reliability and was significantly correlated with a self-report questionnaire scale. Although the small sample size hinders a conclusion, COWS showed significant results regarding validity measures. Thus, our results support that COWS has the potential to fulfill the need in clinical research settings.

**Keywords:** interrater, opiate, reliability, scale, withdrawal

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#### [PP-049] *Psychosomatic medicine - Consultation liaison psychiatry*

### Plasma magnesium, calcium and serum zinc values of premenstrual dysphoric disorder in women

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**Objective:** The aim of this study is to compare the symptoms and zinc, magnesium and calcium levels of females with the diagnosis of premenstrual dysphoric disorder (PMDD) with those of the healthy volunteers.

**Method:** The subjects of the study are 29 university student females with the diagnosis of PMDD according to DSM-IV diagnosis criteria and 27 female volunteers matched in terms of age and education, who are not suffering from PMDD despite showing some premenstrual syndrome symptoms. A survey involving premenstrual syndrome symptoms and diet type was conducted on the participants. Serum zinc, plasma magnesium and calcium levels of menstrual cycles of every participant were analyzed at luteal phase.

**Results:** In the patient group, the most frequent psychological symptom was nervousness (irritation) (86%) while physiological symptoms were stomach ache (96%) and breast tenderness (76%). In the control group, the most frequent psychological symptom was nervousness (63%), while physiological symptom was breast tenderness (48%). In terms of methods to deal with PMDD symptoms, in both the patient and the control groups, analgesic + heat application was preferred. No significant difference was found between the plasma calcium and magnesium levels and serum zinc levels taken from the groups during luteal period.

**Conclusion:** Although various theories have been put forward in the etiology of premenstrual dysphoric disorder, there isn't a universally accepted theory yet. Among these theories, more research is needed for the clarification of the relation between mineral changes.

**Keywords:** premenstrual dysphoric disorder, magnesium, calcium, zinc

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**[PP-050] Addiction and related disorders**

## The Comparison of hypothalamic-pituitary-adrenal (HPA) axis's response to the stimulation of psychological stress in the abstinence period of alcohol-dependent patients with first degree unaffected relatives and control group

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**Objective:** The stress response is a process whereby the body adapts to disruptions in homeostasis, in part through the secretion of specific hormones and neurotransmitters. A healthy stress response is promptly activated at the first signs of homeostatic disruption but quickly terminates after cessation of the stressful experience. Both blunted and overactive hormone responses to stress are maladaptive and are associated with a variety of neuropsychiatric and metabolic abnormalities.

Previous studies of abstinent alcohol-dependent individuals have shown that compared with healthy control subjects, the alcoholics have blunted ACTH and/or cortisol responses to activation of the hypothalamic-pituitary-adrenal (HPA) axis when interrogated pharmacologically or psychologically. Although far fewer in number, studies using psychological stress have shown an attenuated cortisol response in alcohol-dependent individuals compared with social drinkers. Moreover, HPA axis response in alcohol-dependent subjects is likely influenced by other psychological factors, including current mood states and comorbid psychological disorders. Individuals with anxiety and/or depression but without alcohol dependence have also been described to have altered hormone responses to experimentally induced stressors.

Accordingly, the aim to this study was to determine stress hormone responses to a psychological stressor in abstinent alcohol-dependent subjects without comorbidities who were matched to first-degree relatives and to healthy control subjects, to explore if it is possible that cortisol stress hypo-responsiveness might be an important characteristic of persons prone to alcohol dependence.

**Method:** Subjects were 32 hospitalized male patients, aged between 20 to 60 years, who included alcoholics and 32 first degree relatives and 30 community controls. All patients met the previously listed general inclusion criteria plus criteria for alcohol dependence by DSM-IV and had abstinence period >3 weeks. Controls and first-degree relatives had no reported history of DSM-IV Axis I disorders including any substance use disorder.

Subjects reported to the general clinical research center study room at 9:00 to undergo a psychological stress test. The test consisted 30 minutes of public speaking followed by 15 minutes of mental arithmetic. Two baseline (-30 min, immediately before the beginning the test) and five post-stress test (15, 30, 45, 60, 90 minutes) blood samples were drawn.

**Results:** In agreement with these previous reports, we found a deficient activation of the HPA axis by psychological stress, with a not significant exercise-induced ACTH/cortisol rise after 3 weeks of abstinence in alcoholics in comparison with first degree relatives and controls.

We found a deficient activation of the HPA axis, with a significant exercise-induced ACTH rise (not cortisol rise) (at the following time points: 15, 30, 60, 90 minutes) in the first degree relatives in comparison with the controls.

**Conclusion:** This difference suggest that the HPA hypo responsiveness might be an important characteristic of individuals prone to alcohol dependence and this difference might suggest the disruption in first degree relatives that occurs at the pituitary level.

**Keywords:** alcohol, dependence, hypothalamic pituitary adrenal axis, psychological stress

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**[PP-051] Eating disorders****Assessment of social cognitive functions in 11-18 year-old adolescents diagnosed with anorexia nervosa and exogenous obesity**Ipek Percinel<sup>1</sup>, Burcu Ozbaran<sup>2</sup>, Sezen Kose<sup>2</sup>, Damla Goksen Simsek<sup>3</sup>, Sukran Darcan<sup>3</sup><sup>1</sup>Osmaniye State Hospital, Department of Child and Adolescent Psychiatry, Osmaniye-Turkey<sup>2</sup>Ege University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Izmir-Turkey<sup>3</sup>Ege University, Faculty of Medicine, Department of Pediatric Endocrinology, Izmir-Turkey

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**Objective:** Social cognition as a process of information processing represents the relationship between the self and others. Some recent studies have emphasized the importance of information processing processes in the etiology of Anorexia Nervosa (AN). Although it is not classified as psychiatric disorder, Exogenous Obesity (EO) may present many psychosocial problems as well as medical complications. Many characteristics of the disorder are reported to coincide with those of eating disorders. The scope of our study covers the assessment of the social cognitive skills of 11-18 year-old adolescents with diagnosis of AN and 11-18 year-old adolescents with EO; the identification of common aspects, if any; and the comparison of findings with each other and healthy controls (HC).

**Method:** The AN-EO groups consisted of patients treated at Ege University. The criterion for the EO diagnosis was defined as having a body-mass index of 30 and above. The social cognitive skills of the cases were assessed using Faces Test, Eyes Test, Hinting Test, Unexpected Outcomes Test, Faux Pas and Comprehension Test.

**Results:** Our study group consisted of 78 cases, 18 with AN, 30 with EO and 30 HC. The age averages of groups were found as 15.33 for the AN group; 14.57 for the EO group and 14.73 for the HC group ( $p=0.43$ ). The AN group revealed significant impairments compared to the control group in all tests assessing the social cognitive skills ( $p<0.001$ ). The cases with AN were observed to perform lower than the cases diagnosed with obesity ( $p<0.001$ ). The cases with obesity performed significantly lower than the control group in all tests except for the Hinting Test ( $p<0.001$ ). It was observed that the cases with obesity scored lower than the control group in the Hinting Test, as well; however it did not reach to a level of statistical significance ( $p=0.63$ ).

**Conclusion:** This study revealed impairments in social cognitive skills (facial emotion recognition, reading mind in the eyes, faux pas) of the EO and AN groups. EO and HC group did not differ from each other only in Hinting Test. Our findings are compatible with the literature. The studies in literature conducted with the cases diagnosed with an eating disorder show that the cases have difficulties in recognizing and comprehending emotions and reading minds. The studies state that the impaired social functions affect the long-term clinical process. The results of our study revealed the significance of identification of social cognitive functions of the cases and determination of therapy accordingly for a more effective and permanent treatment of the said disorders. Our study approached the EO, which has not been classified as an eating disorder yet, from a different viewpoint; and showed that the social cognitive functions of the cases with the diagnosis of obesity coincided with those of the cases with AN. Furthermore, as far as we can see, our study is the first study in literature to assess the social cognitive functions of the cases with obesity using relevant tests.

**Keywords:** adolescent, anorexia nervosa, obesity, social cognition

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S114**

**[PP-052] Psychosomatic medicine - Consultation liaison psychiatry****The effect of major depression on endothelial functions in stable coronary artery disease**Esra Aydin Sunbul<sup>1</sup>, Murat Sunbul<sup>2</sup>, Huseyin Gulec<sup>1</sup><sup>1</sup>Erenkoy Mental Health and Neurology Training and Research Hospital, Department of Psychiatry, Istanbul-Turkey<sup>2</sup>Marmara University, Pendik Research and Training Hospital, Department of Cardiology, Istanbul-Turkey

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**Objective:** Although the relationship between depression and cardiac events were demonstrated in lots of studies, the mechanisms lying under this relationship are not clear yet. One of the possible mechanisms is endothelial dysfunction. Endothelial dysfunction reduces the synthesis of the protector substances against atherosclerosis associated with nitric oxide and prostaglandin and it causes

to placement of leukocyte, lipid particles and macrophage on the intima tie of the blood vessel. The relationship between endothelial dysfunction and cardiovascular events was demonstrated in the earlier studies. Inflammation decreases the bioavailability across the endothelium by decreasing synthesis of NO and creation of endothelial NO synthase, which causes endothelial dysfunction. Depression has a relationship with the endothelial dysfunction, which is the possible result of the neurohormonal activation disruption. With considering its' effect on the inflammatory process, depression is a significant factor for endothelial dysfunction. In this study, our aim is to study the effect of the major depression on the endothelial function on the patients, who have stable coronary artery disease (CAD).

**Method:** The patient group consists of 65 CAD patients who have major depression diagnosis according to DSM-IV-TR diagnosis measures and control group consists of 54 CAD patient who don't have major depression diagnosis. To measure the degree of the disorder on the patients who have depression diagnosis, Montgomery-Asberg Depression Evaluation Measure (MADRS) was used. Endothelial functions had been evaluated with brachial artery flow mediated dilatation (FMD) which is a noninvasive method.

**Results:** The average age was found  $59.9 \pm 10.4$  for the patient group and  $59.2 \pm 10.2$  for the control group ( $p=0.715$ ). The sociodemographic characteristics are found similar for patient and control groups. When the endothelial function variables of the patient and control groups considered, there was no significant difference in the basal velocity ( $p=0.242$ ), basal diameter ( $p=0.908$ ) and basal hyperemia velocity ( $p=0.533$ ) values. Absolute value of FMD ( $p<0.001$ ) and percentage of FMD value ( $p<0.001$ ) was found significantly lower. No correlation was observed between MADRS score and endothelium function variables on the stable CAD patients, who have major depression diagnosis. Contrary to this there is meaningful correlation between MADRS score and FMD percentage value which is one of the endothelium function variables and absolute value of FMD on the stable KAH patients, who don't have major depression diagnosis. Independent from age and sex, MADRS score was detected as the independent predictive of percentage value of FMD and absolute value of FMD in the linear regression analysis ( $\beta = -0.332$ ,  $p<0.001$ ).

**Conclusion:** In this study, we observed that endothelial dysfunction variables were significantly lower for the stable CAD patients who have depression diagnosis than stable CAD patients, who don't have depression diagnosis and for these patients percentage value of FMD and absolute value of FMD are independent predictive of depression stress.

**Keywords:** coronary artery disease, flow mediated dilatation, major depression

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### [PP-053] *Psychosomatic medicine - Consultation liaison psychiatry*

## The effect of major depression on inflammatory variables in stable coronary artery disease

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**Objective:** Coronary artery disease (CAD) is a chronic inflammatory process, which is triggered by vascular endothelial damage. The increased catecholamine level in the blood contributes to the endothelial damage. The increased catecholamines strengthen thrombocyte activation and increase the hemodynamic stress on the blood vessel walls, which contributes to procoagulant processes. The previously published studies show that there was a significant relationship between major depression and CRP levels on CAD patients and studies drew attention to the relationship between MD and inflammation from cardiovascular morbidity perspective. It is thought that the increased sensitivity to the glucocorticoid inhibition made depressive patients more susceptible to inflammatory processes, which accelerates progression of cardiac disease. In this study our aim is to find the effect of CRP and fibrinogen, which are some of the MD inflammatory determinants on the stable CAD having patients.

**Method:** In the study, patient group consists of 65 CAD patients, who have major depression diagnosis according to DSM-IV-TR diagnosis measures and control group that consists of 54 CAD patients who didn't have major depression diagnosis. The Montgomery Asberg depression rating scale (MADRS) is used for to define the level of disorder on the patients which have depression diagnosis. The fasting blood glucose under the cardiovascular risk factors and lipid parameters, CRP from the inflammatory variables, fibrinogen and full blood count parameters are measured in the both of the groups.

**Results:** The average age was found  $59.9 \pm 10.4$  for the patient group and  $59.2 \pm 10.2$  for the control group ( $p=0.715$ ). The sociodemographic characteristics are found similar for patient and control groups. No significant difference was found for CAD risk factors and inflammatory parameters between patient and control groups.

**Conclusion:** Although CRP and fibrinogen levels are higher in the CAD patients, who have more major depression than CAD patients who don't have major depression, it is not statistically meaningful.

**Keywords:** coronary artery disease, inflammation, major depression

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**[PP-054] Psychosomatic medicine - Consultation liaison psychiatry**

## The effect of major depression on heart rate variability in stable coronary artery disease

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**Objective:** Although previous studies have shown that depression is associated with coronary artery disease (CAD), the underlying mechanisms is unclear. A disorders in the autonomic neural system are one of the possible explanations. Heart rate variability (HRV) is identified as changes on sinus rate which gives idea both sympathetic and parasympathetic balance. Low HRV is an indicator for increased sympathetic and deficient parasympathetic tone. Previous studies have shown that lower HRV is associated with adverse cardiovascular outcomes. Disorders of the neurohormonal system can accelerate the CAD with several mechanisms such as changing cardio autonomic tone, triggering the coagulating and inflammatory processes which is related to mental stress, and extending the QT interval. The aim of the study is to evaluate the effect of the major depression on HRV parameters in patients with stable CAD.

**Method:** Patient group consists of 65 CAD patients, who have major depression diagnosis according to DSM-IV-TR and control group consists of 54 CAD patients who don't have major depression. Montgomery- Asberg depression evaluation measurement (MADRS) is used to detect the degree of the disorder on the patients who have depression diagnosis. To evaluate HRV, 24 hour Holter electrocardiography follow up is used.

**Results:** The average age was found 59.9±10.4 for the patient group and 59.2±10.2 for the control group (p=0.715). The sociodemographic characteristics are found similar for patient and control groups. When we compared HRV parameters between patient and control group, we found that RR, SDNN, SDNN index, SDANN, pNN50, RMSSD values were significantly lower in patient group. MADRS score was correlated with pNN50 value in patient group (r= -0.318 and r= -0.307, p<0.05). Linear regression analyses demonstrated that MADRS scores were independent predictors of pNN50 value ( $\beta$ = -0.375, p<0.001).

**Conclusion:** In our study, HRV parameters were significantly lower in patient group. MADRS score was correlated with pNN50 value in patient group. Moreover, MADRS scores were independent predictors of pNN50 value.

**Keywords:** coronary artery disease, heart rate variability, major depression

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**[PP-055] Mood disorders**

## Psychotic mania after the use of slimming pill that contain Acai Berry: case report

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Acai berry is a kind of blackberry and grows in Africa. It's claimed that it contains high amount of antioxidants, provides slimming, and gives energy. It has become a popular herbal product recently. In literature psychosis and mania cases associated with the use of herbal products were reported. This case is a psychotic mania seen after the use of a slimming pill that contains acai berry. A 19 year-old, male, student was admitted to the hospital 3 months before. Patient begun to use slimming pill which contain acai berry. After starting the use of this slimming pill, insomnia began and he started feeling himself energized. In the last one week, psychotic mania appeared. There was no organic pathology. Haloperidol 40 mg/day was applied and complete remission was achieved in 15 days. He was discharged with

low dose haloperidol treatment. There is an uncontrolled use of herbal products especially acai berry, which is popular in recent years. So psychosis and mania cases are increasing. During psychiatric examination, it must be considered using herbal products which is claimed completely natural and have no side effects but not actually.

**Keywords:** psychotic mania, acai berry, slimming pill

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**[PP-056] Schizophrenia and other psychotic disorders**

## Evaluation of the efficacy of the continuation electroconvulsive therapy in treatment-resistant schizophrenia

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**Objective:** The aim of this study is to evaluate the effectiveness of continuation Electroconvulsive therapy (ECT) in preventing relapse in patients with treatment-resistant schizophrenia.

**Methods:** Schizophrenia patients were defined in three groups such as patients who received only AP treatment (only AP), patients, who received acute ECT only during hospitalization (aECT + AP), patients who received acute ECT and continuation ECT (a-cECT + AP). Only AP group, aECT+AP group, and a-cECT + AP group were compared according to positive and negative syndrome scale (PANSS) and Brief Psychiatric Rating Scale (BPRS) scores.

**Results:** As per comparison of only AP group, aECT+AP group and a+cECT+AP groups in terms of after discharge PANSS and after discharge BPRS scores for 1<sup>st</sup> month, 3<sup>rd</sup> month and 6<sup>th</sup> month; 3<sup>rd</sup> and 6<sup>th</sup> month's PANSS scores of a+cECT+AP group were statistically significantly lower than other two groups. 1<sup>st</sup> month's BPRS scores of a+cECT+AP group were statistically significantly higher than other two groups. 6<sup>th</sup> month's BPRS of a+cECT+AP group were statistically significantly lower than only AP group. There were no significant differences between 1<sup>st</sup> month's PANSS and 3<sup>rd</sup> month's BPRS scores of the three groups.

**Conclusions:** This study suggests that, in patients with a diagnosis of schizophrenia, who have responded to an acute course of ECT, continuation ECT in combination with antipsychotics was more effective than antipsychotics alone in preventing relapse.

**Keywords:** continuation ECT, schizophrenia, treatment-resistant, PANSS, BPRS

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**[PP-057] Autism**

## Vitamin D levels in children with autism spectrum disorders

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**Objective:** In this study, it is aimed to define serum levels of Vitamin D, calcium (Ca<sup>2+</sup>), phosphorus (P), alkaline phosphatase (ALP) and folate in young children with Autism Spectrum Disorders (ASD) and to compare them with those of normal controls and to explore the association between these serum values and the severity of the problem behavior, ASD symptom severity, and level of cognitive development.

**Method:** All participants were assessed by a child and adolescent psychiatry specialist according to DSM-IV-TR criteria and patients with the diagnosis of Autistic Disorder (AD) and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) were included in the study. None of the patients fulfilled the criteria for Asperger Syndrome (AS). All of the participants were interviewed and sociodemographic form and Aberrant Behavior Checklist (AbBC) were administered. Autism Behavior Checklist (ABC), Childhood Autism Rating Scale (CARS) and developmentally appropriate screening or IQ tests were administered to ASD patients. Besides, Vitamin D, Ca<sup>2+</sup>, P, ALP and folate levels

of all participants were calculated at central and endocrinology laboratories of our university hospital from March 2013 to September 2013. Chi square tests, t tests and correlation analyses were used to evaluate the data.

**Results:** In 29.6% of the children with ASD and 38.9% of the normal children, Vitamin D deficiency was detected, however, the difference was not statistically significant between the groups. No statistically significant differences were detected between levels of Vitamin D, Ca<sup>+2</sup>, P, ALP and folate in children with ASD compared to those of controls. The correlational analysis in children with ASD revealed that AbBC, ABC, CARS scores were not correlated with biochemical and endocrine laboratory results.

**Discussion:** The results of the study showed that Vitamin D, Ca<sup>+2</sup>, P, ALP and folate levels in 3-8 years old children with ASD were not different from normal controls. The routine screening of Vitamin D levels in 3-8 years old children with ASD does not seem to be feasible. In future studies, defining Vitamin D levels in cord blood or perinatal period and prospectively following up children may generate different results.

**Keywords:** autism spectrum disorders, vitamin D, calcium, folate

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### [PP-058] *Psychopharmacology*

## Mania related with corticosteroid withdrawal in Behçet's disease: a case report

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Corticosteroids are routinely used in Behçet's disease, which is classified in autoimmune disorders. In steroid treatment, psychiatric side effects can occur as well as systemic side effects like osteoporosis, glaucoma, and cataract. In literature, it has been reported that affective symptoms are possible side effects of corticosteroids for a long time. Especially reducing the dose after a long term and high dose corticosteroid treatment or abrupt discontinuation can cause corticosteroid withdrawal syndrome and anxiety and restlessness were reported in addition to delirium and mania. In this case, with no history of a psychiatric disorder, the patient with diagnosis of uveitis was prescribed prednisolone 60 mg per day. After ten-day treatment, dosage had decreased to 30 mg per day for ten days and subsequently discontinued. Manic symptoms characterized by sleeplessness, logorrhea, irritability, increased sexual pursuits had started six days after dosage reduction and increased one day after termination of prednisolone treatment. There was no organic pathology in cranial MRG and EEG, which could be a reason for manic symptoms. The clinical presentation was interpreted as a manic episode related with steroid withdrawal. After three weeks of lithium 900 mg per day and olanzapine 10 mg per day, manic symptoms had decreased. By the end of two months of follow up treatment, no recurrence, so olanzapine was stopped on third month, lithium was discontinued step by step on ninth month because of planned pregnancy. During one-year clinic visits, there was no mood disorder. This case suggests that psychiatric symptoms could appear in withdrawal syndromes that appear with abrupt reduction and/or discontinuation as well as short-time or prolonged corticosteroid treatments.

**Keywords:** mania, steroid, withdrawal syndrome

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**[PP-059] Others****DSM-IV axis I diagnosis in patients who present to psychiatry outpatient unit with suicide ideation**

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**Objective:** Suicidal behavior is a process usually starts ideations and might end up related behaviors. There are three components of suicidal act including ideation, attempting, and accomplishment. Suicidal thoughts are more prevalent in comparison to attempts and accomplishments. Suicide can be seen as a reaction to a stressful life event in individuals with no psychiatric diagnosis or as a psychiatric symptom in individuals with various psychiatric diagnoses. Although some cultural differences are seen in its prevalence and features in different countries, suicide is one of the main problems of community health. Despite its importance as a mental health problem there still is unawareness out there. Accordingly, the aim of the current study was to evaluate psychiatric diagnosis (if there is any) in individuals, who present to psychiatry outpatient unit with suicidal thoughts.

**Methods:** Study sample consisted of 100 people, who applied to the outpatient unit of psychiatry, Diskapi Yildirim Beyazit Educational and Research Hospital from July 2013 to September 2013. After the study was explained and an informed consent was obtained, socio-demographic and clinical information were collected. Every individual was examined conducting an interview according to Diagnostic and Statistical Manual of Mental Disorders-version IV (DSM-IV-TR).

**Results:** Seventy-one of the sample were female and 29 were male (n=100). Mean age was  $32.7 \pm 12$  years. The distribution of the diagnosis was led by depression and anxiety disorders. Sixty-eight of the participants had a previous attempt history, whereas 32% attempted suicide at the time of application. Fifty-three of the participants, who applied with a suicide attempt, reported at least one previous attempt. In this group, the most prevalent method of suicide attempt was taking drugs. Many of the attempters did not share their suicidal thoughts with his/her friends prior to the attempt.

**Conclusion:** Although the most prevalent diagnosis seen in this sample was major depression as expected, generalized anxiety disorder, adjustment disorders, and schizophrenia were also prevalent among the people, who seek psychiatric help. So other diagnosis should also be a remainder for suicidal thoughts to clinicians. Another finding of that many of the attempters did not report their suicidal ideations to the significant others, suggests the importance of probing suicidal ideation in the psychiatric help seeking group of individuals.

**Keywords:** suicide ideation, psychiatric diagnosis

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S119**

**[PP-060] Schizophrenia and other psychotic disorders****Association between low serum vitamin D levels and disease activity in patients with schizophrenia**Rabia Nazik Yuksele<sup>1</sup>, Neslihan Altunsoy<sup>1</sup>, Baise Tikir<sup>1</sup>, Kubranur Unal<sup>2</sup>, Merve Cingi<sup>1</sup>, Makbule Cigdem Aydemir<sup>1</sup>, Erol Goka<sup>1</sup><sup>1</sup>Ankara Numune Training and Research Hospital, Department of Psychiatry, Ankara-Turkey<sup>2</sup>Ankara Numune Training and Research Hospital, Department of Biochemistry, Ankara-Turkey

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**Objective:** Vitamin D deficiency is one of the implicated factors in ethio-pathogenesis of schizophrenia. Low serum vitamin D levels have been reported in many schizophrenia studies. However, the question is still not answered: Is there an association between disease activity and serum vitamin D level? This is the first study evaluating the relationship between serum vitamin D levels and disease activity, by comparing vitamin D levels in two schizophrenia groups abruptly different in terms of disease activity (in remission and in acute episode, according to Andreasen remission criteria).

**Methods:** 41 schizophrenic patients in remission, 40 schizophrenic patients in acute episode and 40 age and sex matched controls with no major psychopathology were recruited in this study.

Positive and Negative Syndrome Scale (PANSS) and the Clinical Global Impression – Severity scale (CGI-S) were used to evaluate disease

activity. Blood samples were taken from all patients and controls. 25-OH vitamin D3, calcium, phosphorus, parathyroid hormone values were measured.

**Results:** Schizophrenic patients in acute episode had significantly lower vitamin D levels compared to schizophrenic patients in remission and to healthy controls (in terms of median values respectively, 7.18, 15.03, 15.02,  $p < 0.001$ ). We observed negative and moderate correlations between vitamin D levels and CGI scores ( $r: -0.624$ ,  $p < 0.001$ ), vitamin D levels and PANNS scores ( $r: -0.508$ ,  $p < 0.001$ ).

**Conclusion:** The inverse association between vitamin D levels and disease activity brings the following Result: Low serum vitamin D levels may cause exacerbation of psychotic symptoms in patients with schizophrenia. Additionally, this result exposes another question: Can vitamin D supplementation prevent acute episodes in schizophrenic patients? Based on this idea, future studies may enlighten the possible effects of vitamin D supplementation in patients with schizophrenia.

**Keywords:** schizophrenia, vitamin D, vitamin D deficiency

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### [PP-061] *Perinatal psychiatry*

## Affective temperaments in pregnancy

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**Objective:** There are many studies on the mood disorders of this process but no studies questioning how affective temperaments, which are the antecedents of the mood disorders, are influenced by the process as a result of scanning literature. This study aims to examine affective temperaments in women without psychiatric diagnosis in the pregnancy period.

**Method:** 100 pregnant women at the third trimester of their pregnancy (pregnant group) and 75 non-pregnant women (control group) were included in the study. SCID-I was used for evaluation of psychiatric disorders and Temperament Evaluation of Memphis, Pisa, Paris and San Diego Auto Questionnaire (TEMPS-A) is used for evaluation of affective temperaments.

**Results:** The cyclothymic, irritable and anxious temperament scores of the pregnant women were significant lower than that of non-pregnant women ( $p < 0.05$ ). Being pregnant negatively predicted lower scores of cyclothymic, irritable and anxious temperaments.

**Conclusion:** Third trimester of pregnancy seems as a negatively predictor for affective temperaments. Future studies may help to understand biological background of present findings.

**Keywords:** pregnancy, affective temperament, mood disorders, women

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**[PP-062] Attention deficit-hyperactivity disorder****Attachment of children and adolescents with attention deficit hyperactivity disorder to father**Hatice Dogan<sup>1</sup>, Didem Oztop<sup>1</sup>, Sevgi Ozmen<sup>1</sup>, Ozlem Olguner Eker<sup>2</sup><sup>1</sup>Erciyes University, Faculty of Medicine, Department of Child Psychiatry, Kayseri-Turkey<sup>2</sup>Erciyes University, Faculty of Medicine, Department of Psychiatry, Kayseri-Turkey

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**Objective:** Attention deficit hyperactivity disorder (ADHD) is characterized by inattention, hyperactivity and impulsivity, which is observed in 3-7% of the children at school age. It is associated to significant disruption in developmental, cognitive, and academic domains. It manifests as reduced self-confidence, unhappiness, failure, and impaired interpersonal relationships as a result of deficits in almost every domain of children's life and adversely affects mental wellbeing of children. Attachment is a condition that affects both individual's inner self and affiliations. There are studies reporting that there was insecure attachment in patients with ADHD rather than secure attachment. In this study we are going to see the effects of ADHD on father attachment.

**Method:** Among patients presented to Child and Adolescent Psychiatry Department of Erciyes University, Medicine School, 50 patients aged 11-17 years, who were diagnosed as ADHD and had no concurrent psychiatric diagnosis or chronic disease were included in the study. Age- and sex-matched 50 healthy children and adolescent were employed as control group. Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime version (K-SADS-PL) interview and Wechsler Intelligence Scale for Children-Revised (WISC-R) were applied to all cases included. Parents were asked to complete sociodemographic data sheet about their children and Turgay DSM-IV-based child and adolescent behavior disorders screening and rating scale. Parental and Peer Attachment Scale was applied to patient and control groups.

**Results:** The mean age of groups is  $12.78 \pm 1.67$ . There were 15 girls and 35 boys in the groups. There was no differences in sociodemographic data sheet between two groups' fathers (for example education, job, psychiatric disorder..). The mean score of attachment to father in ADHD group is 66, and 69 in control group. The mean score of both the girls and the boys in ADHD group is was 66. In control group the mean score of girls was 68 and 70 for the boys.

**Conclusion:** When compared to controls, it was found that cases in ADHD group attached to fathers less safely. In ADHD group, girls and boys attached equally safely to their fathers. In a research it was found that fathers of patients with ADHD had more negative reactive behavior control and less fatherhood pattern. In the control group, boys attached more safely to their fathers than girls. In conclusion, although ADHD is defined by disorders in cognitive and executive functioning, it is thought that social limitations were observed in children and adolescents with ADHD; that this difficulty in regulation was reflected in relations to both peers and parents; and, thus it shares common etiological factors with insecure attachment; and that they predispose to development of each other. Further studies with larger sample size are needed in this topic.

**Keywords:** attention deficit hyperactivity disorder, attachment

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**[PP-063] Attention deficit-hyperactivity disorder****Attachment of children and adolescents with attention deficit hyperactivity disorder to peers**Hatice Dogan<sup>1</sup>, Didem Oztop<sup>1</sup>, Ozlem Olguner Eker<sup>2</sup>, Sevgi Özmen<sup>1</sup><sup>1</sup>Erciyes University, Faculty of Medicine, Department of Child Psychiatry, Kayseri-Turkey<sup>2</sup>Erciyes University, Faculty of Medicine, Department of Psychiatry Kayseri-Turkey

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**Objectives:** Attention deficit hyperactivity disorder (ADHD) is characterized by inattention, hyperactivity and impulsivity, which is observed in 3-7% of the children at school age. It is associated to significant disruption in developmental, cognitive, and academic domains. It manifests as reduced self-confidence, unhappiness, failure, impaired interpersonal relationships as a result of deficits in almost every domain of children's life and adversely affects mental wellbeing of children. Attachment is a condition that affects both individual's inner self and affiliations. There are studies reporting that there was insecure attachment in patients with ADHD rather than secure

attachment. In this study we are going to see the effects of ADHD on peer attachment.

**Method:** Among patients presented to Child and Adolescent Psychiatry Department of Erciyes University, Medicine School, 50 patients aged 11-17 years, who were diagnosed as ADHD and had no concurrent psychiatric diagnosis or chronic disease were included to the study. Age- and sex-matched 50 healthy children and adolescent were employed as control group. Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime version (K-SADS-PL) interview and Wechsler Intelligence Scale for Children-Revised (WISC-R) was applied to all cases included. Parents were asked to complete sociodemographic data sheet about their children and Turgay DSM-IV-based child and adolescent behavior disorders screening and rating scale. Relationship Scale Questionnaire and Parental and Peer Attachment Scale were applied to patient and control groups.

**Results:** The mean age of groups was  $12.78 \pm 1.67$ . There were 15 girls and 35 boys in the groups. 37 children were in secondary school and 13 children were in high school in ADHD group. In control group 38 of them were in secondary school and 12 of them were in high school. The mean score for dismissing attachment is  $4.41 \pm 1.19$ , secure attachment is  $3.99 \pm 1.06$ , fearful attachment is  $3.68 \pm 1.45$ , and preoccupied attachment is  $3.55 \pm 0.93$  in ADHD group. In control group the mean score for secure attachment is  $4.31 \pm 1.18$ , dismissing attachment is  $3.99 \pm 1.09$ , fearful attachment is  $3.69 \pm 1.34$ , and preoccupied attachment is  $3.41 \pm 1.37$ .

**Conclusion:** In our study, insecure attachment to peers was found to be significantly higher in ADHD group. The highest rate was found in dismissing attachment to peers in both girls and boys. In some researches it has reported that patients with ADHD had insecure attachment whereas healthy adolescents had secure attachment. In conclusion, although ADHD is defined by disorders in cognitive and executive functioning, it is thought that social limitations were observed in children and adolescents with ADHD; that this difficulty in regulation is reflected in relations to both peers and parents; and, thus it shares common etiological factors with insecure attachment; and that they predispose to development of each other. Further studies with larger sample size are needed in this topic.

**Keywords:** attention deficit hyperactivity disorder, attachment, peer

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#### [PP-064] Autism

### Wolf-Hirschhorn syndrome with autistic spectrum disorder diagnosis: a case report

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Wolf-Hirschhorn Syndrome (WHS) was first described by Hirschhorn et al. It is a condition resulting from a distal deletion of the short arm of chromosome 4. It is usually associated with a severe phenotypic expression including multiple malformations, delayed psychomotor development, and profound learning disabilities. Up to date, we found only one case report with WHS with autistic features. This paper reports on an individual with WHS, who has autistic features as chief complaints.

Ten year-old male patient was diagnosed as having WHS in Germany, when he was 2 years old. He had several dysmorphic features including long eyelashes, large ear shells, short philtrum, left auricle is down situated, thin upper and lower lips, pointed chin, partial choanal atresia, hypospadias, etc. Developmental delay in terms of body length (<3<sup>th</sup> percentile) and head circumference (<3<sup>th</sup> percentile) was the reason for genetic investigations. Genetic evaluation reported a deletion in 4p16.3 area. Psychiatric assessment at ten years of age revealed that he has been telling only two words. His eye contact was restricted. He has not spontaneously communicated. He has not reacted to call his name most of the times. He started walking, when he was 7 years old. In addition, he has been suffering chewing problems and severe teeth decay.

WHS has an estimated incidence of one in 50,000 births and arises de novo in 90% of the cases. It is a multiple malformation syndrome with abnormal craniofacial features including hypertelorism, highly arched eyebrows, and oral/facial cleft. Communicative development is concerned, speech is usually absent, and comprehension is limited to simple orders or to a specific context. In our case with WHS, chief complaints were restrictive social interaction and language delay which were core symptoms of autism spectrum disorder. This case is another WHS with autistic features predominate.

**Keywords:** Wolf-Hirschhorn Syndrome, autism, mental retardation

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S122**

**[PP-065] Attention deficit-hyperactivity disorder****Attachment of children and adolescents with attention deficit hyperactivity disorder to mother**Hatice Dogan<sup>1</sup>, Didem Oztop<sup>1</sup>, Sevgi Ozmen<sup>1</sup>, Ozlem Olguner Eker<sup>2</sup><sup>1</sup>Erciyes University, Faculty of Medicine, Department of Child Psychiatry, Kayseri-Turkey<sup>2</sup>Erciyes University, Faculty of Medicine, Department of Psychiatry, Kayseri-Turkey

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**Objectives:** Attention deficit hyperactivity disorder (ADHD) is characterized by inattention, hyperactivity and impulsivity, which is observed in 3-7% of the children at school age. It is associated to significant disruption in developmental, cognitive, and academic domains. It manifests as reduced self-confidence, unhappiness, failure, impaired interpersonal relationships as a result of deficits in almost every domain of children's life and adversely affects mental wellbeing of children. Attachment is a condition that affects both individual's inner self and affiliations. There are studies reporting that there is insecure attachment in patients with ADHD rather than secure attachment. In this study we are going to see the effects of ADHD on mother attachment.

**Method:** Among patients presented to Child and Adolescent Psychiatry Department of Erciyes University, Medicine School, 50 patients aged 11-17 years, who were diagnosed as having ADHD and had no concurrent psychiatric diagnosis or chronic disease were included in the study. Age- and sex-matched 50 healthy children and adolescent were employed as control group. Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime version (K-SADS-PL) interview and Wechsler Intelligence Scale for Children-Revised (WISC-R) was applied to all cases included. Parents were asked to complete sociodemographic data sheet about their children and Turgay DSM-IV-based child and adolescent behavior disorders screening and rating scale. Parental and Peer Attachment Scale was applied to patient and control groups.

**Results:** The mean age of groups was 12.78±1.67. There were 15 girls and 35 boys in the groups. The education level of control group mothers is better than ADHD group and ADHD group mothers had more psychiatric disorders than control group. The mean score of attachment to mother in ADHD group was 69, and 71 in control group. The mean score of girls in ADHD group was 69 and boys' was 66. In control group the mean score of girls is 70, and 72 for the boys.

**Conclusion:** When compared to controls, it was found that cases in ADHD group attached to mothers less safely. It was found that mothers of patients with ADHD had more negative reactive behavior control and had less motherhood pattern in a study. Therefore these negative behaviors affect child's attachment and quality of attachment to mother. Girls attached more safely to their mothers than boys in ADHD group. In a research it was found that boys with ADHD or conduct disorder had insecure attachment. In the control group, boys attached more safely than girls. In conclusion, although ADHD is defined by disorders in cognitive and executive functioning, it is thought that social limitations were observed in children and adolescents with ADHD; that this difficulty in regulation was reflected in relations to both peers and parents; and, thus it shares common etiological factors with insecure attachment; and that they predispose to development of each other. Further studies with larger sample size are needed in this topic.

**Keywords:** attention deficit hyperactivity disorder, attachment, mother

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S123**

**[PP-066] Others****Psychiatric presentation developed in an adolescent receiving intrathecal methotrexate treatment with the diagnosis of ALL: a case report**Hatice Dogan<sup>1</sup>, Didem Oztop<sup>1</sup>, Sevgi Ozmen<sup>1</sup>, Ozlem Olguner Eker<sup>2</sup><sup>1</sup>Erciyes University, Faculty of Medicine, Department of Child Psychiatry, Kayseri-Turkey<sup>2</sup>Erciyes University, Faculty of Medicine, Department of Psychiatry, Kayseri-Turkey

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Acute lymphoblastic leukemia (ALL) accounts for 80% of childhood leukemia cases. It is common between 3 and 7 years of age. Organic brain syndrome is a clinical syndrome that progresses with impaired consciousness as well as memory, perception, orientation, behavior

and sleep rhythm disorders. It is common among patients admitted to hospital. Etiology includes infections, metabolic causes, endocrine causes, cancers, and drugs.

A 14-year-old girl, who was admitted to pediatric hematology clinic with a diagnosis of ALL, was consulted due to mood disorder developed during chemotherapy. Abnormal ideas, ridiculous talks, and forgetfulness had begun in the patient with no previous complaint. She had had skepticism, and had mentioned that some nurses would kill her and occasionally showed coffins to her. The patient had displayed resistance during therapy. She had been mentioning that she speaks with God and all praying and thoughts are realized. There was no event or head trauma that may be a potential cause, and there was no history of such events.

When drugs used were questioned, it was found that she received third dose of intrathecal methotrexate treatment a few days before symptom onset. The patient was consulted to neurology department and no pathology other than the existing picture was detected on cranial MR imaging or EEG. The patient was diagnosed as having organic brain syndrome with detailed history taking. It was observed that there were increased and scattered associations and that she was euphoric. Initially, haloperidol (5 mg/day) and biperiden (1 mg/day) were prescribed to the patient. Haloperidol was titrated to 10 mg/day due to persisting skepticism and inappropriate affection. Biperiden dose was escalated to 2 mg/day due to development of EPS. Currently, the patient is attending control visits and receiving treatment for ALL, who had resolution in psychiatric complaints.

Organic brain syndrome is second most commonly encountered psychiatric diagnosis in cancer patients admitted to hospital with a frequency of 14-55%. Delirium is an irreversible condition either associated with the treatment or occurring spontaneously, which has an acute onset. Delirium emerges with mood alterations and auditory and visual hallucinations, changes in sleep and wakefulness patterns, disorientation, incoherent thoughts, psychomotor agitation or retardation, irritability, aggressiveness, difficulty to concentrate, difficulty in verbalism or inability to recall are early signs. Primary or metastatic brain tumors can cause delirium or other neurological symptoms by compressing cerebral vasculature or blocking flow of cerebrovascular cerebrospinal fluid (CSF). Encephalopathy can be observed following cranial radiotherapy and it may onset within first hours of therapy, persisting weeks to years. Interleukin-2 and interferon- $\alpha$  can cause acute confusion or other disorders such as depression and mania. There are three primary goals in the treatment of delirium. These include resolving factors leading delirium, ensuring patient's safety while providing education to patients, parents, and caregivers and providing symptomatic treatment for behavioral disorders related to delirium. In our case, medical therapy was prescribed to the patient; information was provided to parents and healthcare providers, and patient was placed in a secure and silent room, emphasizing value of these measures in resolution.

**Key words:** Acute lymphoblastic leukemia, methotrexate, side effect

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### [PP-067] Neuroscience: Neuroimaging - genetics – biomarkers

## Pineal gland volume in psychiatric patients

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**Objective:** The majority of patients with schizophrenia and mood disorders [ Bipolar Disorder (BD), Unipolar Depression(UD)] report sleep and circadian rhythm disruption. The human pineal gland has a function in the circadian rhythm and sleep by the secretion of melatonin. The aim of the present study was to compare the pineal gland volumes in patients with BD, UD, schizophrenia and controls in our hospital.

**Methods:** Based on our electronic hospital information database, we retrospectively evaluated 50 patients (16 patients with UD, 17 patients with BD, 17 patients with schizophrenia) and 30 controls that had undergone cranial MRI studies in our outpatient clinic. Total pineal gland volume was measured for each pineal gland with T1 MRI sequence.

**Results:** Subjects were analyzed for total pineal volume. Compared with other groups, total pineal volume was significantly smaller in schizophrenic patients. (Total pineal volume in schizophrenia 83.5±10.1, in BD 93.7±11.4, in UD 95.1±11.2 and in controls: 99.7±12,03 mm<sup>3</sup> p: 0,03).

**Conclusion:** Our results indicate that; the melatonin levels did certainly not influence pineal morphology and we can say that schizophrenia is a neurodevelopment illness and in the etiopathogenetic area, schizophrenia might be separated from mood disorders.

**Keywords:** pineal gland volume, melatonin, circadian rhythm, psychiatric disorders

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**[PP-068] Mood disorders****Comorbidity of neurocognitive impairment and mood disorder in a patient with linear cystic cavitory lesion in the left cerebral hemisphere: a case report**

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Cystic cavities associated with old cerebral infarction or hemorrhage may cause mood disorders as well as cognitive impairments. Here we report a patient who has a linear cystic lesion in the left cerebral hemisphere adjacent to lateral ventricle with neurocognitive impairment and mood disorder comorbidity.

A 28-year-old female patient was admitted to our clinic with inability to think with the right side of her brain, numbness at the right side of the head and neck, anhedonia, forgetfulness. 4 months ago, she was admitted to a neurology outpatient clinic with complaints of numbness and painful contractions at the right side of her neck. She was told to have a normal state based on MRI scan and she was referred to psychiatry for evaluation. The patient was hospitalized in our unit. She had no history of any physical illness. In the first psychiatric examination she had a depressive mood, an anxious affect, passive suicidal thoughts, slowed thinking and decreased attention. Results of routine biochemical tests, complete blood count and thyroid hormone profile were within normal range. Trifluoperazine 1 mg/day, Venlafaxine 75 mg/day and alprazolam 1.5 mg/day were administered to the patient. During next visit, it was seen that she had difficulty in making simple mathematical calculations. It was learned from the patient and her relatives that she had no difficulties in making such calculations before. It was also learned that her depressive complaints were not alleviated despite a 4-month old treatment and she had periods of sleep disturbances and agitations. She was started on lamotrigine 25 mg/day that was increased over the next three weeks to 200 mg/day, with an excellent clinical response. Benton visual retention test and neurocognitive battery and neurology consultation were planned. MRI showed a cystic cavity (old hemorrhage or infarct) in the left cerebral hemisphere adjacent to lateral ventricle. Neurology requested cranial MRI, CT and EEG. Patient's EEG was normal. MRI and CT findings were consistent with the former results. Neuropsychiatric battery revealed mild subcortical (frontal) memory impairment but recalling was preserved. Benton visual retention test suggested an organic pathology. Neurological examination was normal and neurology requested a second neuropsychiatric battery. The second neuropsychiatric battery was performed two weeks later and results were consistent with her age and educational status. Therefore, no additional recommendations were made by neurology. Patient whose depressive symptoms, numbness, sleep disturbances and cognitive functions improved was discharged with venlafaxine 75 mg/day, trifluoperazine 1 mg/day and lamotrigine 200 mg/day. Benign intracranial lesions detected during treatment or investigation may disrupt cognition in a progressive manner even in young and middle aged patients and may cause additional psychiatric symptoms that may be resistant to therapy. In our case, a benign cranial lesion was detected during investigation and was thought to cause neurocognitive changes and mood symptoms. Also, an excellent response to an antiepileptic like lamotrigine suggested cellular destruction.

**Keywords:** cystic cavitory lesion, neurocognition, mood disorder

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**[PP-069] Mood disorders****Alexithymia, suicidal ideation and hopelessness levels in major depressive disorder patients with and without suicide attempts**

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**Objectives:** It is known that hopelessness and alexithymia levels are increased in patients with depressive disorder. In the literature, there are reports suggesting that high levels of hopelessness in patients with depressive disorder increase suicide attempts and ideations. Here we aimed to investigate whether there are any differences in terms of suicidal ideation, hopelessness and alexithymia levels between patients with and without suicide attempts who are diagnosed with major depressive disorder.

**Methods:** In this study, 99 patients diagnosed with major depressive disorder according to structured interview for DSM-IV (SCID-I/CV) and 50 healthy volunteers were included. Sociodemographic questionnaire, Toronto Alexithymia Scale (TAS), Beck Hopelessness Scale (BHS), Scale for Suicide Ideation (SSI) and Hamilton Depression Scale (HDS) were applied to patients and controls. Additionally, Suicide Intent Scale (SIS) was applied to patients with suicide attempt.

**Results:** There were significant differences in all scales and subscales between major depressive patients with or without suicide attempts and healthy controls ( $p < 0.001$ ). According to a cutoff point of 61 for TAS, 34% ( $n=34$ ) of the patient group was alexithymic and 65% ( $n=65$ ) was non-alexithymic. 67.6% ( $n=23$ ) of the alexithymic major depressive patients and 29.2% ( $n=19$ ) of the non-alexithymic major depressive patients had attempted suicide. The difference between these two groups was statistically significant ( $p < 0.01$ ). Mean scores of Scale for Suicide Ideation (SSI) in alexithymic and non-alexithymic patients were  $10.91 \pm 3.47$  and  $5.59 \pm 3.87$ , respectively; the difference between them was statistically significant. Also the difference of Beck Hopelessness Scale (BHS) scores between the two groups was statistically significant and mean scores were  $11.24 \pm 6.15$  and  $6.58 \pm 5.69$ , respectively ( $p < 0.01$ ).

**Conclusion:** In our study, alexithymia, suicidal ideation, hopelessness and depression levels were higher in major depression patients with suicide attempt. Higher incidence of suicide attempts in major depressive patients with higher alexithymia levels and higher levels of suicidal ideation and hopelessness in this group of patients suggest the possibility of alexithymia as a predictive factor for suicide attempt.

**Keywords:** depression, alexithymia, hopelessness, suicide

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### [PP-070] Forensic psychiatry

## Characteristics of foreigner offenders examined in psychiatric observation unit

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**Objective:** The Council of Forensic Medicine (CFM) is the highest level of governmental institutions that gives expertise service in Turkey and its headquarters is in Istanbul. Perpetrators are sent to the CFM Psychiatric Observation Department (POD) for psychiatric observation to find out if they have any mental problems or not. There are few studies about the medico-legal problems of foreigners in Turkey. Moreover, there are no studies for their criminal responsibility. Purpose of this study is to define sociodemographic features, criminal acts and criminal responsibilities of foreigners and to find similarities and differences between Turkish and foreigner perpetrators of same gender and similar age that stayed in the POD of CFM at the same time period.

**Methods:** For this study, 15418 cases, sent to POD between years 1993 and 2012, were investigated one by one. Two groups were formed. Study group consisted of all foreigners sent to POD between 1993 and 2012. Control group consisted of Turkish perpetrators, having same gender and similar age ( $\pm 5$ ) with foreigners who also stayed in POD in the same time period.

**Results:** It was seen that 60 foreigner perpetrators (0.4%) from 26 different countries were sent between 1993 and 2012. The most frequent group was from Iran with 12 cases, 6 of which were accused of drug trafficking. Twenty eight percent of both groups were females. Foreigner perpetrators' mean age was  $32.2 \pm 10.6$  at the crime date while Turkish perpetrators' was  $31.7 \pm 10.1$ . Foreigner perpetrators were sent to psychiatric observation  $9.7 \pm 6.5$  months after the crime and observed for  $7.6 \pm 6.1$  days. On the other hand, Turkish perpetrators were sent to psychiatric observation  $20.3 \pm 29.5$  months after the crime and observed for  $8.6 \pm 5.7$  days. Marital status was similar for both groups but educational level of foreign perpetrators was higher than Turkish perpetrators'. Laborers were the group with the highest number among foreigners; farmers were the group with the highest number of Turkish perpetrators. Alcohol and multiple drug use were similar between two groups but diacetylmorphine (heroin) use was higher among foreigners. Sixty eight percent of foreigner perpetrators committed criminal act in Istanbul, this rate was 23% among Turkish perpetrators. Drug trafficking (37%), homicide (30%) and extortion (13%) were the leading crimes among foreigners. On the other hand, homicide (35%), extortion (15%) and wound (13%) were the leading crimes among Turkish perpetrators. 13% of foreigners and 15% of Turkish perpetrators were reported to have no criminal responsibility due to schizophrenia or other psychotic disorders.

**Conclusion:** This study shows that foreigner perpetrators sent to the POD were mostly male and young adults; most of the crimes were committed in Istanbul. Major crime acts were drug trafficking and homicide, and criminal responsibility results were almost same for the both groups.

**Keywords:** forensic medicine, psychiatry, criminal responsibility

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**[PP-071] Schizophrenia and other psychotic disorders****Varicella zoster -induced psychosis: a case report**

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Although chickenpox, caused by Varicella Zoster Virus (VZV), may occur at any time during the lifetime of humans, more than 90 % of people experience this infection before their adolescence. Although there are some reports about the relationship between herpes family of which VZV is a member, and psychiatric symptoms, these mostly include psychiatric complications secondary to encephalitis resulting from these infections. In this report, we present a patient with schizophrenia that occurred after VZV infection without any central nervous system complication.

A 21-year-old male was admitted to the Psychiatric Outpatient of a University Hospital with the support of his family. The main complaints of the patient were feeling different in his own body, anxiety, and insomnia. The patient believed that he had a carcinoma. In addition, his family described the patient having persecution and reference delusions, irritability, aggressive behavior, increases in speech and social isolation. The patient had no individual or family history of any psychiatric disorder. These psychiatric symptoms were manifested in the previous one-week. The patient and his family reported that, VZV infection was diagnosed in this patient by a specialist of infectious diseases two weeks previous and the psychiatric symptoms developed following this infection. At the time of admission, the patient was not taking any medication. Psychiatric examinations suggested that the patient had normal consciousness and orientation types. The pathological psychiatric findings were disorganized speech, somatic, persecution and reference delusions, irritability, psychomotor agitation, depersonalization and dysphoric affect. Moreover, the patient had no insight about this disorder. The patient was consulted with the Departments of Neurology and Infectious Diseases for differential diagnosis. The physical and neurological examination results as well as the routine hemogram and biochemical laboratory tests' results were normal. Observations of lumbar puncture, EEG (electroencephalography) and brain MRI (magnetic resonance image) were also normal. Consequently, no organic pathology could be established at these consultations. Psychiatric interview by means of SCID-1 showed a diagnosis of acute psychotic disorder. The patient was started with olanzapine at 10 mg/day. One month later, the symptoms of delusions, speech disturbances and depersonalization were completely resolved. However, the symptoms of social isolation were minimally decreased and the patient still had a blunted affect. Six months later there were continuing residual symptoms such as social isolation and blunted affect. After the last examination the diagnosis of the patient was changed to schizophrenia. During the follow up period no neurological complications or symptoms were observed. Schizophrenia is a relatively common neuropsychiatric disease, in which the etiology is unclear. Epidemiologic studies have shown that environmental factors such as infections might be associated with increased risk of schizophrenia. Some authors have reported the relationship between schizophrenia and toxoplasma, cytomegalovirus, herpes simplex virus, human herpes virus-6, influenza, coronavirus and Epstein-Barr virus infections. This case report suggests that VZV infection in adulthood might trigger schizophrenic symptoms in some individuals. Further large-scale studies should examine the incidence and clinical course of schizophrenia or psychotic disorders following VZV infections in adults.

**Keywords:** varicella, schizophrenia, psychosis, herpes

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S127**

**[PP-072] Attention deficit-hyperactivity disorder****Subacutesclerozingpanencephalitis diagnosed during methylphenidate use**Canan Yusufoglu<sup>1</sup>, Ali Riza Sonkaya<sup>2</sup>, Elif Akin<sup>1</sup>, Ibrahim Taymur<sup>3</sup>

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Subacute Sclerosing Panencephalitis (SSPE) is a progressive neurological disorder of childhood and early adolescence, which is presented with psychological symptoms such as cognitive difficulties and neurological symptoms. We report a case, an 11-year-old boy developing

SSPE one year after diagnosis of Attention deficit hyperactivity disorder (ADHD) and articulation disorder.

A 10-year-old boy, one of a twin was presented clinic with learning difficulties, attention problems and hyperactivity. Mental status examination revealed short attention span, motor hyperactivity, difficulties in writing and reading and minor articulation problems. Psychometric test, WISC-R demonstrated verbal score: 76, performance score:81, total score:76. In Bender Gestalt, was found in 5% percentile. Low dose methylphenidate treatment was started and risperidone was added for behavioral problems. Educational and speech therapy was planned for learning disabilities and articulation problems. Attention and behavioral symptoms were improved in one-year follow up. During the clinical course, when the child was 10 year under low dose stimulant and antipsychotic treatment, he began to fail academically, he lost some language and organization, planning skills, he developed cognitive deficiencies including memory deficits, movement disorder, myoclonic jerks. Neurological consultation was revealed typical EEG and cerebrospinal fluid findings. In this case report we point that neurodegenerative disorders in childhood might present with ADHD, especially with cognitive impairment before the clinic is overt. Whether the use of stimulant treatment has an effect on the progress of cognitive component of the disorder during the disease course, more cases are needed to investigate.

**Keywords:** attention deficit hyperactivity disorder, subacute sclerosing panencephalitis, methylphenidate

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### [PP-073] *Psychotherapy*

## Emotional schemas in patients with alcohol dependence

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**Objective:** Leahy emphasized that emotional schemas were closely linked to the resistance to change during cognitive behavioral therapy, particularly in anxiety disorders. Resistance to therapy that Leahy mentioned becomes more crucial in alcohol dependence. In this regard, it may be substantial to determine the emotional schemas of patients with alcohol dependence who have often resistance to the therapy. Thus, we aimed to determine dysfunctional emotional schemas in patients with alcohol dependence.

**Methods:** 45 patients diagnosed as having alcohol dependence, according to DSM-4 TR criteria, who applied to BRSHH AMATEM clinic and 43 healthy volunteers who do not have alcohol and other substance dependence were included in the study. "Demographic Information Questionnaire (DIQ)" and "Leahy Emotional Schema Scale (LESS)" for determination of dysfunctional schema were used.

**Results:** Alcohol dependence group was significantly lower in "comprehensibility" and was significantly higher in "perception of emotions as harmful", "rumination" subscale scores in LESS than control group.

**Conclusion:** This research may contribute to our understanding about psychopathology, maintenance and therapy process of alcohol dependence. Improvements of comprehensibility, normalization and acceptance of emotions can help individuals to stop alcohol using.

**Keywords:** alcohol, emotional schemas, resistance, cognitive behavioral therapy

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### [PP-074] *Others*

## Depression and anxiety levels of children and adolescents with attention deficit and hyperactivity disorder

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**Objective:** The aim of this study is to compare the depression and anxiety levels of children with attention deficit hyperactivity disorder (ADHD) with healthy controls.

**Method:** 47 children and adolescents with ADHD, aged between 7-12, who were evaluated according to DSM-IV criteria and 44 healthy

children and adolescents, who matched to patients in terms of age and education levels were included in this study. Sociodemographic data form, parent-report of Children's Depression Inventory (PR-CDI), child-report Children's Depression Inventory (CR-CDI), Spence Children's Anxiety Scale (SCAS) were applied to the participants.

**Results:** It was revealed that depression and anxiety levels of children with ADHD were significantly higher than healthy controls. Both CDI Parents and CDI Self Depressive symptom levels were positively correlated with age and anxiety symptom levels. The panic/agoraphobia, separation anxiety, social phobia, generalized anxiety subscales' scores of SCAS in ADHD were significantly higher than healthy controls ( $p < 0.05$ ).

**Conclusions:** The comorbidity of depression and anxiety disorders was found to be frequent in ADHD samples. Clinicians should be careful about comorbid depression and anxiety disorder when they treat children and adolescents with ADHD.

**Keywords:** children, adolescent, depression, anxiety, attention deficit hyperactivity disorder

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### [PP-075] Psychopharmacology

## Escitalopram induced euprolactinemic galactorrhea: a case report

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Escitalopram is a selective serotonin reuptake inhibitor that is the *s*-enantiomer of citalopram. Galactorrhea is defined as discharge of milk or milk like secretions from the breast spontaneously. Here we report the case of a postmenopausal woman, who was treated with escitalopram for depression and developed galactorrhea without hyperprolactinemia.

A 32-year-old married female with two children applied to psychiatry outpatient clinic due to depressive complaints five months ago. There was galactorrhea from both breasts for a month. A medical history and review of her medical records revealed that she was treated with escitalopram dose of 10 mg per day given by psychiatrist for 4 months. In mental state examination there were mild depressive complaints. She underwent hysterectomy salpingo-phorectomy operation six years ago due to ovarian cyst. She wasn't on hormone replacement or any other medication treatment. Her general physical examination was normal except for galactorrhea. She was evaluated by endocrinologist and her serum prolactin level was normal (10.03 ng/ml, normal limit: 4.79-23.3 ng/ml). Serum prolactin levels were also normal in repeated measurements. Results of other laboratory investigations such as hemogram, liver, kidney, thyroid function test were normal. FSH, LH levels were high due to post-oophorectomy. Neurological examination was normal. Magnetic resonance image of the brain and hypophysis particularly the pituitary gland were normal. Her breast ultrasonogram was normal. In cytological examination of secretion from the breasts, there was no inflammation and secretion was not consistent with cyst fluid. In the result of investigations, galactorrhea was thought to be escitalopram induced and escitalopram treatment was stopped. The patient was advised to avoid from coitus and breast stimulation for a one week. Four days after stopping escitalopram her galactorrhea discontinued. Subsequently she was prescribed sertraline for depression treatment. During three months of follow-up, the patient maintained well on sertraline, serum prolactin level was normal and there was no galactorrhea.

Galactorrhea may be induced by the use of various medications. Drugs especially antipsychotics, gastrointestinal motility increasing agents and verapamil may cause galactorrhea. Antidepressant drugs rarely may lead to galactorrhea. Prolactin levels in galactorrhea due to drugs are normal or lower than 100 ng/ml. It has been suggested that hyper responsiveness of TRH is probable reason for euprolactinemic galactorrhea. Even if prolactin levels are normal, clinicians should think of escitalopram as a probable cause of galactorrhea.

**Keywords:** escitalopram, galactorrhea

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**[PP-076] Anxiety disorders****Serum uric acid levels preventive against anxiety disorders but not depressive disorders**Yasemin Kaya<sup>1</sup>, Havva Keskin<sup>2</sup>, Esra Yancar Demir<sup>3</sup>, Ozgur Enginyurt<sup>4</sup>, Yavuz Kursat Polat<sup>1</sup><sup>1</sup>Ordu University, Faculty of Medicine, Department of Internal Medicine, Ordu-Turkey<sup>2</sup>Medeniyet University, Goztepe Education and Research Hospital, Department of Internal Medicine, Istanbul-Turkey<sup>3</sup>Ordu University, Faculty of Medicine, Department of Psychiatry, Ordu-Turkey<sup>4</sup>Ordu University, Faculty of Medicine, Department of Family Medicine, Ordu-Turkey

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**Objective:** Anxiety and depressive disorders are known to be associated with metabolic and electrolyte disorders in patients with critical illness. Oxidative stress is one of the important mechanisms that causes the destruction of nerve cells and decrease the volume of hippocampus in patients of major depression. The major antioxidative defences include both enzymatic and nonenzymatic antioxidants. Albumin, bilirubin, uric acid and ascorbic acid are some of the nonenzymatic antioxidants in the body. The nonenzymatic antioxidant levels are also modified in major depression. Accumulating evidence suggest lowering of these antioxidants in patients of major depression. However this relationship is not fully understood in elective (outpatient) patients. In this study we try to determine the relationship between anxiety and depressive disorders with uric acid levels in outpatients.

**Method:** In this cross-sectional study, we enrolled 100 patients with suspected symptoms of anxiety and/or depressive disorders, which come to psychiatry outpatient clinic. Assessment of the anxiety and/or depressive disorders was made by using BECK scales. In addition, demographic data (age, gender and BMI), hematological indexes, renal function tests, liver function tests, thyroid function tests, vit B12, lipid panel, GGT and Uric Acid levels were measured from these patients.

**Results:** The mean age of the patients who were enrolled in the study was  $41.9 \pm 10.9$  and 81% of them were female. According to BECK scale anxiety were present in 80% of the patients and depression present in 69% of the patients. Serum hemoglobin, creatinine, ALT, FT3, B12, lymphocyte ratio and serum uric acid levels were significantly lower in patients with depression. In multivariate analysis serum levels of uric acid and BECK depression scores were correlated with each other with statistically borderline significance ( $p=0.086$ ). Serum calcium, potassium and serum uric acid levels were significantly lower in the patients with anxiety. In multivariate analysis only serum uric acid levels were correlated with BECK anxiety scores with statistically significance ( $p=0.086$ ), the other variables were not. There had been a negative correlation between serum uric acid levels and BECK anxiety scores ( $r= -0.389$ ,  $p<0.001$ ) and sensitivity of the serum uric acid level  $> 4.55$  cut-off value was 37% and specificity was 18% (AUC: 0.666, 96%CI 0.532 – 0.801,  $p=0.038$ ).

**Conclusion:** In this study we determine a significant correlation between serum uric acid levels and anxiety disorder. Elevation in serum uric acid level seems to be protective against anxiety disorder. Pathophysiological and clinical effects of this will be eligible to appear with broader studies.

**Keywords:** anxiety disorders, depressive disorders, uric acid

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**[PP-077] Anxiety disorders****Treatment of panic disorder with bupropion: a case report**

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Panic disorder is a relatively prevalent psychiatric condition that often is chronic and rarely resolves without medical intervention. First line medication treatments are the selective serotonin reuptake inhibitors (SSRIs) including escitalopram. However, better-tolerated compounds are often needed, because SSRIs can cause problematic side effects such as sexual side effects. Herein, we report the case of a 33-year-old male with panic disorder treated with bupropion, who had initially responded to escitalopram but developed sexual dysfunction.

A 33-year-old male with a 15-year history of panic disorder (without agoraphobia) previously treated with SSRIs antidepressants presented to the outpatient clinic with panic attacks. He had been symptom-free for six months without any medication prior to the

admission. During the previous month, he suffered from 4 panic attacks per day each lasting 1 to 2 hours on average and consisting of shortness of breath, chest pain, intermittently unreliable vision, nausea, diarrhea, and a sense of impending doom. He was treated with escitalopram, initially 5 mg/day and gradually increased to 20 mg/day. Although the treatment worked well and resolved all his symptoms in 2 months, he developed sexual dysfunction (decreased libido, erectile impotence). This side effect did not subside despite dose reduction. Escitalopram was stopped gradually and bupropion was started, initially 150 mg/day and increased to 300 mg/day. His sexual dysfunction had resolved within a week of changing his medication. He denied any further panic attacks at his 1- and 4-month visits.

Only a few previous studies in the literature investigated the efficacy of bupropion in panic and anxiety disorders with inconsistent findings. For example, Sheehan et al. have found that bupropion was ineffective in the treatment of panic disorder with phobias. On the other hand, in their open trial, Simon et al. have shown that bupropion SR was effective for the treatment of panic disorder. Moreover, the anxiolytic efficacy of bupropion XL (150 to 300 mg/day) was found to be comparable to that of escitalopram (10 to 20 mg/day) in outpatients diagnosed with generalized anxiety disorder.

Our case report shows that bupropion (300 mg daily) was effective not only in reducing or in eliminating panic attacks, but also in reversing SRI-induced sexual dysfunction. Further systematic longitudinal studies are required to test the effectiveness and safety of bupropion in the treatment of anxiety disorders.

**Keywords:** bupropion, escitalopram, panic disorder, sexual dysfunction

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### [PP-078] Others

## The evaluation of psychopathology and quality of life in children and adolescents with migraine

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**Objective:** Migraine is a problem most frequently encountered in the childhood and adolescence periods. Migraine adversely affects the psychosocial development of children and adolescents and reduces the quality of life concerning health. In this study, what was aimed to be achieved is not only to evaluate the co-existing psychiatric diseases, the levels of anxiety and depression as well as the quality of life, but also to evaluate the interrelation between these parameters, in these children with migraine.

**Methods:** Out of those patients with migraine followed up at the department of Child Neurology, Medical Faculty of Erciyes University, 35 children, 9 to 16 year-old, and their families were involved in the study. Those children with either epilepsy or EEG abnormality, or clinical mental retardation, or coexisting physical or chronic diseases were excluded from the study. Matched with the patient group regarding age and gender, the control group, taking a permission from the Governorship of Kayseri, Provincial Directorate Of National Education, was comprised of 35 children and adolescents who were attending Fatma Zehra Dulgeroglu Primary School and Sehit Nuri Aydin Sagir Anatolian High School and did not have any psychiatric, physical or chronic diseases. All the children, adolescents and families enrolled in the study were kindly asked to fill in a socio-demographic data form. The psychiatric diseases, interviewing with all the cases in the study, were scanned using schedule of affective disorders and schizophrenia for school aged children - present and life time version (K-SADS-PL). All the children and adolescents enrolled in the study were asked to fill in a form regarding child depression inventory, state-trait anxiety inventory-child, and pediatric quality of life inventory. In cases with migraine, in addition to these, to determine the level of migraine limitations, pedMIDAS scale and to determine ache/pain severity, VAS scale was conducted.

**Results:** Depression scale scores of children and adolescents with migraine were found to be higher than those of the control group. There was no significant difference between the groups in terms of anxiety scores.

Life quality perception of children and adolescents with migraine, and life quality perception of parents concerning their children were detected lower compared with the healthy controls.

In psychiatric evaluation of the group with migraine by using K-SADS-PL, substantial psychiatric diseases were detected. The frequency of psychiatric diagnosis in girls with migraine was statistically significantly higher than that in boys.

It was found that pain severity was associated with life quality scores, level of migraine limitation, depression scale scores and child state anxiety inventory scores.

**Conclusion:** It has been thought that migraine, in children and adolescents, adversely affected the psycho-social development, provided a basis for psychiatric diseases and led to a decline in the life quality. Further studies are required to explain the effects of migraine on children and adolescents, as well as the interaction of it with co-morbid situations.

**Keywords:** migraine, psychopathology, quality of life, child

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**[PP-079] Anxiety disorders**

## Aggression in posttraumatic stress disorder

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**Objective:** High levels of anger and aggression in post-traumatic stress disorder lead to unfavorable social, legal, physical and economic results to family members and the other social layers as much as patients. In this study, it is aimed to investigate the relation between both alcohol-cigarette consumption ratios and anger levels, characteristics of aggressive behaviors and the judicial outcome in cases diagnosed post-traumatic stress disorder due to armed conflict.

**Methods:** 38 cases diagnosed as post-traumatic stress disorder were included to the study. Pre- and post-traumatic alcohol/cigarette consumption amounts and aggressive behaviors are determined. Impact of Events Scale (Revised) (IES-R) was used for evaluating post-traumatic stress disorder symptom patterns and severity, Buss Perry Aggression Questionnaire was used for measuring anger and aggression levels, and Taylor's Violence Rating Scale was used for evaluating the judicial outcome of aggression.

**Results:** 23 of cases (60.6%) were married with children, 13 of cases (34.25) were single and 2 of cases (5.2%) were divorced. 18 of cases (47.4%) were graduate. IES-R total score was  $66.9 \pm 12.7$ , Buss Perry total score was  $111.3 \pm 20.5$ , and Taylor's Violence Rate was  $2.5 \pm 1.0$ . When the pre- and post-traumatic aggressive behaviors were compared; physical violence to the partner was increased more than ten times, Physical and verbal violence to social individuals were increased more than four and seven times, respectively. And also it is observed that inflicting damage to property was increased 17 times, reckless driving was increased 11 times, and self-mutilation was increased 5 times. Alcohol consumption was determined as 0 (0 - 126) g/day for pre-trauma cases and 16.5 (0 - 294) g/day for post-trauma cases. Cigarette smoking was determined as 5 (0 - 40) cigarette/day for pre-trauma cases and 30 (0 - 60) cigarette/day for post-trauma cases.

**Conclusion:** Post-traumatic stress disorder associated with high levels of anger and aggression and alcohol can cause familial-marital problems, breaking up a family, increase in judicial problems and arrest, increase in ratios of self-mutilation and severe bodily injuries, physical violence to patterns and children, progressing of post-traumatic stress disorder, severe mental situations such as depression and suicide. For these reasons, careful detection of alcohol-drug abuse and overstimulation symptoms as anger/aggression in post-traumatic stress disorder, and rapid target-driven psychopharmacologic and psychotherapeutic interventions become more of an issue.

**Keywords:** aggression, anger, posttraumatic stress disorder

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**[PP-080] Mood disorders****The Relationship between symptom severity and discomfort intolerance in women with premenstrual dysphoric disorder**

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**Objectives:** Discomfort intolerance a well-established psychological construct that was shown to be related to various anxiety disorders and depressive mood as well as functional disorders such as irritable bowel syndrome. Premenstrual dysphoric disorder (PMDD) appeared in Diagnostic and Statistical Manual of Mental Disorders-5<sup>th</sup> Edition (DSM-5) under the category of mood disorders. Psychological factors in experiencing and expression of PMDD symptoms seem to be important area of research. We aimed to evaluate the relationship between the severity of the (psychological and physical) symptoms and discomfort intolerance in women with PMDD.

**Methods:** Thirty-three females, who were presented to either gynecology or psychiatry department of Diskapi Yildirim Beyazit Education and Research Hospital with severe premenstrual symptoms and those their diagnoses were confirmed by a psychiatrist according to DSM-5 criteria for PMDD were included the study. A form for socio-demographics, Distress Intolerance Scale (DIS), and Premenstrual Symptoms Screening Tool (PSST) were given to the participants.

**Results:** Mean age of the study group was  $31.12 \pm 8.4$  and the mean age at menarche was  $13.15 \pm 1.48$ . Most of the women (72%) were at least high school graduates and about half of them (54.5%) were married. Total DIS scores were very high ( $19.23 \pm 6.16$ ) in the study group. DIS subscale-1 (withstanding to the discomfort) was significantly correlated with the insomnia item of the PSST; DIS subscale-2 (avoiding from discomfort) was correlated with tearful/increased sensitivity to rejection, depressed mood, and difficulty concentration items; and DIS total score was correlated with tearful/increased sensitivity to rejection, depressed mood, and insomnia items.

**Conclusions:** Discomfort intolerance levels mainly related some of the core symptoms of PMDD, namely increased sensitivity to rejection and depressed mood in women with PMDD. These preliminary results suggest that the core symptoms of PMDD rather than physical symptoms are related to discomfort intolerance. So discomfort intolerance might be a focus of interest for psychological interventions in the management of PMDD.

**Keywords:** premenstrual dysphoric syndrome, discomfort, intolerance

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**[PP-081] Psychopharmacology****Compulsive buying disorder treatment with naltrexone: a case report**

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Compulsive buying disorder (CBD) is characterized by excessive shopping cognitions and buying unneeded or unwanted items, causing serious psychological, financial and familial problems. The etiology of CBD is unknown. It was reported that 5.8% of the US general population suffers from the disorder and that 80% of CBD sufferers are women. There are no established diagnostic criteria for CBD. Psychiatric comorbidity is frequent, particularly mood disorders, anxiety disorders, substance use disorders, impulse control and Obsessive compulsive disorders. Treatment has not been well delineated, but psychodynamic psychotherapy or cognitive-behavioral therapy may be helpful. Selective serotonin re-uptake inhibitors, opioid antagonists, mood stabilizers and atypical antipsychotics may help some patients regulate their buying impulses. Naltrexone is a pure opioid antagonist that blocks the effects of opioids by competitive binding at opioid mu receptors. Kim has reported naltrexone treatment (100 mg/day) for CBD in one individual with comorbid bulimia nervosa. Grant reported treatment of three cases with high-dose naltrexone (100-200 mg/day) for CBD. In this presentation, we are going

to present a case with CBD who was treated with naltrexone. A 34-year-old woman was admitted to the outpatient unit for help with her uncontrolled buying behaviors. She had this complaint of buying unnecessary items for the last eight years. She said "I cannot stop shopping, it is like marihuana for me, I cannot get this out of my mind". After shopping, she was feeling relaxed, but only temporarily. She reported spending 30.000 Turkish liras in a week and that she did not want to go outside anymore because she buys something whenever she goes outside. She said that her husband had cancelled her credit cards and she bought furniture mostly because she could buy them by signing a bill of exchange. She reported depressive mood and anhedonia. However, these symptoms were mostly due to her CBD and its negative consequences. She did not meet full criteria for a major depressive episode. Although she mentioned occasional mood elevations, there was no history of hypomania and her compulsive buying was not associated with a seasonal or episodic pattern. Earlier, she used sertraline 200 mg/day for eight months but she reported no benefits out of sertraline. When she was admitted to our clinic, she was using fluoxetine 80 mg/day. The patient was diagnosed to have compulsive buying disorder. Naltrexone treatment was started at a dose of 50 mg/day. At the follow up interview that took place four weeks after starting naltrexone, the patient reported that the urge to buy was reduced. She said she could go outside on her own twice without giving in to her urge of shopping. However, she did not attend her next follow up interview. Therefore, we did not have long-term outcome data and the patient was considered as lost at follow up. In conclusion, although we only have data for the first month of treatment, our case supports the positive results of other case reports indicating possible efficacy of naltrexone for CBD. Controlled studies of naltrexone in patients with CBD are needed.

**Keywords:** compulsive buying disorder, naltrexone, treatment

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**[PP-082] Mood disorders**

**Bipolar affective disorder that occurs after a psychotic depressive episode in a young patient with multiple sclerosis: a case report**

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Multiple sclerosis is a chronic demyelinating disease of the central nervous system. Demyelinating diseases also can cause almost every psychiatric disorder like other central nervous system diseases. In this case report, we are going to discuss a 19-years-old multiple sclerosis patient, who had a diagnosis of bipolar affective disorder after a psychotic depressive episode.

The patient was 19-years-old male. Approximately 7 months ago, he had been diagnosed multiple sclerosis after admitting to a neurology clinic due to numbness and loss of sensation in the face and inability to look both lateral sides. His complaints regressed after several neurology polyclinic controls. Then he had been taken to a neurology polyclinic by his relatives because of reluctance, insomnia, feeling of inappropriate guilt, worthlessness, uncontrollable crying spells, refuse to eat or drink complaints, which he was suffering for 10 days. In the control MR, there had been demyelinating plaques at C6 region of cervical medulla spinalis; callosal, pericallosal and periventricular multiple demyelinating plaques in white matter at supratentorial region; several demyelinating millimetric plaques in the brain stem. However, he had been said to be stable in terms of neurology and he was referred to our psychiatry clinic. His biochemistry results and neurological examination was normal; he was hospitalized to our clinic and diagnosed with major depression with psychotic features. In his mental state examination, there was decreased self-care. He wasn't making eye contact. His mood was depressive, affect was restricted. His speech rate and ease of conversation were decreased and there was latency in response. He was describing auditory hallucinations and visual hallucination. His speed of thinking and associations was decreased. Persecutory ideas of reference were present. HAM-D score was found 24. Paroxetine 20 mg/day, lorazepam 1 mg/day, amisulpiride 200 mg/day was ordered. At the end of the second week, psychomotor retardation and vegetative symptoms were dramatically improved. The patient, whose HAM-D score was decreased to 12, mood symptoms and psychotic symptoms regressed, discharged from hospital with paroxetine 30 mg/day and amisulpiride 300 mg/day at the end of the third week. His state at first polyclinic control was stable; however, in his second control, there was euphoric mood, increased libido, decreased need for sleep, increased energy and activity, logorrhea, increased money spending. He was hospitalized again with pre-diagnose of bipolar affective disorder manic episode and paroxetine doses were lowered and then totally stopped gradually.

In multiple sclerosis, bipolar affective disorder episodes can be the first sign of the disease. Also, it can be seen as a concurrent diagnose or can be occurred as a side effect of medication used in order to treat multiple sclerosis. Multiple sclerosis and bipolar affective disorder co-occurrence is a well-known but little clarified situation. In our case, there was a bipolar affective disorder, which was occurred after

multiple sclerosis. Although there is no way to tell if it was secondary to MS or they were two comorbidities, concomitance of MS and mood disorders incidence in literature suggests that MS might cause mood disorders.

**Keywords:** multiple sclerosis, psychotic depression, bipolar affective disorder

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**[PP-083] Obsessive compulsive disorder**

## A psychotic disorder patient with Parkinsonism symptoms who gives good response to anti-obsessive compulsive medication: a case report

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In this case report, an OCD patient, who had been followed up with psychotic disorder diagnosis and treated with depot and oral antipsychotics for 2 years, is going to be discussed. We suggested that, Parkinsonism symptoms occurred due to antipsychotics and we rearranged his medical treatment. After adding anti-obsessional medication to treatment and rearrange medications, symptoms and functionality improved greatly.

Our case is a 36-years-old male. Two years ago, he had diagnosed as having psychotic disorder and treated with ECT, depot and oral antipsychotics. In spite of this treatment, in addition to his latter complaints, he presented extra complaints such as sexual obsessions and movement restrictions. He was hospitalized to our clinic. His physical examination was ordinary. In his neurological examination, there were movement restrictions and mask-like facial expression. His personal medical history was clear. At the time of mental state examination, his self-care was moderate; psychomotor activity was lowered. His mood and affect was restricted; partially anxious. His spontaneity and rate of speech were decreased and his tone of speech was monotonous. There was an overvalued idea such as somebody has bewitched him. His speed of thought was lowered and there was response time latency. There were sexual obsessions; and compulsions like praying and repeating words from inside. His memory examination was ordinary, except recalling. His ability of abstract thinking was partially conserved. His fund of knowledge and intelligence was coherent with his education. His insight was poor. The patient was diagnosed as having OCD and he scored 45 points from Yale-Brown Obsessive Compulsive Scale (YBOC-S). His Mini Mental State Examination score was 24. Antipsychotic doses that he was receiving were reduced and the treatment was rearranged as risperidone 2 mg/day, fluvoxamine 100 mg/day, and clonazepam 2 mg/day. Neurology consultation was made for Parkinsonism symptoms and his brain MRI and EEG findings were found to be in normal range. Movement restriction, rigidity and mask-like face expression symptoms were thought to be associated with the use of depot antipsychotics. With regard to this, antipsychotic doses were reduced and stopped gradually. Lithium was added to treatment as an augmentation. In his clinic follow-ups, his obsessions and sociality were improved and he started to express his obsessions with more ease. Parkinsonism symptoms were reduced and his insight of disease was improved. In the repetition rating of YBOC-S, he scored 30 points (his first score was 45). The patient, whose psychotic symptoms were disappeared and affective interaction improved, discharged from hospital with fluvoxamine 200 mg/day, clonazepam 2 mg/day, lithium 600 mg/day, vitamin-E 400 mg/day and omega-3 1000 mg/day.

Parkinsonism is a commonly seen side effect in patients using antipsychotic medication. OCD patients, whose insight are poor and present psychotic symptoms can be misdiagnosed in polyclinics and can be administered a high dose of antipsychotics. In these situations, this may contribute to the worsening of the prognosis and the functionality of the patient

**Keywords:** antipsychotics, Obsessive compulsive disorder, parkinsonism

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S135**

**[PP-084] Psychopharmacology****Acute blockade of P2X7 receptors by Brilliant Blue G does not result in antidepressant-like activity in mice**

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**Objective:** Purinergic 2X7 receptor activation has recently been considered to be possibly involved in depression by resulting in excessive glutamatergic neurotransmission and also increased release of proinflammatory cytokines through NLRP3 inflammasome pathway. In very recent studies, PPADS and iso-PPADS, non-selective P2R and P2XR antagonists respectively, are shown to have acute antidepressant-like effects and genetic deletion of P2X7R induces antidepressant-like state in mice. Therefore, the aim of the present study is to investigate whether the acute administration of Brilliant Blue G (BBG), a highly selective P2X7R antagonist, has antidepressant-like effects in forced swim (FST) and tail suspension tests (TST) in mice.

**Methods:** Balb-c mice (20-40 g) were divided into Control (saline), Imipramine (30 mg/kg), BBG (100 mg/kg), Imipramine +BBG (30 mg/kg+100 mg/kg) groups (n=10-14 in each). FST and TST were applied to distinct groups 30 min after i.p. drug administration for assessing the acute antidepressant-like effects of BBG. Mice subjected to FST or TST were allowed to swim for 6 min (temperature remained at 23-25 °C) or suspended by the tails for 5 min, respectively. The time of immobility was video recorded and scored by three different trained experimenters. One-way analysis of variance (ANOVA) was used for statistical analysis followed by Tukey's test.

**Results:** The time of immobility was significantly reduced in Imipramine (30 mg/kg) groups compared to control (saline) groups (FST;  $p < 0.001$ , TST;  $p < 0.01$ ). The time of immobility in BBG (100 mg/kg) groups were not statistically different when compared to control groups. When combined with Imipramine, the immobility time was reduced significantly compared to BBG alone (FST;  $p < 0.001$ , TST;  $p < 0.05$ ) and control (TST;  $p < 0.01$ ).

**Conclusions:** Our present results from the both despair models suggest that acute administration of BBG did not result in antidepressant-like activity. Further, BBG does not enhance or reverse the antidepressant effect of imipramine that can be interpreted as not interacting with serotonergic neurotransmission. These results strongly support our notion that questioning P2X7 receptors involvement in depression requires activation of NLRP3 inflammasome by ATP-mediated danger stimulus such as stress in psychiatric manner. Therefore, future studies are needed to further investigate the role of P2X7 receptor activation in stress-mediated chronic pathologies as in depression.

**Keywords:** Brilliant Blue G, depression, P2X7

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S136**

**[PP-085] Stress related conditions****Posttraumatic stress disorder symptoms in patients with acute myocardial infarction**Murat Semiz<sup>1</sup>, Fatma Erdem<sup>2</sup>, Alim Erdem<sup>2</sup>, Taha Can Tuman<sup>3</sup>, Meral Oran Demir<sup>1</sup>, Nefise Kayka<sup>3</sup>, Osman Yildirim<sup>3</sup><sup>1</sup>Gaziosmanpasa University, Faculty of Medicine, Department of Psychiatry, Tokat-Turkey<sup>2</sup>Abant İzzet Basal University, Faculty of Medicine, Department of Cardiology, Bolu-Turkey<sup>3</sup>Abant İzzet Baysal University, Faculty of Medicine, Department of Psychiatry, Bolu-Turkey

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**Objective:** The aim of this study is to investigate depression, anxiety and posttraumatic stress disorder (PTSD) symptoms in patients with acute myocardial infarction (AMI). In our study psychiatric symptoms was also examined in relation with clinical findings.

**Method:** In this study 50 patients, who came to the cardiology polyclinic after spending a month after AMI were taken. Sociodemographic form, Hospital Anxiety-Depression (HAD) and Post Traumatic Stress Disorder Checklist (Civilian Version) (PTSD-CL) were asked to be completed. AMI patients, who experience physical or mental events that can lead to PTSD symptoms, were excluded from the study.

**Results:** The average score of the patients' anxiety scale was  $8.7 \pm 4.3$ . Anxiety scale, when evaluated according to the cut-off point, 26% of patients were shown to be suffering from an anxiety disorder. In particular of depression scale, the average score was  $7.2 \pm 3.6$  and according to the cutoff point, depressive disorder could be detected in 36% of patients (n=18). The average PCL-C score was  $22.1 \pm 5.1$ .

24% of patients had a value above cut-off scores on the PCL-C scale and the possibility of PTSD was considered as high in these patients. **Conclusion:** In this study, AMI patients were identified with high rates of PTSD symptoms. The duration of hospitalization and angina symptoms after discharge were associated with symptoms of PTSD. In AMI patients PTSD symptoms as well as depressive symptoms must be considered.

**Keywords:** posttraumatic stress disorder, acute myocardial infarction, anxiety

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**[PP-086] Schizophrenia and other psychotic disorders**

## Delusional disorder with family burden and jealous delusions of incestuous content: a case report

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The primary aim of this report is to discuss a case of delusional disorder with jealousy delusions of incestuous content where a father and an uncle sharing similar delusions.

Our case is a 37-year-old male patient, whose complaints had started 4 years back when he moved out from his house upon thinking that two siblings living in his neighborhood were having an affair. After that he developed jealousy delusions that his wife was cheating on him with her brother. Since his delusions kept increasing in the past 6 months, his family and social relations began to break down. He started to put camera and voice recorders in the house in order to prove his ideas and he stopped going to work and even going out because of his jealousy delusions. So he was brought to our clinic and hospitalized. He had no history of psychiatric or organic disease. According to the history taken from the patient and his relatives, patient's father and uncle had similar jealousy delusions about their wives at similar ages and were hospitalized many times. In the psychiatric examination, the patient was conscious, oriented, and cooperative and had good self-care and an age-appropriate look. His psychomotor activity was normal. He was partially open to communication. He had a dysphoric mood and an anxious affect. He did not describe any hallucinations. He had jealousy delusions regarding an incestuous affair between his wife and her brother. His functioning was poor because of his delusions. Cognitive functions were preserved. His impulse control was poor. His judgment was also poor and insight was partial. There was no homicidal or suicidal ideation in thought content. Results of routine biochemical tests, complete blood count and thyroid hormone profile were within a normal range. Cranial CT and EEG findings were normal. Rorschach test could not be evaluated because of inadequate data due to patient's defensive attitude. Risperidone 4 mg/day and alprazolam 0.5 mg/day were started with a diagnosis of delusional disorder. Patient whose delusions were partially improved was discharged on his and his family's request to carry on an outpatient treatment.

Delusional disorder is a psychiatric condition that starts in middle ages but also one can display paranoid features in premorbid personality. As with our case, similar jealousy delusions in the family may suggest the role of genetic predisposition as well as premorbid personality traits.

**Keywords:** jealousy delusions, delusional disorder, genetic tendency

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**[PP-087] Others****Restless legs syndrome due to use of mirtazapine and treatment with pramipexole**Atakan Yucel<sup>1</sup>, Halil Ozcan<sup>1</sup>, Nermin Yucel<sup>2</sup>, Unsal Aydinoglu<sup>1</sup><sup>1</sup>Ataturk University, Faculty of Medicine, Department of Psychiatry, Erzurum-Turkey<sup>2</sup>Ataturk University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Erzurum-Turkey

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Restless legs syndrome (RLS) is a neuropsychiatric syndrome that may lead to chronic insomnia and may impair the quality of sleep. The typical clinical features are motor restlessness, difficulty falling asleep, dysesthesia, the requirement of unbearably moving extremities. RLS can be caused by vitamin deficiencies, anemia, secondary to certain drugs and an unknown number of reasons. Antidepressant drugs that have been reported may trigger RLS. A case with mirtazapine induced RLS will be presented.

A 57-year-old female was admitted to psychiatry outpatient clinic with the existing complaints such as reluctance, inability to enjoy life, feeling worthless, attention deficiency, loss of concentration, insomnia, anxiety and waking up suddenly lasting a month. The physical examination was unremarkable. Results of laboratory tests such as biochemical parameters, complete blood count, thyroid function tests, vitamin B12, vitamin D and folic acid levels were in normal range. On psychiatric examination; she was conscious, oriented and her cooperation was fluent and understandable. She had anxious affect and depressive mood. Her thought content was related to symptoms of insomnia, anhedonia was detected and there was no hallucination and delusion. The diagnosis was compatible with Major Depressive Disorder according to DSM-V. Mirtazapine 15mg/day was initiated and techniques for sleep hygiene were recommended. She was evaluated using Hamilton Depression Rating Scale (HDRS) (33/51); Beck Depression Inventory (BDI) (48/63); Beck Anxiety Inventory (BAI) (52/63) and Pittsburgh Sleep Quality Index (PSQI) (10/21) at the first application. At the end of third week, treatment scores were as follows; HDRS (20/51), BDI (21/63), BAI (23/63) and PSQI (7/21). The patient's depressive and anxiety symptoms were decreased compared with the first application. However sleep quality had not improved enough. Furthermore additional complaints such as increasing sensations of tingling, burning and restlessness in the legs, urge to get out of the bed had arose especially in the evening. These additional symptoms were compatible with RLS. Therefore, pramipexole 0.25 mg/day was added her treatment. Compared with the first application, her scores were as follows; HDRS (7/51), BDI (9/63), BAI (4/63) and PSQI (3/21) at the end of the sixth week of treatment. Follow-up of this patient is ongoing.

Association of insomnia and depressive symptoms are frequently reported and it may be related to each other. Drugs with a high sedative property such as mirtazapine may be used in the treatment of both conditions. Some case reports that use of pramipexole in the strengthening treatment of depression was presented in the literature. In this case RLS was aroused after the treatment of mirtazapine, this situation was thought it might be mirtazapine induced RLS. After addition of pramipexole to the mirtazapine treatment, RLS symptoms decreased as well as anti-depressive treatment was strengthened. The purpose of this case is to remind that RLS might occur due to mirtazapine and can be treated with pramipexole successfully.

**Keywords:** insomnia, mirtazapine, restless leg syndrome, pramipexole**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S138****[PP-088] Attention deficit-hyperactivity disorder****Assessment of life quality in the children with attention deficit hyperactivity disorder by comparison with type-1 diabetes mellitus and healthy control groups**Nihal Yurteri Cetin<sup>1</sup>, Aynur Akay<sup>2</sup>, Hulya Ellidokuz<sup>3</sup><sup>1</sup>Eskisehir State Hospital, Department of Child And Adolescent Psychiatry Clinic, Eskisehir-Turkey<sup>2</sup>Dokuz Eylul University, Faculty of Medicine, Department of Child And Adolescent Psychiatry, Izmir-Turkey<sup>3</sup>Dokuz Eylul University, Faculty of Medicine, Department of Biostatistics, Izmir-Turkey

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**Objective:** Attention deficit hyperactivity disorder (ADHD), which is characterized by developmentally inappropriate levels of hyperactivity, impulsivity, and inattentiveness, has been identified as an important psychiatric condition in terms of its prevalence (around 5% worldwide) and its impact on quality of life for patients and their families. Type 1 Diabetes Mellitus (DM) is one of the most common chronic diseases of childhood. In the present study, the life quality of children and adolescents with ADHD was compared both with the life quality of children and

adolescents with Type 1 DM and with healthy control groups.

**Method:** 60 ADHD cases, 60 Type 1 DM patients and 60 healthy controls, in total 180 children and adolescents, aged between 8-16 years were enrolled in this prospective, case-control study. The diagnostic assessments of psychiatric disorders in all subjects were made according to the DSM-IV criteria, the Kiddie-Schedule for Affective Disorders and Schizophrenia for School-Age Children—Present and the Lifetime (K-SADS PL). Sociodemographic scale, Pediatric Quality of Life Scale for Children (PedsQL 4.0 TM) were applied to all of the children - adolescents and their parents. The results were assessed with appropriate statistical analysis.

**Results:** In our study, the mean age was found  $130.25 \pm 16.31$  months ( $10.8 \pm 1.4$  years) in the case and the control groups. The majority of ADHD subjects (68.3%) were male. Children and adolescents in the control groups were matched to subjects in the ADHD group according to age and sex. As a result, no significant difference between the groups were found in terms of age and sex ( $p=0.995$ ,  $p=0.633$ ). Compared with healthy controls, children and adolescents with diagnosed ADHD reported lower self-concept in all subscales and total scores of PedsQL except "Physical Health Summary" ("Emotional Functioning", "Social Functioning", "Academic Functioning", "Psychosocial Health Summary" and "Scale Summary") ( $p<0.01$ ). No significant difference was found in "Physical Health Summary" score ( $p:0.216$ ). Similarly, children and adolescents with diagnosed ADHD reported lower self-concept in terms of "Emotional Functioning" and "Psychosocial Health Summary" scores than reported by children and adolescents with Type 1 DM ( $p<0.05$ ).

**Conclusions:** Life quality in terms of "Emotional Functioning", "Social Functioning", "Academic Functioning" and "Psychosocial Health" were found to be impaired in ADHD subjects.

**Keywords:** attention deficit hyperactivity disorder, pediatric quality of life inventory, type-1 diabetes mellitus

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#### [PP-089] *Schizophrenia and other psychotic disorders*

### Fatty liver-induced changes in stereotypic behavior in rats and effects of glucagon like peptid-1 analog on stereotypy

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**Objectives:** Although the relation between psychotic behavior and immune abnormalities has taken attention for many years, it remains to be elucidated whether the alterations in cytokine levels are part of etiology or result of the stress associated with the disorder. In the light of the previous studies about cytokine level alterations due to metabolic changes and psychosis, we hypothesized that fatty liver might potentiate apomorphine-induced stereotypy in a rodent model and that a synthetic GLP-1 analog, exenatide would ameliorate this effect.

**Methods:** 18 male Sprague Dawley albino mature rats were used; 30% fructose was given in drinking water for 8 weeks in order to induce the hepatosteatosis. The animals were divided into three groups (normal group, intra cerebro ventricular (ICV) exenatide group and ICV NaCl group). Apomorphine-induced stereotypic behavior test was performed in all groups and the liver was removed for histopathological examination after all the rats were euthanized. Apomorphine-induced stereotypic behavior test Signs of stereotypy, which include mainly sniffing and gnawing, were served and scored as follows: absence of stereotypy (0), occasional sniffing (1), occasional sniffing with occasional gnawing (2), frequent gnawing (3), intense continuous gnawing (4), intense gnawing and staying on the same spot (5). The stereotypic behavior was rated after each minute and mean of 15 min period was calculated and recorded.

**Results:** In nonalcoholic fatty liver (NAFL) group, stereotypy scores were significantly increased compared to the control group rats ( $p < 0.00001$ ). Significant decreases in stereotypy scores were observed in ICV exenatide group with NAFL when compared to ICV saline group with NAFL ( $p<0.005$ ). Also, brain MDA and TNF $\alpha$  levels decreased in exenatide treatment group.

**Conclusions:** In the present study, we demonstrated that fatty liver enhanced the effects of apomorphines on stereotypy, which was reversed by exenatide possibly via antioxidant and anti-inflammatory effects.

**Keywords:** psychosis, exenatide, nonalcoholic fatty liver, apomorphine induced stereotypic behavior test

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S139**

**[PP-090] Psychopharmacology****Antipsychotic-like effect of trimetazidine in a rodent model**Oytun Erbas<sup>1</sup>, Huseyin Akseki<sup>2</sup>, Betul Elikucuk<sup>3</sup>, Dilek Taskiran<sup>4</sup><sup>1</sup>Gaziosmanpasa University, Faculty of Medicine, Department of Physiology, Tokat-Turkey<sup>2</sup>Odemis State Hospital, Izmir-Turkey<sup>3</sup>Manisa Psychiatry Hospital, Manisa-Turkey<sup>4</sup>Ege University, Faculty of Medicine, Department of Physiology, Izmir-Turkey

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**Objectives:** Schizophrenia is a psychiatric disorder, which is thought to have close relationship with hyperdopaminergic activity. Trimetazidine an anti-ischemic drug, has been used in cardiology practice due to its protective effects particularly against myocardial ischemia and reperfusion injury. Trimetazidine is thought to carry out its effects via supporting cellular homeostasis during ischemia-reperfusion injury.

**Methods:** Apomorphine-Induced Stereotypic Behavior Test: Mesolimbic and nigrostriatal dopaminergic pathways play crucial roles in the mediation of locomotor activity and stereotyped behavior. Apomorphine induced stereotypy is due to the stimulation of dopamine receptors and has been used as a convenient method for in vivo screening of dopamine agonists or antagonists and assessment of dopaminergic activity. Briefly, four groups of rat (n=7) were administered TMZ (10 and 20 mg/kg, i.p.), chlorpromazine (1 mg/kg, i.p.), and isotonic saline (1 mL/kg, i.p.). One hour later, apomorphine (2 mg/kg, s.c.) was administered to each rat. First, rats were placed into the cylindrical metal cages (18 × 19 cm) containing vertical (1 cm apart) and horizontal (4.5 cm apart) metal bars (2 mm) with upper lid for 10 minutes for orientation period. After apomorphine administration, the rats were immediately placed back into the metal cages and observed for stereotypic behavior. Signs of stereotypy, which include mainly sniffing and gnawing, were observed and scored as follows: absence of stereotypy (0), occasional sniffing (1), occasional sniffing with occasional gnawing (2), frequent gnawing (3), intense continuous gnawing (4), and intense gnawing and staying on the same spot (5). The stereotypic behavior was rated after each minute, and mean of 15 min period was calculated and recorded.

**Results:** The inhibitory effect of TMZ on rearing behavior was dose dependent, being more evident at a higher dose (20 mg/kg). Post-hoc Bonferonni test demonstrated a highly significant decrease in stereotypy scores in both doses of TMZ and chlorpromazine compared to saline group. The decrease was significantly greater with 20 mg/kg of TMZ compared to 10 mg/kg.

**Conclusion:** This study demonstrates the beneficial effects of TMZ on rearing behavior and stereotypy, which are accepted to be indicators of anti-psychotic effect.

**Keywords:** antipsychotic, trimetazidine

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**[PP-091] Schizophrenia and other psychotic disorders****DNA damage and oxidative stress in patients with schizophrenia: a comparative study**Hasan Mayda<sup>1</sup>, Erman Bagcioglu<sup>1</sup>, Kerem Senol Coskun<sup>1</sup>, Salih Selek<sup>2</sup>, Ibrahim Fatih Karababa<sup>3</sup>, Ibrahim Hakki Cigerci<sup>4</sup>, Halil Ibrahim Guzel<sup>1</sup><sup>1</sup>Afyon Kocatepe University, Faculty of Medicine, Departments of Psychiatry, Afyonkarahisar-Turkey<sup>2</sup>Medeniyet University, Faculty of Medicine, Departments of Psychiatry, Istanbul-Turkey<sup>3</sup>Harran University, Faculty of Medicine, Departments of Psychiatry, Sanliurfa, Turkey<sup>4</sup>Afyon Kocatepe University, Faculty of Science and Literatures, Departments of Biology, Afyonkarahisar-Turkey

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**Objective:** To investigate whether has effect of DNA damage in the pathogenesis of schizophrenia or not, by using Comet assay method (procedure) and to reveal the possible relationship between DNA damage and oxidative stress.

**Methods:** 31 patients with schizophrenia, who were admitted to an outpatient or inpatient treatment in the Afyon Kocatepe University, Faculty of Medicine, Psychiatry Clinic and 36 healthy patients were included in this study. In the Afyon Kocatepe University Molecular Biology Department Laboratory, total antioxidant capacity (TAC), total oxidant status (TOS) and oxidative stress index (OSI) measurements were performed by ready-kit method and DNA damage analysis was performed by Comet Assay method.

**Results:** DNA damage, TOS and OSI scores were found a higher in patients with schizophrenia than the control group. There was no statistically significant difference in TAC score between patient and control groups. There was a positive correlation between the total PANSS score and DNA damage score. There was positive correlation between DNA damage score and TOS score or OSI score.

**Conclusions:** Our study supports previous studies that oxidative stress and DNA damage was involved in pathogenesis of schizophrenia. DNA damage is associated with disease severity and oxidative stress may play important role in the formation of DNA damage.

**Keywords:** schizophrenia, oxidative stress, DNA damage, comet assay

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### [PP-092] *Mood disorders*

## Family history in patients with bipolar disorder

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**Objective:** In this study, we aimed to better understand the genetic transmission of bipolar disorder by examining the family history of patients.

**Method:** 63 bipolar disorder patients and their families are included in this study. The sample was derived from 156 bipolar patients and their family members. An inclusion criterion for the study is the presence of bipolar disorder history in the family. The diagnosis of the other family members is confirmed by analyzing their files and hospital records or calling them to the hospital.

**Results:** 65 of the patients were female (41.6%) and 91 of them were male (58.3%). (The rate of men/women: 1.40) When analyzing the results in terms of the transition of the disease from the mother's side or the father's side, similar result were found. There were 25 patients from the mother's side and 25 patients from the father's side in 63 cases.

**Conclusion:** The findings of our study showed that bipolar disorder could be seen more frequently in men than in women (approximately 1.4 times more) and the rate of the transition from the mother's side and the father's side can be similar.

**Keywords:** bipolar disorder, family history, genetic transmission

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### [PP-093] *Attention deficit-hyperactivity disorder*

## Methylphenidate and dermatological side effects

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Methylphenidate is a stimulant drug used in Attention deficit hyperactivity disorder in children and adolescent psychiatry clinic. Along with its needed effects, methylphenidate may cause some unwanted effects. Although not all of these side effects may occur, if they do occur they may need medical attention. One of these, seen rarely but needs treatment, when once occurred are dermatological side effects such as skin rash, dermatitis. We report a case, 12-year-old boy developing acneiform eruptions and dermatitis in the scalp just after increasing dose of methylphenidate from 27 mg/day to 36 mg/day.

A 12-year-boy was presented to the clinic with attention deficit hyperactivity disorder and learning disability was started methylphenidate

27 mg per day. The child developed acneiform drug eruption on face. Two months later, the dose was increased to 36 mg per day because of partial response. And shortly after the dose increase dermatitis in scalp region was observed at the same time. The laboratory findings also showed an increase in eosinophil to 11%, comparing to the initial eosinophil level of 6%. The other hematological and biochemical laboratory findings were normal. The dermatitis in scalp was treated topically by dermatologist. And afterwards the stimulant dose was decreased to 18 mg per day and dermatological symptoms improved progressively.

In this case, we discuss that commonly seen dermatological disorders such as acne and dermatitis could be a result of the use of a stimulant drug in children and adolescents.

**Keywords:** methylphenidate, dermatological side effect, eosinophil

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**[PP-094] Schizophrenia and other psychotic disorders**

## White matter abnormalities and Virchow Robin spaces in patients with psychotic disorders

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White matter abnormalities (WMA), also known as subcortical hyperintense lesions on magnetic resonance imaging (MRI), may be seen in a variety of pathologic processes including genetic, vascular, toxic, metabolic, infectious, inflammatory, and traumatic diseases. Cerebral WMA comprised of periventricular and deep subcortical alterations have been reported in psychiatric populations such as patients with affective disorders, Obsessive compulsive disorders, and psychotic disorders. These white matter changes may reflect tract abnormalities contributing to the clinical presentation and pathophysiology of mental disorders. The Virchow-Robin spaces (VRS) are perivascular spaces surrounding the subcortical small cerebral blood vessels. VRS are normally very small, microscopic, but when dilated, they can be well visualized with MRI. The patient sample comprised 24 patients with psychotic disorders who had white matter abnormalities on MRI. Magnetic resonance imaging (MRI) revealed periventricular white matter changes in twelve patients (50,0%), frontal lesions in six patients (25,0%), parietal lesions in six patients (25,0%), temporal lesions in one patients (4,2%), infratentorial lesions in two patients (8,3%), and Virchow Robin spaces in eight patients (33,3%). This study suggested that there was a relationship between white matter abnormalities and psychotic disorders.

**Keywords:** white matter abnormalities, Virchow Robin space, psychotic disorder

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**[PP-095] Schizophrenia and other psychotic disorders**

## Psychotic attacks due to toxic neurobrucellosis in two adolescent patients

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Immunopathologic mechanisms like T-cell mediated cytotoxicity and microglia activation are suggested to play a role in neurobrucellosis. The diagnosis of toxic neurobrucellosis is confirmed by isolation of Brucella organism from blood cultures and/or positive Coombs Wright test and the Standard agglutination test (SAT) in serum, when there are no cerebrospinal fluid (CSF) findings. The magnetic resonance imaging (MRI) of brain in patients with neurobrucellosis may show abnormalities such as inflammation, white matter changes and

vascular pathologies and these can mimic other neurologic diseases. In this study, we present two adolescents who presented with psychotic symptoms due to toxic neurobrucellosis.

**Case 1:** A is a 15-year-old student living in a village within the municipal boundaries of Van Province. Such complaints as talking nonsense, hallucinations, laughing to oneself, detrimental behavior towards people and things around him, insomnia and lack of appetite were reported to have started a month before the patient's application to the psychiatry outpatient service. In his physical examination, it was revealed that he had pain and sensitivity in his left hip joint aggravating upon movement and causing a limp in his walk. In laboratory analyses, Wright's Brucella tube agglutination test result was positive in the titration of 1/60. Leukoencephalytic changes in perisupraventricular white matter were monitored in both cerebral hemispheres through Magnetic Resonance Imaging (MR).

**Case 2:** B is a 14-year-old female applying for treatment from district of Patnos, a province of Agri. The patient, not having applied for psychiatric help so far, was brought to our psychiatry outpatient service by her relatives with complaints of such behavior as talking nonsense, talking to herself, insomnia, nervousness, hearing voices calling her name, leaving home, breaking things, punching people around her, attempting at setting the house on fire, tearing her clothes off, seeing non-existent things such as a man in white, two girls and two dogs and saying that she was talking with them and an increase in movements and amount of speech. As for organic etiology, increased white matter signals were recorded and monitored at the level of right corona radiata and in the vicinity of left lateral ventricle atrium in brain MR. In her clinical follow-up visit, she was consulted to the department of infectious diseases since she had fever at subfebrile levels, and a blood culture sample collected at the time of her fever was sent thereto. Brucella reproduced in the blood culture.

These data suggest that white matter involvement may be an immune-mediated reaction in central nervous system to brucellosis infection. Persistence of residual symptoms in follow-up visits of the two cases demonstrates that the bacteria might give rise to longer and chronic processes due to toxic effect since bacteria can trigger immune mechanisms.

**Keywords:** toxic neurobrucellosis, psychotic symptoms, adolescent patient

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#### [PP-096] *Obsessive compulsive disorder*

### White matter lesions in a patient with treatment resistant obsessive compulsive disorder: a case report

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Neurobiological models of obsessive compulsive disorder (OCD) suggest that there are structural and functional abnormalities in frontal-striatal-thalamic-cortical circuits. These cortical and subcortical microcircuits are physically and functionally connected through the white matter. Therefore, the disrupted white matter microstructure may be implicated in the pathophysiology of OCD. Neuroanatomical studies have reported various regional white matter abnormalities in patients with OCD. In this case, we present subcortical WMHs in a patient with treatment resistant OCD.

A 35-year-old female, who was married and has a child, diagnosed with obsessive compulsive disorder. Firstly, she washed her hands excessively due to the fear of contamination. Later, different types of obsessions and compulsions were triggered by psychological stress factors related to marital status. She started spending lots of time every day in the bathroom, counting objects, and constantly checking the computer, television, stove, and iron. The patient had taken sertraline 200 mg/day, paroxetine 40 mg/day clomipramine 225 mg/day and atypical antipsychotic augmentation including risperidone, aripiprazole, paliperidone, also cognitive behavioral techniques have been used. Nevertheless, the patient could not control these obsessions and compulsions. Lastly, she was admitted to our outpatient clinic with her husband for the complaints of increased frequency and severity of obsessions-compulsive symptoms, serious functional impairment, fatigue, anhedonia, and low self esteem. She didn't want to take medicine and want to take electroconvulsive therapy (ECT). Total seven session ECT were performed but her symptoms didn't significantly decreased. The Yale-Brown Obsessive Compulsive scale score reduced from 36 to 30 (%15 reduction), the Hamilton Depression Rating Scale score reduced from 24 to 15 (%40 reduction). Because of resistance to treatment Magnetic Resonance Imaging (MRI) examination were performed. MRI revealed white matter hyperintensities in left posterior frontal and right parietal regions.

This case may represent an evidence of impaired connectivity due to white matter abnormalities in patients with treatment resistant OCD,

and thus may serve to further our understanding of white matter deficits in OCD. It may be suggested that disruption in brain networks was associated with pathogenesis of the disorder.

**Keywords:** neurobiology of Obsessive compulsive disorder, white matter lesions, treatment resistance

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**[PP-097] Addiction and related disorders**

## Greater family burden leading to poorer quality of life in relatives of patients with heroin dependence

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**Objective:** Heroin dependence has a major impact on the lives of patients and anyone who lives with them. Several studies have shown that the disease substantially interferes with the patients daily activities; disrupts social life and disturbs emotional well-being. In recent years, health-related quality of life (QoL) has been specifically investigated among individuals who are heroin users. The aim of this study is to investigate the family burden, quality of life (QoL) and psychiatric disorders in relatives of heroin dependent patients and to compare them with healthy controls

**Methods:** A total of 40 heroin dependent patients and 40 of their relatives as well as 40 healthy subjects and 40 of their relatives were included in the study. Heroin dependence and comorbid anxiety or mood disorders were determined by means of Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders. Family burden and QoL in the relatives were evaluated with the Zarit Burden Interview (ZBI) protocol and the World Health Organization Quality of Life Assessment-Brief, respectively.

**Results:** According to SCID-I, major depression was significantly higher in the relatives of patients compared to the control relatives ( $p=0.003$ ). The mean ZBI score of family members of heroin dependent patients was higher than the control relatives. The mean ZBI score in the relatives of heroin dependent patients was  $41.5 \pm 21.37$ , while the score in the control relatives was  $11.02 \pm 8.3$ . The difference was statistically significant ( $p < 0.000$ ). In addition, compared with those of control relatives, the QoL of relatives of heroin dependent patients was significantly lower in all domains ( $p < 0.000$ ).

**Conclusions:** The study suggests that heroin dependence not only affects the lives of patients but also their family members. Heroin dependence leads to high burden on the family and also impairs the QoL of relatives.

**Keywords:** burden, family, heroin, quality of life

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**[PP-098] Addictions**

## The relationship of depression and drug addiction

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**Objective:** The relationship of depression and drug addiction : the subject of numerous scientific studies. A special problem is dysthymia - slightly expressed subclinical depression and anxiety neurotic components; these conditions more often than other types of depressive pathology observed in drug addiction.

**Method:** As part of the study about the interactions of depressive disorders and addiction, we investigated the clinical efficacy of antidepressants in treatment of depression after abstinence and postabstinent states in patients with opiate addiction. Patients were admitted with a state of withdrawal syndrome. The examined patients had depressive state of mild or moderate severity according to the criteria of the International Classification of Diseases-10.

**Results:** Affective disorders are found in abstinent and postabstinent states. In 13 patients with a background of the existing withdrawal symptoms, an antidepressant medication was administered on the first day of stay in hospital (group 1). Six people received the drug later, within 6-14 days (group 2). A comparison group of patients treated with antidepressant from the first days of therapy, and patients treated within the first 6-14 days by only sedative and detoxification therapy, showed the best dynamics and affective status and more effective reduction of pathological attraction in the first group. Side effects that would cause a need to cancel the prescribed medicines were not observed. Effects of antidepressants manifested in the reduction of depression more than 50 % (responders), have been observed in 13 patients with drug addiction.

**Conclusion:** The obtained data confirm the clinical correlation between affective disorders and addictive disorders.

**Keywords:** antidepressant, addiction, therapy

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### [PP-099] Addictions

## Clinical features of dysthymia patients using opioid drugs

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**Objective:** The combination of affective disorders and substance use - is a widespread phenomenon that requires in-depth a clinical study and analysis of the progress of the disease.

In accordance with the above, the goal was set to conduct a comparative study of psychopathology, clinical picture and the features of the therapy in groups of patients with dysthymia, taking narcotic drugs of the opium group and drug addiction, and to offer the most effective methods of therapy in such states.

**Methods:** For this purpose, we examined 26 patients with dysthymia complicated opium addiction drugs (DCOAD) and 22 patients with opium addiction. Patients suffering from dysthymia before the use of psychoactive substances mentioned about long periods of dysthymic states and appealed mainly, to the doctors with a wide panel of complaints such as low mood, fatigue and anhedonia. The most frequent reason of the use of opioid drugs in patients with dysthymia was motivation with the desire to use substances to alleviate or eliminate the emotional discomfort.

**Results:** Despite the fact that most of the patients repeatedly receive unsuccessful drug treatments, doctors-narcologists usually do not question about the diagnosis of dysthymia. Reception of psychoactive substances may hide dysthymia.

**Conclusion:** The above results fully support that patients with DCOAD suppress the symptoms of psychoactive drugs than patients with drug addiction.

**Keywords:** dysthymia, opioid, drug

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**[PP-100] Neuroscience: Neuroimaging - genetics - bioindicators****Potential pathological mutation in nNOS gene for schizophrenia in Ashkenazi Jewish cohort**

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**Objective:** Schizophrenia (Sch) appears to be a multi-factorial disorder with a strong genetic predisposition. Accumulating evidence from human genetics and animal studies suggest that neuronal nitric oxide synthase (nNOS) might contribute to susceptibility for Sch. Information accrued from human genetics studies indicates nNOS variants are highly associated with Sch in many populations such as Ashkenazi Jewish (AJ), European, Asian, Irish and German. In these populations, the variant of intron 9 in nNOS leads to IQ, episodic memory, and working memory impairment. Also, the variants in alternative exon 1 affect the continuous performance test and increase the positive score in PANSS (6). These studies highly suggest that variants in nNOS play critical roles in phenotypes associated with Sch.

**Methods:** We studied 600 Sch and 1056 healthy control for identifying novel Sch-associated rare mutations in nNOS gene. We utilized next generation sequencing (NGS) to analyze 384 samples (192 for cases, 192 for controls) from the AJ population. All nNOS exonal variants were targeted for PCR amplification with specific primers designed by primer 3 software. Targeted regions include the coding region (CDR; 3'-end of exon 2 ~ 5'-end exon 29) and untranslated region (UTR; alternative exon 1, 5'-end of exon 2 and 3'-end of exon 29). Given that the UTR of 3'-end of exon 29 is difficult to amplify with a single PCR reaction due to the long length of its exon, specific regions of exon 29, including the regions which have a greater potential of micro RNA binding sites, transcription binding sites, and a highly conservation region based on the USCS genome browser and target scan database, were selectively amplified. Since the previous studies indicate that exon 1 has multiple alternative variants (7,8), we designed 10 primer pairs to cover all alternatives of exon 1. In summary, 49 pairs of primers were designed for the present project, namely, 34 for CDR, 10 for alternative exon 1 and 5 for UTR of exon 29. Possible rare unreported variants identified by Next generation sequencing were then verified by Sanger sequencing (SS). The occurrence of identified mutations was examined in additional cohort (408 Sch and 864 controls) by PCR-RFLP (Restriction Fragment Length Polymorphism) method followed by SS.

**Results:** We found high incidence of genetic variants of nNOS gene occurs in Sch samples compared to controls. Interestingly, we found possible rare variants in the coding region of nNOS gene by NGS data analysis using IGV software. 4 CDR variants which were in unreported Sch group, was verified by SS. One missense mutation was found within these 4 CDR variants. According to RFLP results carrying this mutation was found in another patient with Sch.

**Conclusion:** We currently characterize biological effects of nNOS rare variants associated with Sch in vitro cell model as well as in animal model, including nNOS knockout mice and mice with knockdown of nNOS expression by RNA interference approach during brain development. We hope to further address molecular and physiological mechanisms of how nNOS variations affect brain maturation, which may in turn, contribute to understanding of etiopathologies of Sch.

**Keywords:** schizophrenia, nNOS, next generation sequencing, rare mutation

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**[PP-101] Addictions and related disorders****Does melissa tea cause dependence? a case report**

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Melissa officinalis L. (sweet balm, lemon balm) is a medical and aromatic plant which is a member of Lamiaceae family. It is used by people for its hypnotic, sedative and spasmolytic effects. In this report, a case is discussed about Melissa officinalis dependency and deprivation symptoms after cessation of use.

The patient was a 30 years old, male, married and had a college degree. He applied our emergency department with complaints of restlessness, tremor, distractibility, sweating for about 24 hours. Patient was evaluated by psychiatrist because of his anxiety and there was no organic reason related to his complaints. In mental state examination patient's affect was distressed, his mood was anxious, he had no psychotic symptoms, no appetite and he had insomnia for two days. In his neurological examination there weren't any pathological findings except his resting tremor in his both hands. During interview, patient expressed he was in an important period of exams. It was learned from the patient that he bought sweet balm plants in tea form (Melissa tea) from herbalist two months ago and drank it at every night. He started to drink one or two cups of Melissa tea per day. After 20 days, he increased the amount of tea to three or four cups per day. He expressed that he had stopped taking this tea three days ago and his complaints started after he had stopped intake tea. His symptoms were thought as deprivation symptoms and clonazepam treatment was started (1x3 drops per day). Clonazepam dose was reduced gradually in 10 days and after that it was stopped. His complaints improved completely at the end of the ten days. There were no symptoms of deprivation in control examinations at first and third months.

This case showed that using Melissa officinalis plant might be a reason of dependence of this plant. In researches about Melissa officinalis, it is emphasized that this plant had two modes of action on human metabolism: This plant inhibits the activity of acetylcholinesterase (AChE) and aminobutyric acid transaminase (GABA-T) enzymes, which cause an increase in the cholinergic and GABAergic influence, respectively. With these mechanisms it is understood that Melissa officinalis has sedative, anxiolytic, hypnotic effects as well as its favorable effects on cognitive functions. Also it is shown that this plant's positive potency is equal to that of 0.125 mg triazolam per day on people who has sleep disorders. Consequently although Melissa officinalis is preferred by patients instead of drugs because of being natural, it should not be ignored that it might have dependency risk.

**Keywords:** melissa officinalis, dependence

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**[PP-102] Psychosomatic medicine - liaison psychiatry****The investigation of the relationship between traumatic growth and depression and anxiety levels in patients with an operated breast cancer diagnosis**Bilgen Bicer Kanat<sup>1</sup>, Ayse Gul Yilmaz Ozpolat<sup>2</sup>, Tugba Ayaz<sup>2</sup>, Ozlem Konag<sup>2</sup>, Okan Er<sup>2</sup>, Asiye Ozkan<sup>3</sup>

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**Objectives:** Traumatic growth is defined as positive changes in self-concept, interpersonal relationships and one's world view after a trauma or severe life crisis. In this study, it was aimed to examine the traumatic growth level and the relationship between the traumatic growth level and, depression and anxiety in patients diagnosed with an operated breast cancer.

**Method:** The study consisted of 80 patients who were between 18-65 ages, and who applied to Ankara University Medical Faculty, Department of Internal Medicine, Medical Oncology Department as outpatient and who were diagnosed with the breast cancer and had an operation. The patients filled the Traumatic Growth Inventory (TGI) and Hospital Anxiety and Depression Scale.

**Results:** In our study, it was found that mean score of Traumatic Growth Inventory was 71,3. While in 74 patients the Anxiety subscale score of Hospital Anxiety Depression Scale was found higher ( $\geq 10$ ) with a 92,5% percentage, in 70 patients the Depression subscale

score of Hospital Anxiety Depression Scale was found higher ( $\geq 7$ ) with a 87.5% percentage. There was no relationship between TGI and, depression and anxiety symptoms ( $p > 0.05$ ).

**Conclusion:** It was determined that anxiety and depression levels in our study were found higher than were found in the similar studies in the literature, and it was considered that this finding was related to fact that 56.6% patients participated into the study within the first year of the diagnosis. Nevertheless, it is important to assess these patients along with their course of psychopathology and their traumatic growth level in the frame of collaboration between oncology and psychiatry (psycho-oncology).

**Keywords:** breast cancer, depression, traumatic growth

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### [PP-103] Attention deficit-hyperactivity disorder

## Evaluation of the plasma leptin, adiponectin, neuropeptide Y level in pediatric patients with Attention deficit hyperactivity disorder

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**Objective:** Attention deficit hyperactivity disorder (ADHD) is the most common psychiatric disorder in children. Relationship of the disorder with obesity is well known, but the mechanism has not been understood yet. Recent studies found out 1,5-2 fold increase in risk for overweight/obesity in patients with ADHD compared to normal population. The aim of the present study was to evaluate plasma leptin, adiponectin, neuropeptide Y (NPY) levels and to investigate the mechanism and etiology of weight gain in patients with ADHD.

**Methods:** The study was conducted in Department of Child and Adolescent Psychiatry, Medical Faculty of Inonu University from February 2013 to April 2013. 36 patients with a diagnosis of ADHD according to the DSM-IV- TR criteria (drug naive) and 40 healthy children were enrolled in this study. Plasma leptin, adiponectin and NPY levels were measured; age, height, weight were recorded and body mass index (BMI), BMI percentile, weight to height values were calculated for all patients enrolled in the study.

**Results:** This study included 29 (80.6 %) males and 7 (19.4%) females in the ADHD group and 29 (72.5%) males and 11 (27,5%)females in the control group. The mean age in the ADHD group was 9.3 years and 8.8 years in the control group. In the control group, 35 (87,5%) patients had normal, 1 (2.5%) had increased and 4 (10%) patients had decreased BMI percentile. 35 (75%) patients had normal, 5 (13.9%) patients had increased and 4 (11.1%) patients had decreased BMI percentile in the ADHD group. No significant difference was found between two groups in terms of age, gender, height, weight, BMI, BMI percentile, weight to height value and NPY plasma levels. Adiponectin plasma levels ( $p=0,003$ ) and leptin / adiponectin ratio ( $p=0,009$ ) were significantly higher in ADHD group.

**Conclusion:** These results suggest that weight gain in patients with ADHD may be related to the decrease in plasma adiponectin levels and increase in leptin / adiponectin ratio.

**Keywords:** attention deficit hyperactivity disorder, adiponectin, leptin, NPY, obesity

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**[PP-104] Psychopharmacology****Frequency of antipsychotic polypharmacy in schizophrenic outpatients**Neslihan Akkisi Kumsar<sup>1</sup>, Neslihan Altunsoy Sen<sup>2</sup>, Nesrin Dilbaz<sup>3</sup><sup>1</sup>Sakarya University Training and Research Hospital, Sakarya-Turkey<sup>2</sup>Ankara Numune Training and Research Hospital, Ankara-Turkey<sup>3</sup>Uskudar University NP Hospital, Istanbul-Turkey

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**Objective:** With an increase in the new generation of antipsychotic drugs and resulting antipsychotic polypharmacy, treatment of schizophrenic patients has again come into the daily agenda. In spite of the annual increase of these new drugs in recent years, no expected benefit in the treatment of patients has been observed. A lack of alternative treatments of schizophrenia and the increase in polypharmaceutical approaches to treatment have led clinicians feel helpless; especially as schizophrenia is known to be treatment resistant over time and is often subject to poor prognosis. According to the treatment algorithm, the application of antipsychotic polypharmacy can be the choice of treatment for treatment-resistant patients but only by following a program of sufficient monotherapy. For a short period, antipsychotic polypharmacy can ease the transition from the use of one antipsychotic to that of another. However it is thought that this approach is often over used in clinical experiments and observations. In this study, it is aimed to determine the prevalence of polypharmacy, rates of treatment adherence and disease severity in schizophrenic patients admitted to the psychiatry policlinic at Ankara Numune Training and Research Hospital.

**Method:** The patients admitted to psychiatry policlinic of Ankara Numune Training and Research Hospital in June 2010 - September 2010 period with the diagnosis of schizophrenia were reviewed and 122 patients were included in the study. Participants were evaluated for their treatment compliance, use of polypharmacy, drug doses, and severity of the disorder.

**Results:** The rate of polypharmacy was 49,2%. The polypharmacy and monotherapy groups were not statistically different in terms of comorbidity, disorder and treatment duration, number of previous hospitalizations, type of admission and general medical condition. However, the monotherapy and polypharmacy groups were statistically different in terms of the use of antipsychotic type. Distribution of "first to prescribe" antipsychotics was 25.4% (n=31) for olanzapine, 18% (n=22) for risperidone, 18% (n=22) for clozapine, 10.7% (n=13) for quetiapine, 8.2% of typical antipsychotics, and 4.9% (n=6) for amisulpiride-sulpiride. Distribution of "add on" antipsychotic was 26.7% (n=16) for amisulpiride-sulpiride, 25% (n=15) for risperidone consta, 15% (n=9) for depot antipsychotics, 10% (n=6) for typical antipsychotics, 8%, 3 (n=5) for quetiapine, 5% (n=3) for risperidone, 3.3% (n=2) for olanzapine and 3.3% (n=2) for clozapine.

**Conclusion:** Use of polypharmacy is limited in good clinical practice guidelines but surveys on clinical practices show that the use of polypharmacy is more frequent than the suggested levels in the guidelines.

**Keywords:** antipsychotic, schizophrenia, polypharmacy, outpatient

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**[PP-105] Psychopharmacology****Does using quetiapine and lithium at the same time create restless leg syndrome?  
a case report**Kadir Demirci<sup>1</sup>, Havva Sert<sup>1</sup>, Ayse Rumeysa Yaman<sup>1</sup>, Seden Demirci<sup>2</sup><sup>1</sup>Suleyman Demirel University, Faculty of Medicine, Department of Psychiatry, Isparta-Turkey<sup>2</sup>Suleyman Demirel University, Faculty of Medicine, Department of Neurology, Isparta-Turkey

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Restless leg syndrome (RLS) is a disease characterized by dysesthesia that consists abnormal sensation in the extremities especially in the legs, irresistible need to move because of sensation and motor restlessness. Multiple drugs such as dopamine D2 receptor antagonists, histamine receptor antagonists, antidepressants, lithium and caffeine have been described to induce or exacerbate RLS. In this case, a patient was hospitalized with a diagnosis of manic episode. On follow up four months after discharge, she was presented to the psychiatry outpatient department with a complaints such as urge to move her legs, restlessness, numbness and tingle sensations that relieved with movements especially at nights. We have learned there was no problem at daytime treatment (lithium carbonate 300 mg in the morning,

300 mg in the afternoon). But complaints appeared, when she had taken lithium 300 mg with quetiapine 300 mg at the same time at nights. The patient was evaluated as bipolar disease-euthymic mood. Clinical signs of anemia, vascular diseases or peripheral neuropathy were not found for secondary causes of RLS. We recommended her to take lithium 300 mg in the mornings and 300 mg in the afternoons and lithium 300 mg and quetiapine 300 mg with 2 hour intervals in the evenings. From the first day of this application symptoms started to disappear. Two weeks later, symptoms completely resolved with this application, and no symptoms were observed. Our case suggests that the combination lithium with quetiapine might cause RLS with an unclear mechanism and symptoms could be reduced by changing the times of administration without the reducing the dose of quetiapine.

**Keywords:** restless leg syndrome, quetiapine, lithium

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**[PP-106] Neuroscience : Neuroimaging - genetics - bioindicators**

## Serum oxytocin levels in patients with generalized anxiety disorder and panic disorder

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**Objective:** It is reported that oxytocin facilitates coping with stress and has anxiolytic and anti-stress effects, and that oxytocin administration reduce the levels of anxiety symptoms and aggression. This study aimed to investigate the serum levels of oxytocin in patients with generalized anxiety disorder (GAD) and panic disorder (PD).

**Methods:** This study included a total of 50 patients admitted to the Erciyes University Medical School Department of Psychiatry outpatient clinic between August 2012 and November 2013; the patients were 18-65 years of age, without medication, followed inpatient or outpatient. Of 50 patients 23 were diagnosed with GAD (8 male and 15 female) and 27 with PD (14 male and 13 female). Control group consisted of 23 (11 male and 12 female) healthy subjects. Hamilton Depression Rating Scale (HAM-D) and Hamilton Anxiety Rating Scale (HAM-A) were administered to both the patients and the controls. In addition, the Generalized Anxiety Disorder 7-Item Test (GAD-7) and the Panic Disorder Severity Scale (PDSS) were administered to the patients with GAD and PD, respectively. Clinical scales were administered to the groups only once. Serum levels of oxytocin were assayed with ELISA.

**Results:** Although serum oxytocin levels of the patients with GAD and PD were higher than the control group, this difference was not statistically significant. There was no gender effect on oxytocin levels.

**Conclusions:** In this study, it was found that serum oxytocin levels of the patients with GAD and PD were higher than the control group, but this difference was not statistically significant. This mild increase in serum oxytocin levels may result from compensatory mechanisms to reduce the anxiety.

**Keywords:** generalized anxiety disorder, oxytocin, panic disorder

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**[PP-107] Perinatal psychiatry****Follow-up study of children whose mothers were treated with transcranial magnetic stimulation during pregnancy**Gul Eryilmaz<sup>1</sup>, Gokben Hizli Sayar<sup>1</sup>, Eylem Ozten<sup>1</sup>, Eda Bagci<sup>2</sup>, Isil Gogcegoz Gul<sup>1</sup>, Ozgur Yorbik<sup>3</sup><sup>1</sup>Uskudar University, NP Istanbul Hospital, Department of Psychiatry, Istanbul-Turkey<sup>2</sup>Uskudar University, NP Istanbul Hospital, Department of Psychology, Istanbul-Turkey<sup>3</sup>Uskudar University, NP Istanbul Hospital, Department of Child and Adolescent Psychiatry, Istanbul-Turkey

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**Objectives:** The purpose of this study is to determine the impact of maternal repetitive transcranial stimulation treatment during pregnancy, on neurodevelopment of children.

**Methods:** Women who were treated with repetitive transcranial magnetic stimulation (rTMS) during pregnancy and delivered liveborn children between 2008 and 2013 were selected. Mothers were contacted again after an average of 3.7 years (15 months–68 months) after the first study (between August and December 2013). All the infants were exposed to transcranial magnetic stimulation throughout the second and third trimesters (n=18). A control group consisted of children, whose mothers had a history of untreated depression during their pregnancy on second and third trimesters (n=26). Early developmental characteristics of all the children in the study were evaluated and also their developmental levels were determined using the Ankara Developmental Screening Inventory.

**Results:** The mean age of the children in the prenatal maternal rTMS treatment group was 32.4 months (range: 16-64 months) and the prenatal maternal untreated depression group was 29.04 (range: 14-63 months). Jaundice (n=2) and febrile convulsion (n=1) were the reported medical conditions in the children of prenatally rTMS treated maternal depression group, whereas jaundice (n=3) and low birth weight (n=1) were reported in the untreated prenatal maternal depression group. In the rTMS group, a delay in language development observed, but there were not any statistically significant differences in the prevalence rate compared to the untreated prenatal maternal depression group (OR= 0,38; 95% CI; 0,0860-1.6580).

**Conclusion:** Our results suggest that pregnancy rTMS exposure is not associated with poorer cognitive or motor development outcomes in 18-62 months aged children. Although language development seems to be found poorer than expected, the delay in language skills was found to be similar to the language delay observed in children of untreated prenatal depression, and that was reported in previous reports of SSRI treated prenatal depression. This information adds into the available data used by clinicians and mothers making critical decisions about the treatment of depression in pregnancy. However, given the small sample size these results need to be treated with caution.

**Keywords:** safety, pregnancy, transcranial magnetic stimulation, neurodevelopment, language

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**[PP-108] Addictions and related disorders****Problematic internet use among Turkish high school students**Ahmet Hamdi Alpaslan<sup>1</sup>, Kadriye Avci<sup>2</sup>, Nusret Soylu<sup>3</sup>, Hanife Uzel Tas<sup>2</sup>, Cansu Cobanoglu<sup>1</sup><sup>1</sup>Afyon Kocatepe University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Afyonkarahisar-Turkey<sup>2</sup>Afyon Kocatepe University, Faculty of Medicine, Department of Public Health, Afyonkarahisar-Turkey<sup>3</sup>Inonu University, Faculty of Medicine, Department of Child and Adolescent Psychiatry Malatya-Turkey

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**Objectives:** Today, internet is a global system that is increasingly used by all people as one of the most important devices for access to information in the world, especially among adolescents and young adults. As the internet has increasingly become an important part of adolescent life, the risk of youth being addicted to the internet also increases. Internet addiction is also called as problematic internet use (PIU) in the literature and is defined as “the inability of the individual to control him/herself impulsively in relation to duration or aim of activity and experiencing physical, social and psychological difficulties in consequence”. Furthermore PIU is defined in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) as “a condition recommended for further study”. Prevalence of PIU among adolescents and young adults has been reported to vary between 0.9-38 % all over the World. In this study, we aimed to

investigate the PIU prevalence and the effects of some sociodemographic variables in a group of high school students.

**Methods:** The study group consisted of students of three high schools in Afyon city center who volunteered to participate in the study. Data was collected by a socio-demographic information form and Young Internet Addiction Test (YIAT). A probability level of  $p < 0.05$  was used to indicate statistical significance.

**Results:** The study sample consisted of 584 students (34.8 % was male, and 65.2 % female) with a mean age of  $16.12 \pm 1.04$  years. In this survey, according to YIAT the prevalence of PIU was 10.1% (n=59). Its prevalence was significantly higher in males than females ( $\chi^2 = 12.973$ ,  $p < .001$ ). Monthly income level, smoking habits and alcohol use were found to be significantly higher in PIU group than non-PIU group. When groups were compared with respect to age, mother's education level, father's education level and school achievement no significant differences were found between groups ( $p > 0.05$ ).

**Conclusions:** In the present study, the rate of PIU was found to be 10.1% among students. Studies using the YIAT with non-clinical samples found rates of PIU that were higher than or similar to those found in this study. In two studies from Turkey, PIU rates were reported to be 7.6% and 11.6% respectively. According to our study results, among high school students, the likelihood of PIU is higher in males. Level of income, smoking habits and alcohol use were found to be possible risk factors that affect problematic internet use. Effective measures are needed to prevent the spread of this problem.

**Keywords:** demographics, problematic internet use

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### [PP-109] Others

## A case report: catatonia due to hyperthyroidism

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Catatonia is a neuropsychiatric disease, characterized by symptoms including mutism, psychomotor retardation, catalepsy, echolalia and echopraxia. Although catatonia has historically been associated with schizophrenia and listed as a subtype of the disorder, it can occur in patients with a primary mood disorder and in association with neurological diseases and other general medical conditions. In this report, 24 year-old woman patient is presented. Patient was brought to the emergency clinic with catatonia symptoms. Symptoms were firstly noticed by her mother three days ago. There was no history of psychiatric admission before. In her psychiatric examination, self-care was impaired. Due to negativism, mutism and psychomotor retardation, she was uncooperative and her orientation could not be evaluated. Bilateral upper extremity rigidity was examined. In her family history, her father had thyroid disease, and died due to thyrotoxicosis; her mother was diagnosed with intellectual developmental disorder.

In physical examination, except sinus tachycardia, her electrocardiogram was normal. Serum free T3 and free T4 levels were high (13.9 pmol/L, 66.4 pmol/L respectively), TSH level was suppressed (0.009 mIU/L). She was diagnosed with Catatonia Due to A Medical Condition. We did not prefer electroconvulsive therapy because of thyrotoxicosis risk. Lorazepam 5 mg per day (5x1 mg) was started. Using ultrasonography and scintigraphy, thyrotoxicosis was found to be associated with diffuse thyroiditis. Antithyroid medication (metimazole) was added. Within one month, patient started to communicate with treatment members and catatonia disappeared. She was planned to be followed at outpatient clinic.

Catatonia due to a medical condition is separated into three groups: neurologic, substance induced and metabolic. In the literature, neurological diseases are mostly accused. To our knowledge, thyroid diseases are rarely seen with catatonia, and a few cases have been presented. The presented free T3 and free T4 levels were lower than that of our patients. Patients diagnosed with catatonia due to hyperthyroidism should be treated with benzodiazepines. Electroconvulsive therapy has the risk of thyrotoxicosis and should be avoided.

**Keywords:** catatonia, hyperthyroidism, thyroiditis.

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**[PP-110] Psychopharmacology****High dose sertraline-induced extrapyramidal symptoms in an adolescent: a case report**Onder Ozturk<sup>1</sup>, Zeynep Goker<sup>2</sup>, Gulser Senses Dinc<sup>2</sup>, Esra Guney<sup>2</sup><sup>1</sup>Pamukkale University, Faculty of Medicine, Department of child and adolescent Psychiatry, Denizli-Turkey<sup>2</sup>Ankara Pediatric & Pediatric Hematology, Oncology Training and Research Hospital, Department of Child and Adolescent Psychiatry, Ankara-Turkey  
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Selective serotonin re-uptake inhibitors (SSRI) are one of the most prescribed agents because of their safety and tolerability. The most prominent adverse effects of SSRI are nausea, headache, dizziness, anxiety, changes in sleep and eating patterns, and sexual dysfunction. Nevertheless, extrapyramidal symptoms (EPS) are rarely seen in patients treated with SSRI. Previously, SSRI-induced EPS was reported only in therapeutic doses. In this case report, however, we present an adolescent who attempted to commit suicide with sertraline (700 mg) and developed many EPSs.

R.K. was a girl and 16 years of old. She had been started sertraline 50 mg a daily for depressive disorder. At the 20<sup>th</sup> day of her treatment she attempted to commit suicide-receiving 14 of tablets of 50 mg of sertraline (700 mg). Her parents admitted her to the emergency service. She was not able to walk because of contractions in the foot muscles, had hyperextension of her head because of the contractions in neck muscles. Also, she had oculogyric crisis presenting as fixed eyes upward glance, had tongue swelling and inability to speak, shaking in hands and feet. These symptoms were considered as EPS and biperiden 5 mg/IM was given. After biperiden injection, contractions resolved. Results of all routine hematological and biochemical tests and electrocardiogram were normal. Because of difficulty in speaking, computerized tomography was conducted revealing normal results. She was followed for two days and at the end of the second day, all symptoms had disappeared, thus she was discharged.

In this case, EPS was thought to be related to high dose sertraline. SSRI-induced EPS is rare since serotonin also makes dopaminergic re-uptake inhibition. For this reason, there are only limited numbers of SSRI-induced EPS case reports in the literature. A review evaluating the SSRI-related movement disorders between 1977 and 1996 years indicated that 8 out of 71 cases had been associated with sertraline use. In these cases akathisia, contractions in both the neck and in general body parts were reported.

One of the mechanisms of sertraline-induced EPS may be the increased amount of serotonin that may inhibit dopaminergic activity through the nigrostriatal dopaminergic pathway. In a recent PET study, extracellular dopamine levels were shown to be decreased after citalopram treatment, which supports this above mentioned theory.

This case clearly shows that SSRIs, which are used frequently might cause adverse effects like EPS whether in therapeutic doses or in very high doses.

**Keywords:** sertraline, extrapyramidal symptoms, dystonia

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**[PP-111] Eating Disorders****Disordered eating attitudes among Turkish high school boys**Ahmet Hamdi Alpaslan<sup>1</sup>, Kadriye Avcı<sup>2</sup>, Nusret Soylu<sup>3</sup>, Hanife Uzel Tas<sup>2</sup>, Cansu Cobanoglu<sup>1</sup><sup>1</sup>Afyon Kocatepe University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Afyonkarahisar-Turkey<sup>2</sup>Afyon Kocatepe University, Faculty of Medicine, Department of Public Health, Afyonkarahisar-Turkey<sup>3</sup>Inonu University, Istanbul Faculty of Medicine, Department of Child and Adolescent Psychiatry, Malatya Turkey  
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**Objectives:** Eating disorders among boys and girls are rare, but many adolescents demonstrate behavioral eating disturbances. Disordered eating attitudes (DEAs) are defined as problematic eating patterns that are not practiced at a high enough frequency or severity to merit the formal diagnosis of an eating disorder. Behaviors and attitudes such as restrained eating, fear of being fat, distorted body image, binge eating, and purging are common among adolescents of both sexes. Moreover, much of the available research on eating disturbances and body image in adolescents has focused on girls. This trend is found worldwide, because girls are more prone to DEAs than boys. We assumed that owing to rapid socio-cultural changes in Turkey, the prevalence of DEAs among adolescents has been relatively high among both males and females. Therefore the purpose of this study was to determine the frequency of DEAs among boy

students in a rural area (Afyon City) of Turkey, and to compare the groups based on the socio-demographic data.

**Methods:** The study group consisted of boy students of two high schools in Afyon city center who volunteered to participate in the study. All participants attended public schools. Data was collected by a socio-demographic information form and Eating Attitude Test-26 (EAT-26). A probability level of  $p < 0.05$  was referred to indicate statistical significance.

**Results:** The study sample consisted of ( $n=203$ ), (100% were boys) with a mean age of  $16.22 \pm 1.09$  (14-20). In this survey, according to EAT-26 the prevalence of DEAs was 18.7% ( $n=38$ ). Of those cases, 19.7% ( $n=40$ ) were underweight, 67.0% ( $n=136$ ) were normal weight, and 13.3% ( $n=27$ ) were overweight. When DEAs and non- DEAs groups were compared with respect to age, Body Mass Index, mother's education level, father's education level, smoking habits, alcohol use and school achievement no significant differences were found between groups ( $p > 0.05$ ). Monthly income level was found to be significantly higher in DEAs group than non-DEAs group ( $\chi^2 = 4.314$ ,  $p = 0.038$ ).

**Conclusions:** According to the EAT-26, the prevalence of DEAs among Turkish high school boy students was 18.7% ( $n=38$ ). In a study of Australian college males, 21% reported the presence of disordered eating behaviors. In the present study the risk for DEAs was significantly higher in boys of higher socioeconomic status (SES) than in those of middle or low SES. Indeed, several studies have reported DEAs were more prevalent in upper SES adolescents than in lower-SES adolescents. Likewise, we found a significant association between SES and DEAs in the study sample. The main finding of the present study is that DEAs are prevalent during adolescence among young boys. The sample for the current study comprised a group of students in just one city in Turkey, which may limit the generalization of results. Thus, a study with a large sample containing mixed gender and different age groups in the country needs to be conducted.

**Keywords:** adolescent, body mass index, disordered eating attitudes, socioeconomic status

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### [PP-112] Psychopharmacology

## Dysphagia associated with aripiprazole dose increase in obsessive compulsive disorder

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Dysphagia may occur as a side effect of neuroleptic treatment. Antipsychotics may have central and peripheral effects on swallowing due to depression of bulbus and dopaminergic and anticholinergic blockage. This is a rare case of dysphagia associated with aripiprazole dose increase. Our case is a 43-year-old female patient, who is graduated from high school and married. She applied our psychiatry polyclinic and she was diagnosed as having obsessive compulsive disorder. Fluoxetine 40 mg/day and aripiprazole 5 mg/day were started. Aripiprazole dose was increased one year later. After dose increase, dysphagia appeared. There was especially difficulty in swallowing solid foods. Aripiprazole dose was decreased to 5 mg/day. She has consulted with otorhinolaryngology and gastroenterology physicians. Dysphagia cannot be explained by organic pathology. One month later after dose decrease for aripiprazole, complaint about dysphagia was recessed. Extrapyramidal side effects and other movement disorders are rare in atypical antipsychotics so dysphagia is uncommon after aripiprazole which is partial agonist of D2 receptors and atypical antipsychotic. In literature, there is only one case about it. When there is a patient with swallowing difficulties, who is on an antipsychotic drug, we must consider drug-induced dysphagia.

**Keywords:** dysphagia, aripiprazole, obsessive compulsive disorder

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**[PP-113] Psychosomatic medicine – Consultation liaison psychiatry****Relationship between somatosensory amplification with alexithymia, character and temperament in asthma patients: a preliminary report**

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**Objective:** Asthma is one of the most common chronic diseases with an increasing prevalence, morbidity and mortality. Asthma has long been considered as a psychosomatic phenomenon in which, changes in psychological state or traits play role in its clinic. Studies showed that patients with chronic health problems were vulnerable to over perception of nonspecific symptoms in a situation that affects the disease. In psychosomatic patients, amplification is thought to be forming this over perception symptoms. A study showed that, the complaint of patients with asthma about shortness of breath are not correlated with the spirometric values, but thought to be associated with psychometric values. Due to its early onset of severe findings in asthma clinics, this is expected to affect the structure of personality. Psychobiological theory of personality that has developed by Cloninger is based on the information obtained by the synthesis of neuropharmacological, and neurobehavioral learning studies: contains four temperaments (Novelty-Seeking, Harm-Avoidance, Reward-Dependence, and Persistence) and three character (Self-Directedness, Cooperativeness, and Self-Transcendence) dimensions. One other personality structure evaluated as alexithymia, is defined as the inability to recognize, distinguish and identify emotions, and has a contribution to perceive and interpretation of the emotional state in the clinic of asthma falsely as physical illness. In this study, it is aimed to investigate somatosensory amplification in asthma patients in comparison to normal controls and their relation with alexithymia, temperament and character traits.

**Methods:** This study has been carried out in Erenkoy Mental and Sureyyapasa Chest Diseases Research and Training Hospital. Consecutively admitted to the outpatient clinic and clinical severity according to GINA criteria identified 58 asthma patients and 49 healthy volunteers were enrolled. The Toronto Alexithymia Scale-20 (TAS-20), Somatosensory Amplification Scale (SSAS), Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI), Temperament and Character Inventory (TCI) were applied to participate in the study.

**Statistical analysis:** Data acquired were analyzed with SPSS 15.0 software. For digital comparison of groups, chi-square test was applied. For mean comparisons, t test was applied.  $P < 0.005$  was considered to be significant.

**Results:** The mean age of the asthma patients was  $38.65 \pm 11.94$  years, 72% of cases were female. The illness duration was found to be  $9.82 \pm 9.85$  years. Considering the severity of the disease in the group 5.1% were severe, 16.9% moderate persistent, 49.2% mild persistent and 28% was rated as mild intermittent. The patient group's SSAS average score was  $33.75 \pm 7.2$  and significantly more amplified than normal group. TAS total, A and B subscale scores, BDI, BAI scores, Harm-Avoidance, Persistence, Self-Transcendence subscales of the TCI scores correlated positively, C subscale of the TAS scores, Self-Directedness, Cooperativeness subscales of the TCI were found to be negatively associated with the SSAS scores.

**Conclusions:** Asthmatic patients were found to be amplified more than controls. Asthmatic patients were found to have a positive relationship between the Harm-Avoidance and Persistence of temperament and Self-Transcendence of the character dimension; and negatively associated with Cooperation and Self-Directedness dimensions of character. Amplification was seen to be associated with many dimensions of temperament and character and also associated with depression, anxiety, and alexithymia in multi-relation.

**Keywords:** asthma, somatosensory amplification, alexithymia, temperament

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**[PP-114] Forensic psychiatry****Demographic characteristics and psychiatric disorders in sexually abused children and adolescents: A 4-years experience**Hatice Altun<sup>1</sup>, Nilfer Sahin<sup>2</sup>, Ramazan Karanfil<sup>3</sup><sup>1</sup>Kahramanmaraş Sutcu Imam, University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Kahramanmaraş-Turkey<sup>2</sup>Mugla Sitki Kocman University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Mugla-Turkey<sup>3</sup>Kahramanmaraş Sutcu Imam University, Faculty of Medicine, Department of Forensic Medicine, Kahramanmaraş-Turkey

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**Objective:** In this study, it was aimed to identify demographic characteristics and psychiatric diagnosis in children and adolescents who presented to Child and Adolescent Psychiatry outpatient clinic.

**Method:** We retrospectively reviewed records of 343 children and adolescent aged 3-18 years, who referred to Child and Adolescent Psychiatry outpatient clinic at Kahramanmaraş province with exposure to sexual abuse between 2009 and 2012 by judicial authority. In all cases, age, gender, educational status, intelligence level, type and frequency of abuse, degree of familiarity of perpetrator and psychiatric diagnosis according to DSM-IV-TR classification were evaluated.

**Results:** Majority of the cases were girls (78.7%). Mean age was found as 13.46±3.1 years. It was found that 77.8% of the cases were between 12 and 18 years of age. The most commonly detected type of sexual abuse was touching and/or friction (51.6%). Majority of cases was exposed to sexual for once (54.7%). The most commonly detected perpetrators were previously known individuals (85.1%). It was found that the rate of early marriage was 10.5%. The rate of mental retardation was found as 7.3%. It was found that a psychiatric disorder was detected in 71.4% of the cases, as posttraumatic stress disorder (37.6%) being most commonly detected psychiatric disorder.

**Conclusions:** The results that majority of sexual abuse cases were adolescent girls, that rate of psychiatric disorders was detected as high, and that posttraumatic stress disorder was the most common psychiatric disorder, were in agreement with literature. Early marriage is an important problem. Education programs and legal measures should be implemented for early marriage. Given the fact that abuse has negative impact on mental health of children, long-term management should be stressed in such cases.

**Keywords:** sexual abuse, demographic characteristics, psychiatric disorder

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**[PP-115] Addictions****Transdermal fentanyl dependency in the treatment of cancer pain: a case report**

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Fentanyl, a drug with high affinity to  $\mu$  - receptors, is a selective and synthetic opioid agonist. It has 75-100 times more potent pain relieving effect than that of morphine. Available administration ways are oral, intravenous, epidural, transmucosal, intranasal and transdermal. Painkiller effects of fentanyl patches are as strong as opioids. They are more preferable in cancer treatment due to their relatively low side effects. 12.5, 25, 50, 75, 100 mcg/h strengths of these patches are available. In literature, three cases are reported about addiction of fentanyl skin patch. In our case, in spite of remission of cancer and relieving of pain, patch use has continued and addiction occurred. Our aim is to draw the attention to the problem of unnecessary and inappropriate long-term use of fentanyl skin patches for management of cancer related pain.

A 47 years old female patient was admitted to our clinic with complaints of long-term use of fentanyl skin patches and failing to quit, along with depressive symptoms. 4 years ago, due to breast cancer, she had bilateral mastectomy operation and chemotherapy was started. Afterwards, she visited pain clinic in anesthesia unit due to fatigue and body aches. 25 mcg/h fentanyl transdermal skin patch was initiated. One year later, patient was admitted to rheumatology unit with joint effusion and widespread muscle pain. 3 years ago, she was diagnosed with connective tissue infection and 200 mg hydroxychloroquine sulfate, 4 mg prednisolone and 60 mg acetaminophen were started. Patient benefited from these drugs. Despite doctors reported cancer and connective tissue disease were in remission and pain was not expected anymore, yet continued to prescribe fentanyl upon patient's request. Due to the patient's fatigue and body aches

fentanyl dose was increased to 50 mcg/h. After using it for 6 months at the dose of 50 mcg/h, it is reduced to 25 mcg/h by pain clinic. Patient tried to quit fentanyl according to doctor's recommendations, but failed. During these attempts, she experienced withdrawal symptoms and was unable to do household chores. Her hospital admissions became frequent. In our clinic, 30 mg/day duloxetine was started for her depressive symptoms. Fentanyl administration for patient was organized as 25 mcg/day once in every 3 days for first 2 weeks, once in every 4 days between 2 and 4 weeks and once in every 6 days between 4 and 6 weeks. During follow-up, duloxetine dose was increased to 60 mg/day and 150 mg of diclofenac sodium was added for the treatment of pain. The patient was recommended to continue duloxetine and regular follow-up examinations.

Although transdermal fentanyl reported to be very low risk of addiction, in recent years increasing use in patients with chronic pain suggests that addiction could become more frequent. In our case, although the cancer pain was disappeared and connective tissue disease was in remission, fentanyl skin patch has continued to be prescribed. Our purpose of presenting this case, with proper training of professionals involved in the treatment of cancer pain for fentanyl prescription, possible future emergence of such addiction cases could be prevented.

**Keywords:** transdermal fentanyl, dependence

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### [PP-116] *Attention deficit-hyperactivity disorder*

## Socio-demographic and behavioral factors related to unintentional injuries in preschool children with Attention deficit hyperactivity disorder

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**Objectives:** Unintentional injuries are a significant cause of morbidity and mortality in preschool children. Unintentional injuries may result in mental and physical effects on children, which may last for a lifetime. The purpose of this study was to investigate the factors related to unintentional injuries in preschool children diagnosed as having Attention deficit hyperactivity disorder (ADHD).

**Methods:** This study included 237 preschool children diagnosed with ADHD, aged 4–5 years, from a child psychiatry outpatient clinic. Children with a pervasive developmental disorder diagnosis were not included in the study. Fractures, soft tissue traumas leaving scar tissue, burning, poisoning, and all traumas that required hospitalization, were defined as unintentional injuries. Diagnoses of ADHD in the children were determined by child psychiatrists according to DSM-IV criteria. Behavioral problems of children were assessed using the Child Behavior Checklist/4-18 (CBCL).

**Results:** Of the preschool children with ADHD examined in this study, 19.8% (n=47) had unintentional injuries. Additionally, 17% (n=8) of the children, who experienced unintentional injuries had multiple unintentional injuries. While 68.1% of accidents occurred at home, 32.9% occurred outside of the home. The regression analysis conducted in this research revealed that male gender, higher CBCL externalizing scores, and separation of parents were associated with unintentional injuries in preschool children with ADHD.

**Conclusions:** The results of the present study emphasize the fact that in preschool children with ADHD, there may be signs heralding severe injuries, which may lead to morbidity.

**Keywords:** attention deficit hyperactivity disorder, preschool children

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**[PP-117] Anxiety Disorders****Cockroach phobia' in adults: a case report**Cicek Hocaoglu<sup>1</sup>, Faruk Gulluce<sup>2</sup><sup>1</sup>Recep Tayyip Erdogan University, Faculty of Medicine, Department of Psychiatry, Rize-Turkey<sup>2</sup>Recep Tayyip Erdogan University, Faculty of Medicine, Rize-Turkey

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Specific phobia is much more common than most people imagine perhaps because the person with a specific phobia disorder may feel embarrassed about it and hide it from others. Research has shown that at least one in ten persons had a specific phobia disorder. For example, a recent study by Zimmerman et al found that the lifetime rate of specific phobia was 11.8% in psychiatric patients. These results are consistent with lifetime prevalence of 12.5% for specific phobia obtained in an older but much larger sample. And according to this same study, specific phobia ranked as the third most prevalent psychiatric disorder being outranked only by major depression at 16.6% and alcohol abuse at 13.2%. Although specific phobia is a chronic illness and animal extinction studies suggest that relapse was a common phenomenon, little is known about long-term outcome. Specific phobia is a type of disorder in which, the affected individual displays a marked and enduring fear of specific situations or objects. Individuals with specific phobias experience extreme fear as soon as they encounter a defined situation or object, a phobic stimulus. The specific phobia triggers a lot of distress or significantly impairs an affected individual.

The case is a 22-year-old female, single and under grad. She is living with a roommate in a different city separated from his family. Since childhood the patient is afraid of cockroaches. She cannot stay in places outside her home for a long time continuously apply insecticide the places she lives in fear of being faced with cockroaches available. Because of the fear of cockroaches the patient has kept a cat at home. The patient was admitted to our outpatient clinic one month ago. She said she saw a cockroach in the bathroom, locked bathroom, stood on a chair for a night, the lights have been constantly on in the house. After this incident the patient's school attendance and academic success decreased. In our study with a diagnosis of specific phobia of 'cockroach phobia' treated with patient is presented in the light of the literature examining in the framework of the history of disease.

Animal phobias are among the most common and persistent of all phobias. At the beginning of the most feared animals: cats, dogs, birds, insects, animals such as 'cockroach phobia' is very old known animal phobia. But, cockroach phobia etiology, clinical features, course, and treatment is limited.

**Key words:** specific phobia, cockroach phobia, animal phobia

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**[PP-118] Attention deficit-hyperactivity disorder****Henoch-Schönlein Purpura with attention deficit hyperactivity disorder**Canan Yusufoglu<sup>1</sup>, Ali Riza Sonkaya<sup>2</sup>, Ibrahim Taymur<sup>3</sup><sup>1</sup>Erenkoy Mental Health and Neurology Training and Research Hospital, Department of Child and Adolescent Psychiatry, Istanbul-Turkey<sup>2</sup>Gulhane Military Medical Academy Haydarpasa Training Hospital Department of Neurology, Istanbul-Turkey<sup>3</sup>Bursa Sevket Yilmaz Training and Research Hospital, Department of Psychiatry, Bursa-Turkey

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Henoch-Schönlein purpura (HSP) is one of the most common vasculitis of childhood and frequently associated with the gastrointestinal tract involvement, manifesting as abdominal pain, vomiting and GI bleeding. The etiology is unclear. Interaction of several environmental factors, including infections and multiple genes has been proposed to play a role in pathogenesis. Neurological symptoms are rare although non-specific headache followed by subtle encephalopathy with minimal changes in mental status, such as labile mood, apathy and hyperactivity may be more common than previously thought. In a prospective study 46% of 26 patients had abnormal EEGs. It represents a diffuse vasculitis that is secondary to hypersensitivity. Neuropsychiatric conditions can also be seen in the latter, including attention deficit hyperactivity disorder (ADHD), being more frequent in the chronic forms of the disease.

We report a case of a 11-year-old male HSP patient with ADHD. He is a 6<sup>th</sup> grader. When he was in primary school, he learned reading at 1<sup>st</sup> class. He had a high academic achievement but he has been getting bored quickly of lessons since the 1<sup>st</sup> class and he has got attention problems. The case had no resume medical histories. ECG is within the normal values.

From when our case was 2-3 years of age, was referred Behcet Uz Hospital in September 2001 with the purpuric rashes, swollen legs. He had taken antibiotic. The case had no history of infection or animal/insect bites at least until the onset of rashes. The case was diagnosed as having HSP.

ADHD is one of the most common childhood brain disorders and can continue through adolescence and adulthood. Symptoms include difficulty staying focused and paying attention, difficulty controlling behavior, and hyperactivity (over-activity). These symptoms can make it difficult for a child with ADHD to succeed in school, get along with other children or adults, or finish tasks at home. ADHD is a common disorder of complex pathology with several possible treatment options. The first-line treatment of ADHD is the prescription of stimulant drugs such as methylphenidate. In this case we point out that methylphenidate with behavioral management was associated with benefit in the management of ADHD with HSP and additional cognitive impairments. Methylphenidate appears to be a safe and effective treatment for ADHD in the majority of children with HSP. In our case a 12-year-old child with a diagnosis of ADHD had an academic success; methylphenidate treatment was carried out and our patient has got benefits.

If Children diagnosed with ADHD have a history of vasculitis, the treatment of methylphenidate may be the first option. During the early years of children, as the neurodevelopment is in progress, HSP should be followed up in advanced stages for ADHD, if diagnosed.

**Keywords:** Henoch-Schönlein purpura, attention deficit hyperactivity disorder, methylphenidate

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### [PP-119] Psychopharmacology

## A retrospective study on ziprasidone use in a psychiatric inpatient unit

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**Objectives:** Lack of response to treatment and side effects of antipsychotics limit their use in early onset psychosis and mood disorders. Ziprasidone has been recently approved by the U.S. Food and Drug Administration for children with bipolar disorder (BD) above 10 years of age as a third line strategy. There are only few studies for ziprasidone use in early onset psychiatric disorders. The primary objective of this study was to evaluate the effectiveness and tolerability of ziprasidone in children and adolescents hospitalized in a psychiatric inpatient unit.

**Method:** A retrospective chart review was conducted on children and adolescents, who received ziprasidone in the inpatient psychiatry unit of Bakirkoy Research & Training Hospital for Psychiatry, Neurology and Neurosurgery, between 1 January 2006, and 31 December 2013, Medical charts of 27 adolescents were reviewed to determine clinical information, tolerability and effectiveness of ziprasidone. Patients were evaluated according to the Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> Edition, Text Revision based on clinical assessment. Severity of symptoms and clinical response of were assessed with Young Mania Rating Scale (YMRS) for BD and Negative Syndrome Scale (PANNS) for psychosis. The PANNS and YMRS scores and electrocardiogram were obtained at baseline and then weekly. Side effects were also obtained.

**Results:** Parents of 2 of 27 patients discharged their children before their treatment was completed. Forty percent of the 25 patients were female. The mean age was 16 years and 2 months with a standard deviation of 15 months (range 13 years-17 years and 8 months). The psychiatric diagnoses were BD (32%, n=8), psychosis (32%, n=8), conduct disorder (20%, n=5), Obsessive compulsive disorder (8%, n=2), tic disorder (4%, n=1) and autism (4%, n=1). Generally, ziprasidone was either added to the existing antipsychotic treatment or other antipsychotics were replaced with ziprasidone; only 16% of the patients were treatment-naïve. Previously used antipsychotics were replaced with ziprasidone due to the ineffectiveness in 72% of (n=18) patients and side effects in 12% (n=3) of patients. Mean initial dose of ziprasidone was 55.20 (range 40-80) mg/day and mean maximum dose of ziprasidone was 136.80 (range 40-240) mg/day. Four patients reported side effects, including prolactinemia and asymptomatic QTc prolongation. None of the patients developed severe complications including arrhythmia. Improvement was recorded in 37.5% of patients with psychosis and 62.5% of patients with BD; with a total number of 14 patients (56%).

**Conclusions:** Evidence from this study supports the effectiveness and safety of ziprasidone for a variety of psychiatric disorders in children and adolescents. Ziprasidone can be considered as a viable treatment option for patients, who do not respond or experience side effects with other antipsychotics. Ziprasidone was generally well tolerated, with asymptomatic QTc prolongation as the most common side effect for discontinuation. Long-term follow-up studies may provide further knowledge about the safety of ziprasidone in this age group.

**Keywords:** adolescents, side effects, efficacy, ziprasidone

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**[PP-120] Others****Psychotic symptoms related to hydroxychloroquine**Borte Gurbuz Ozgur<sup>1</sup>, Duygu Aslan Kunt<sup>2</sup>, Levent Sevincok<sup>2</sup><sup>1</sup>Adnan Menderes University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Aydin-Turkey<sup>2</sup>Adnan Menderes University, Faculty of Medicine, Department of Psychiatry, Aydin-Turkey

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Hydroxychloroquine is an antimalarial drug, which is also used for the treatment of rheumatoid arthritis, lupus erythematosus (both systemic and discoid), Sjögren Syndrome, post-Lyme arthritis, and chronic Q fever. Although antimalarial drugs have been associated with various side effects including neuropsychiatric symptoms such as depression, claustrophobia, feelings of inferiority, increased dreaming, loss of sleep from noxious dreams, suspiciousness, loss of affection, labile affect, delirium, delusions, auditory hallucinations and visual hallucinations; psychosis induced by hydroxychloroquine is unexpected.

A 51-year-old, married female patient suffering from insomnia for 4 days was admitted to psychiatry outpatient clinic. She had auditory hallucinations, perspective and reference delusions, impairment in judgment for twenty days. Since nine years, she has used several drugs such as methotrexate, salicylazosulphapyridine, prednisolone, and adalimumab because of a diagnosis of rheumatoid arthritis. Four months ago, hydroxychloroquine 200 mg/day (d) was added to her treatment for her shoulder pain. The brain MRI and the results of all laboratory tests were normal. At admission, Scale for the Assessment of Positive Symptoms (SAPS) and Scale for the Assessment of Negative Symptoms (SANS) scores were 18 and 0, respectively. For her insomnia and the prominent psychotic symptoms, quetiapine was started at a dose of 25 mg/d and titrated up to 75 mg/d. One week later quetiapine was changed to olanzapine 5 mg/d because of tachycardia. Within one month, the dose of olanzapine was increased to 20 mg/d. Also, haloperidol 1 mg/d and alprazolam 0,5 mg/d were added to treatment for her positive symptoms of psychosis. Initially, the drugs which the patient received for rheumatoid arthritis were not discontinued and we tried to manage psychiatric symptoms with antipsychotic treatment. When we noticed her psychotic symptoms were persisting despite an effective antipsychotic treatment, we decided to discontinue hydroxychloroquine, as we predicted insomnia and psychotic symptoms developed one-two months after hydroxychloroquine was added on previous drugs. One week later hydroxychloroquine was stopped, her primary psychotic symptoms resolved (SAPS=2, SANS=0). Therefore, we supposed that the psychotic symptoms of this patient might be related to short-term hydroxychloroquine treatment. Then, we discontinued the all-antipsychotic drugs, and observed that her primary psychotic symptoms did not relapse until now.

The exact mechanism psychosis associated with hydroxychloroquine or chloroquine is not clear but these mechanisms are suggested to be related with dopaminergic and anticholinergic effects. It was shown in an animal study that, usage of chloroquine, in low doses, produced excitatory effects. Chloroquine might increase dopaminergic activity by increasing dopamine-transporter protein turnover and decreasing the down regulation of post-synaptic dopamine receptors. The anticholinergic effects of chloroquine in cortex contribute to the neuronal mediation of psychotic symptoms by affecting mesolimbic dopaminergic transmission. Das et al. suggested another one that hydroxychloroquine might cause a lysosomal dysfunction by accumulation in lysosomes of cells which could be probable for psychotic symptoms. In light of this and previous cases in the literature, relationship between hydroxychloroquine and psychosis should be considered. Our case indicates that long-term antipsychotic drug interventions might not be necessary in such patients developed psychotic symptoms following hydroxychloroquine treatment.

**Keywords:** hydroxychloroquine, psychosis, rheumatoid arthritis

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**[PP-121] Schizophrenia and other psychotic disorders****Possible interferon-alpha associated psychosis treated with amisulpride in an adolescent**

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Interferon (INF) is an immunomodulatory agent that is widely prescribed for treatment of chronic viral diseases, some haematological cancers, solid tumors and multiple sclerosis. Most common side effects of interferon therapy are flu-like symptoms, mild elevations in hepatic enzymes, fatigue, anorexia and neuropsychiatric symptoms. According to our knowledge, in this article, we report the first adolescent suffering from INF-alpha induced psychosis during hepatitis B treatment. Through this case report, we wanted to draw attention of clinicians on this rare but challenging side effect.

A 14-year-old boy presented to emergency psychiatric unit with suspiciousness, aggressive behaviors against his family, persecutory, mystic and grandiose delusions for two months comorbid with active chronic hepatitis B infection had been diagnosed. Before first psychiatric admission, he was under the treatment of lamivudine 100 mg/day for 2 weeks and he had been treated with interferon alpha 2b (3 million U/ week, subcutaneously) for six months. In his first mental status examination, he was awake, alert and disoriented with place and time. His speech was very slow, disorganized by several blocks and incoherent. His affect was inappropriate and restricted. His psychomotor activity was reduced. He had auditory hallucinations, persecutory, mystic and grandiose delusions. According to family, his psychiatric symptoms were firstly seen 2 weeks after cessation of INF therapy. He had no any psychiatric and medical diseases except for chronic hepatitis B. His neurologic examination and laboratory findings were normal.

He was diagnosed as "medication-induced psychosis". Because of his hepatitis history, an antipsychotic, metabolized especially by kidney was preferred. He was started on amisulpride 200 mg/day and titrated to 800 mg/day. Also, he continued taking antiviral treatment at the same dosage. At the end of second week of hospitalization, his delusions and hallucinations were totally regressed. His affect was appropriate and his social interaction was very well. He was discharged on amisulpride 800 mg/day and lamivudine 100 mg/day after a hospitalization period of fifteen days.

The case mentioned above was evaluated as a possible interferon-alpha associated psychosis because that the symptoms started approximately six months after INF treatment. Also, the absences of any organic causes, family psychiatric history and past psychiatric disease explaining psychosis have supported our opinion. Because interferon induced psychosis has been seen rarely, it could be overlooked by clinicians in comparison to its more common side effects. Moreover, this rare side effect may interrupt treatment of some important diseases such as hepatitis and malignancies. In conclusion, we suggest that patients should be observed carefully by clinicians in terms of psychiatric side effects especially psychosis during interferon treatment.

**Keywords:** adolescent, interferon, psychosis, side effect

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**[PP-122] Psychopharmacology****Risperidone induced acute dystonia: two case reports**Canan Yusufoglu<sup>1</sup>, Feride Ezgi Unal<sup>2</sup>, Alper Unal<sup>2</sup>, Ali Riza Sonkaya<sup>3</sup>

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Antipsychotic use in children is increasing. Neuroleptic-induced acute dystonia, or also known as acute dystonic reactions, are seen within days after starting or dose increase of antipsychotics. Dystonic reactions are adverse extrapyramidal symptoms (EPS) and are common to antipsychotics. They are thought to have a significant impact on subjective tolerability and adherence with antipsychotic therapy in addition to impacting function. Unlike conventional antipsychotic medications, atypical antipsychotics have a significantly diminished risk of inducing acute EPS at recommended dose ranges. The purpose of the case reports was to provide guidance to clinicians on the clinical management EPS of second-generation antipsychotics.

**Case 1.** A 10-year-old boy was admitted to our polyclinic with irritability, aggressive behavior, loss of interest to lessons, and difficulty in adapting to the rules. Sub-scores of WISC-R were found as following: verbal score:118, performance score: 101, IQ: 112, general information: 15, arithmetic: 8, judgment: 16, block design: 8, sequence of numbers: 10, picture completion: 11, code: 9, picture completion: 15. Bender gestalt visual motor test score was found to be within 10% percentile. Low dose methylphenidate treatment was started and risperidone was added for behavioral problems. Methylphenidate and risperidone doses were increased to 36 mg/day and 2 mg/day, respectively during the clinical course. One month later, it was found out that risperidone was administered to the patient 4 mg/day instead of 2 mg/day, erroneously, by the family. Patient was admitted to emergency with acute dystonic reactions consisting of torticollis, tongue protrusion and respiratory distress that resolved with the intramuscular administration of biperiden 2.5 mg.

**Case 2.** A 5.5-year-old boy was the only child of the family. His neuromotor development was normal. He began to walk at 1 year-old and speak at 2 year-old. He wasn't at school age. In particular of family history; his cousin was autistic. He was admitted to our polyclinic with complaints including: irritability, aggressive behavior, difficulty in establishing relationships and late bedtime. He didn't know colors and shapes. His initial treatment was started with risperidone 0.25 mg/day. He was admitted to the emergency service with tongue protrusion, neck dystonia and inability to speak after the second dose. We diagnosed EPS and administered intravenous biperiden hydrochloride (1x1/8 bulbs in 100 cc %0,9 NaCl). Complaints were resolved with biperiden.

Acute dystonic reactions can occur within a few hours, days or weeks (4). Risk of EPS is increasing with high dose. However, single-dose or low-dose antipsychotics can induce dystonia. In this case report, we point at the importance of management of acute dystonia. Families should be informed about EPS.

**Keywords:** acute dystonia, biperiden hydrochloride, risperidone

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### [PP-123] Autism

## Neurological comorbidities and consultation of children under 3 years in case of pervasive developmental disorder

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**Objective:** Pervasive developmental disorder (PDD) is an early onset neurodevelopmental disorder characterized with impairment in social, communicative and cognitive development and repetitive- restrictive behavior. In our study, we aimed to examine neurological consultation and comorbidity in children diagnosed with PDD who admitted to our outpatient clinic in 2013.

**Methods:** Files of PDD patients, who admitted to 0-3 year's outpatient clinic, were evaluated retrospectively.

**Results:** Clinical evaluation of children under three revealed that 42 children were diagnosed as having autism, 13 children with Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS). 13 children with autism and three children with PDD-NOS accompanied by neurological symptoms, was requested to have neurological consultation. Seven of the children were reported to have normal neurological state and electroencephalogram (EEG), while one patient diagnosed as epilepsy. However the data of the rest 8 patients could not be accessed.

**Conclusions:** Autism is associated with high rates of epilepsy and subclinical epileptiform activity. Some studies was reported that epileptiform activity could lead to autistic regression. In contrast to literature, we found less comorbidity with PDD and neurological and epileptiform abnormalities.

**Keywords:** pervasive developmental disorder, neurological, epileptiform

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**[PP-124] Attention deficit-hyperactivity disorder****An adolescent with Sanfilippo type C and the effect of methylphenidate treatment: a case report**Canan Yusufoglu<sup>1</sup>, Elif Akin<sup>1</sup>, Ayse Buyukdeniz<sup>2</sup>, Ali Riza Sonkaya<sup>3</sup><sup>1</sup>Erenkoy Mental Health and Neurology Training and Research Hospital, Department of Child and Adolescent Psychiatry, Istanbul-Turkey<sup>2</sup>Marmara University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Istanbul-Turkey<sup>3</sup>Gulhane Military Medical Academy Haydarpaşa Training Hospital, Department of Neurology, Istanbul-Turkey

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Sanfilippo syndrome (mucopolysaccharidosis type III or MPS III) is a lysosomal storage disorder characterized by progressive mental deterioration and behavioral problems with only mild somatic disease. Sanfilippo type C in 2006 the gene encoding enzyme acetyl-CoA: alpha-glucosaminide N-acetyltransferase was cloned and localized to chromosome 8 p11.1. Sanfilippo syndrome includes destructiveness, restlessness, and aggressiveness and sleep problems. Aggression and hyperactivity respond poorly to behavioral treatment. Progressive behavioral problems are predominant symptom in Sanfilippo patients. Behavioral problems usually start around the age of 3-5 years and consist of restless, destructive, chaotic, anxious and sometimes aggressive behavior. Behavioral problems decline with age and eventually disappear due to the progressive mental retardation, finally resulting in complete loss of initiative. Drug treatment aimed at controlling the hyperactivity and aggression is necessary to allow many families to cope. The response to such treatment is very unpredictable and parents should be warned that a temporary worsening of behaviors might follow the introduction of any antipsychotic agent.

A 12-year-old girl was presented with hyperactivity and restlessness and behavioral problems. At age of 8, the adolescent was treated with 0.5 mg/day risperidone because of agitation, restlessness, and temper tantrums. At 11-year-old girl was diagnosed as having Sanfilippo type c with the clinical presentation consisting of coarse faces, hepato/splenomegalia; dysostosis multiplex, neurocognitive deficit, hypertrychosis, family history of positive similar affected late male cousin. When the adolescent was 11 years old, atomoxetine 20 mg/day treatment was began due to hyperactivity, and as the behavioral problems continued, atomoxetine was stopped and aripiprazole 2.5 mg/day was started. 4 days later, the patient developed akathisia and extrapyramidal side effect and aripiprazole was discontinued. During the follow up, the patient continued taking fluoxetine 10 mg /day because of restlessness and crying. Complaints decreased but since hyperactivity and talking too much persisted, methylphenidate was added on present drug treatment and improvement was observed. The Sanfilippo syndrome is particularly hard on families, because the progressive mental retardation is often accompanied by intense hyperactivity that is not readily managed with medications. Our case is notable because conventional treatment, including behavioral modification and pharmacotherapy including stimulants and most of antipsychotics has provided limited success in managing behavioral problems.

**Keywords:** methylphenidate, Sanfilippo syndrome**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S163****[PP-125] Others****Fluoxetine-induced extrapyramidal symptoms in an child: two case reports**Canan Yusufoglu<sup>1</sup>, Feride Ezgi Unal<sup>2</sup>, Alper Unal<sup>2</sup>, Ali Riza Sonkaya<sup>3</sup><sup>1</sup>Erenkoy Mental Health and Neurology Training and Research Hospital, Department of Child and Adolescent Psychiatry, Istanbul-Turkey<sup>2</sup>Erenkoy Mental Health and Neurology Training and Research Hospital, Department of Psychiatry, Istanbul-Turkey<sup>3</sup>Gulhane Military Medical Academy Haydarpaşa Training Hospital, Department of Neurology, Istanbul-Turkey

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Selective serotonin reuptake inhibitors (SSRIs) have been increasingly used in the treatment of children and adolescents. Extrapyramidal symptoms (EPSs) are an uncommon side effect of serotonin reuptake inhibitors (SSRIs). The most common EPS associated with SSRIs seems to be akathisia, followed by dystonia and Parkinsonism. Fluoxetine is the SSRI, most associated with extrapyramidal reactions in the majority of cases. We present two cases that developed extrapyramidal symptoms (mainly dystonia) on fluoxetine.

**Case 1.** A 10-year-old girl was admitted to our polyclinic with complaints including unhappiness, anhedonia and academic failure. Psychotic disorder and depression diagnosis were in family history. Fluoxetine 10 mg/day liquid dose was initiated and 10 days later

increased to 20 mg/day dose. Patient was admitted to the emergency with limb spasm, backache and rash, which were resolved with intramuscular administration of biperidene.

**Case 2.** A 11-year-old girl was admitted to hospital with throbbing headache ten months ago. EEG findings and MR venogram were normal. Plaques were established in cranial MRI. Valproate treatment was initiated. Drug wasn't used regularly. A year later patient was admitted to neurology clinic with headache, drop and swoon. Topiramate and methylprednisolone treatments were initiated because of plaques. 3 weeks later headache was continued. Fluoxetine liquid 10 mg/day was initiated for anxiety. Muscle spasm, joint pain and akathisia were presented after 5 days. Complaints were resolved with intramuscular injection of 5 mg biperidene.

The exact frequency of occurrence of EPS with antidepressants is unclear, but the estimated incidence is 1 per 1000 or less among SSRI users. Any EPS can interfere with patient compliance, causing significant morbidity and, ultimately, decreased quality of life. Clinicians should be aware of the potential for any class of antidepressants to cause EPS.

**Keywords:** extrapyramidal symptoms, dystonia, fluoxetine

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### [PP-126] *Dementia*

## A case with a late-onset kleptomaniac and hoarding behavior

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The case was a retired 66-year-old police officer. He had been manifesting kleptomaniac behaviors, which led to opening of a legal suit against him two months ago. For the last one year, he was stealing with a sudden impulse without any economic need. For the last 18 months, he could not get rid of the superfluous household goods. He was also resisting against family members' attempts at getting rid of unnecessary objects.

At the time of his hospitalization, HAM-D scale score was 23 points. On cranial MR, at the level of frontal lobes bilaterally, thinned cortex, prominent sulci, cortical and subcortical atrophy in the anteroparietal area and secondary to this atrophic process, chronic frontal subdural effusion measuring 9 mm at its thickest area were observed. Mini-mental performance test result of the patient without any complaint of amnesia was within normal limits (28/30 pts). EEG findings were normal. He had been assigned 90/100 points in Addenbrook cognitive test, which evaluates cognitive functions in more detail than mini-mental test. This test result demonstrated that his cognitive functions were normal when compared with age-matched healthy individuals. On neurological examination, he had an apathic appearance. His MMPI test results revealed that he had been vehemently seeking medical help. Neuropsychological tests related to the assessment of memory including Rey Complex Figure Test, Serial Digit Learning Test (SDLT) and Otkem Verbal Memory Processes Scale Tests were performed. The patient had memory factor scores nearing average values of the age-matched individuals. Benton Facial recognition and also judgment of Line Orientation Tests. Besides, his mental and intellectual faculties related to visual-spatial perception, imaging, orientation, spatial cognition and facial recognition were not impaired. Wisconsin Card Sorting Test (WCST), Stroop Test and Trail-Making tests were used to evaluate functions of the frontal lobe. In Stroop test his performance score was two standard deviations below than that of the age-matched healthy individuals. Based on WCST, Stroop and Trail-making test results, it has been detected that he was erroneously insistent on his reactions and had experienced difficulties in inhibiting improper reactions. When cognitive tests were evaluated as a whole, we thought that his executive functions were significantly impaired.

The case with abnormal cranial MR findings together with impairment in executive functions as manifested in cognitive tests, by apathy, onset of hoarding behavior followed by habitual stealing acts seen since the last year, increase in appetite and change in eating habits, was diagnosed as behavioral variant FTD based on International Frontotemporal Dementia Consensus Criteria.

Our case we presented here in was diagnosed as FTD, after detailed neurocognitive tests and review of new diagnostic criteria. While results of clinical tests related to memory and intellectual capacity are usually within normal limits in cases with late-onset behavioral problems, their evaluation together with frontal lobe function tests has been recommended in order not to overlook diagnosis of FTD.

**Keywords:** late onset, kleptomania, hoarding

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**[PP-127] Schizophrenia and other psychotic disorders****Stalking in an erotomaniac patient diagnosed as resistant depression: a case report**

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Erotomania (also known as De Clerambault's syndrome) is usually described as a rare delusional syndrome that characteristically involves a woman, who believes that a man, typically of higher social, economic or political status, is in love with her. Stalking, which has been given the clinical term "obsessional following", is repetitive threatening or harassing behavior that creates a fear of harm in the victim. In this article we aimed to present a case of erotomania, who stalked her doctor and was diagnosed as resistant depression.

A 46 years old, female, married, housewife was admitted to our psychiatric outpatient clinic. She had the symptoms of depressed mood, irritability, loss of interest, insomnia, psychomotor retardation. She was diagnosed as chronic major depression and used various antidepressants for 8 years. She was using Venlafaxine 150 mg/day for 20 days. In subsequent interviews she said that she had abdominoplasty operation 5 years ago. She thought her doctor had fallen in love with her, however; the doctor had never mentioned this issue. She had gone to the hospital to see her doctor again and again. When we asked her, how she understood that the doctor had fallen in love with her, she could not give a reasonable answer. She had seen apparently insignificant actions as incontrovertible evidence of his devotion. She said that she and the doctor had a special spiritual understanding. Although the patient did not know the address of the doctor, she sent gifts to the doctor via his phone number. Later she said that every year at the same day the doctor made a missed call from a private number and when she answered the phone he didn't talk to her. When we asked her why she didn't call him, we found out that she didn't know the phone number of the doctor. Upon these conflicting expressions, she was diagnosed as erotomaniac type of delusional disorder and quetiapine 600 mg/day was initiated gradually. Erotomania is often overlooked for several reasons. Among these is the fact that the disorder is often associated with more well-known disorders in psychiatry such as schizophrenia, bipolar disorder, major depression, delusional disorder or another form of psychosis (such as psychotic depression, etc.) We presented a patient, who had a clinical picture of erotomania that involved his doctor a few days after operation of abdominoplasty. Erotomanics are typically female, whereas love obsessional and simple obsessional subjects are commonly male. Similarly our patient was a woman and she had a delusion of being loved by the doctor who was a stranger and had a higher social and economic status. The patient stalked her doctor by going to his clinic frequently, going his home and sending him gifts in the hope of seeing him. Our patient was treated as chronic major depression for 8 years. It is important both for the patients and victims not to overlook and delay in the initiation of therapy in erotomania phenomenon with frequent stalking.

**Keywords:** erotomania, resistant depression

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**[PP-128] Autism****Asperger's Syndrome and comorbid somatic type delusional disorder and epilepsy: a case report**

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Asperger's Syndrome is a form of pervasive developmental disorder, which can include poor social understanding, all-absorbing narrow interests, uncoordinated motor movements, speech and language idiosyncrasies and difficulties with non-verbal communication. Comorbid psychiatric conditions are frequent in patients with AS. We present a case with Asperger's Syndrome, who has comorbid somatic type delusional disorder and epilepsy.

A 35 year-old, single, male, epileptic patient was presented with feeling his lips stuck, inability to wiggle his mouth, feeling bone-like structure at the tips of his lips in last 2 years. He thought that, he could not read books because of these feelings. He was intolerant and irritable. His social relations were weak; eye contact was limited. He could memorize the books that he read before, about geography or religion. He knows all vehicle registration plates of Turkey and all districts of provinces of Turkey. His antiepileptics were 1600 mg/day

gabapentin and 1600 mg/day carbamazepine. He graduated from primary school. There wasn't any language, cognitive development and self-help skill delay. His first psychiatric examination showed that his mood and affect was anxious. His consciousness was clear. He was cooperative and well oriented towards people, places and time. He had inadequate insight and judgment. He had psychomotor agitation. When he was asked for subjects that he memorized, he took a ritualistic posture and started shaking and saying that he memorized with minimal eye contact. There wasn't any hallucination. He had perseverations and somatic delusions that his lips were stuck and stiff like a bone. Alexander IQ: 65 (mild mental retardation) Neuropsychological test results were general cognitive disorder and frontal type memory disorder. We thought that epilepsy and delusional disorder had bad influence about tests. EEG result was diffuse, mild bioelectrical delay. We first continued his antiepileptic drugs, and started clomipramine 75 mg/day for perseverations and olanzapine 20 mg/day for delusional thoughts about his lips. Because of minimal eye contact, history of social isolation and ritualistic behaviors, we referred him to child and adolescent psychiatry for confirmation of Asperger's Syndrome. They confirmed the diagnosis and suggested aripiprazole treatment. We started aripiprazole 10 mg/day, lorazepam 2,5 mg/day for akathisia. In follow-ups olanzapine, clomipramine and lorazepam were discontinued; aripiprazole dose was increased to 20 mg/day. He was discharged with improvement.

The patient we presented—an adult male with a history of repetitive behavior, social dysfunctions, aggressions, and limited interests in a specific range—met virtually all DSM IV criteria for AS. PDD patients have a two-to-six times greater risk of experiencing comorbid psychiatric conditions than normal population. AS may display symptoms similar to those seen in psychotic or depressive disorders and some personality disorders. AS may be associated with psychotic episodes. Clinicians warn against overvaluing psychotic symptoms, when specific features of AS are present. With aripiprazole treatment, the patient experienced a range of positive clinical changes in social and psychological skills. We aimed to inform the clinicians about the comorbidities of AS.

**Keywords:** Asperger's Syndrome, comorbidity, delusional disorder, epilepsy, aripiprazole

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### [PP-129] *Schizophrenia and other psychotic disorders*

## Successful treatment of primary delusional parasitosis with risperidone: a case report

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Delusional parasitosis is characterized by the fixed belief that one is infested with parasites or small living creatures although there is no medical evidence for this. It can manifest itself as an isolated delusional disorder (primary), as a symptom of another psychiatric disorder or as an organic or toxic psychosis. Here, we describe a patient, who was diagnosed as having delusions of parasitosis that was successfully treated with risperidone.

A 66-year-old female was presented with a 5-year history pruritus in her forehead and scalp. She believed that her hair had been infested with insects that bit her on the head. She was admitted to our clinic after having been treated by approximately 10 physicians. She underwent treatment for scabies, and treatment with antihistamines. None of these measures provided permanent relief. She reported being preoccupied by this symptom to the point of being able to think of nothing else throughout the day. The patient denied any other psychotic symptoms. Direct examination of the skin for bites, stings, or scabies were negative for parasites. On mental status examination, she was anxious and dysphoric. There was no evidence of cognitive decline. Results of the routine laboratory tests were in normal limits. Treatment with risperidone 2 mg daily was begun. Within 4 weeks she noted a decrease in her symptoms and the dose of risperidone was increased to 3 mg daily. She no longer felt as though she were being bitten. She remained asymptomatic on this dose of risperidone for 12 months.

Antipsychotics both typical and atypical have been tried successfully to treat delusional parasitosis. In particular, has been recommended as a first-line treatment for this condition. However, despite the therapeutic efficacy of pimozide, the possibility of adverse effects, most notably extrapyramidal symptoms, has also been reported.

The patient in the present case showed remission while receiving risperidone treatment. Although no controlled clinical studies are available, there are some case reports indicating the possible effectiveness of risperidone for delusional parasitosis.

Based on the presented patient we believe that risperidone is an effective and well-tolerated agent for the therapy of delusional parasitosis. Therefore, risperidone should be considered as one of the possible treatment modalities for delusional parasitosis.

**Keywords:** delusional parasitosis, risperidone, treatment

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**[PP-130] Sleep disorders****Assessment of subjective sleep quality in iron deficiency anemia**Murat Semiz<sup>1</sup>, Ali Ugur Uslu<sup>2</sup>, Serdal Korkmaz<sup>3</sup>, Suleyman Demir<sup>4</sup>, Ilknur Parlak<sup>5</sup>, Bahattin Aydin<sup>5</sup>, Mehmet Sencan<sup>3</sup><sup>1</sup>Gaziosmanpasa University, Faculty of Medicine, Department of Psychiatry, Tokat-Turkey<sup>2</sup>Kangal State Hospital, Department of Internal Medicine, Sivas-Turkey<sup>3</sup>Cumhuriyet University, Faculty of Medicine, Department of Hematology, Sivas-Turkey<sup>4</sup>Dicle University, Faculty of Medicine, Department of Psychiatry, Diyarbakir-Turkey<sup>5</sup>Cumhuriyet University, Faculty of Medicine, Department of Internal Medicine, Sivas-Turkey

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**Objective:** We aimed to assess the effect of anemia on subjective sleep quality in patients with Iron Deficiency Anemia (IDA).**Method:** One hundred and four patients diagnosed as IDA and 80 gender and age matched healthy individuals were included in the study. The study sample was requested to complete a socio-demographic form (age, gender, marital status, income level and educational status), Hospital Anxiety and Depression (HAD) Scale and Pittsburgh Sleep Quality Index (PSQI).**Results:** In HAD scale, the average anxiety score was found to be  $9.24 \pm 4.37$  in the patient group and  $7.58 \pm 4.07$  in the control group. The average depression score was  $7.53 \pm 4.10$  in the patient group and  $6.41 \pm 2.74$  in the control group. The total Sleep Quality Score was  $6.71 \pm 3.02$  in the patient group and  $4.11 \pm 1.64$  in the control group. There was a statistically significant difference in terms of anxiety, depression and sleep quality scores. Linear regression analysis showed no association of anxiety and depression with poor sleeping.**Conclusion:** In the present study, subjective sleep quality was examined in patients having iron deficiency anemia. The relation between sleep quality and laboratory values was studied. The results obtained showed that, irrespective of the depression and anxiety signs, the subjective sleep quality was worse in the patient group when compared to the control groups. No significant relation was found between the sleep quality and laboratory values of the patients.**Keywords:** anxiety, depression, iron deficiency anemia, sleep quality**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S167****[PP-131] Mood disorders****Comparing remitted unipolar and bipolar depressive disorder according to the clinical features**Etem Soyucok<sup>1</sup>, Ahmet Ozturk<sup>1</sup>, Nazan Aydin<sup>2</sup>, Ismet Kirpinar<sup>3</sup><sup>1</sup>Dumlupinar University, Faculty of Medicine, Department of Psychiatry, Kutahya-Turkey<sup>2</sup>Bakiirkoy Mental Health and Research Hospital, Istanbul-Turkey<sup>3</sup>Bezmialem University, Faculty of Medicine, Department of Psychiatry, Istanbul-Turkey

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**Objective:** Mood disorders has been classified in two subgroups, which are namely bipolar and depressive disorders according to the type of the episode. The authors report that bipolar disorder with manic episode and unipolar disorder without manic and hypomanic episode can represent the two pole of a spectrum. It is seen that 15% of unipolar disorder switch to bipolar disorder. It is important for patients with major depressive disorder concerning which of them remains unipolar and which of them switches to bipolar disorder and there is no predictor demonstrated for identifying the switch. The studies report that there are some clinical and sociodemographic differences between these two disorders.

In this study we aimed to compare remitted unipolar and bipolar depressive patients concerning some clinical and sociodemographic factors.

**Method:** 53 unipolar and 52 bipolar depressive patients admitted to the university hospital psychiatry outpatient clinic were enrolled to the study, who were remitted according to the DSM-IV TR criteria. Patients were assessed with applying sociodemographic form including sociodemographic and clinical questions.**Results:** In the unipolar group, patients reported more stressful life events at the last episode. In the bipolar group, the age of onset was earlier, currently drug use were more and the duration of disease was longer. In addition to these, the number of psychotic featured

episodes, suicidal attempts, and hospitalization were more than unipolar group.

**Conclusion:** Current DSM system distinguishes unipolar and bipolar episode only according to the character of the episode. This distinction is for the progress of the disease but not identifies the bipolar disorder without history of manic or hypomanic episode yet. Therefore distinguishing the clinical, demographical and biological diversities between unipolar and bipolar depression is very important. Distinction on the basis of these features guides the clinicians about the progress and treatment options of the disorder.

**Keywords:** Unipolar depression, bipolar depression, sociodemographic features

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**[PP-132] Psychosomatic medicine - liaison psychiatry**

## A case report of factitious disorder with the outgoing autoinoculation

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Factitious Disorder is a mental disorder, which characterized by uncovering physical or psychological signs and symptoms intentionally or behaving like there are signs and symptoms. The underlining motivation for this behavior is the adoption of the patient's role. There is no such act requiring secondary profit. Physicians should keep in mind that Factitious Disorder was an important disease, which the incidence and prevalence of the disease is unknown and there are difficulties of diagnosis and treatment. In this article, patient who applied with complaints of ear discharge, autoinoculation identified during follow-up, underwent surgery many times and thought to be a Factitious Disorder, was presented.

**Keywords:** Munchausen syndrome, factitious disorders, autoinoculation

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**[PP-133] Addictions**

## Predictors of relapse in patients with opioid addiction during buprenorphine –naloxone maintenance treatment

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**Objective:** Illicit opioids such as heroin are among the most common form of illicit drug use worldwide. Buprenorphine–naloxone treatment of patients dependent on heroin has been reported to be more effective than placebo. This treatment allows clinicians to initiate and manage the treatment of opioid-dependent patients directly in the outpatient clinics. Up to now, no studies have examined factors associated with relapse and treatment retention in opioid dependent outpatients in Turkey. The goal of this study was to evaluate the predictors of three months compliance rate with buprenorphine–naloxone treatment among a sample of patients with opioid addiction.

**Methods:** A retrospective chart review of 60 patients with opioid addiction treated at the Akdeniz University, Alcohol and Substance Addiction Treatment and Research Center was conducted. Medical records of the patients were accessed via the center's database. We evaluated the records of patients who sought and had received any treatment with buprenorphine–naloxone for opioid addiction in the center from September 1, 2013 to November 31, 2013. Records were reviewed from the beginning of a patient's opioid treatment, through January 31, 2014, to ensure an opportunity for at least three months of data collection, even if the patient dropped out of treatment.

Relevant data such as sociodemographic variables, drug use history, and opioid use patterns were gathered from the records. Normality of the data was tested using the Kolmogorov–Smirnov test. If distributed normally, data were shown as means and standard deviations and compared with Student's t-test. Non-normally distributed data were described as median (25<sup>th</sup> percentile; 75<sup>th</sup> percentile). The non-parametric Mann–Whitney U test was used to detect differences in non-normally distributed continuous variables between two groups. Categorical variables were compared using chi-square test.

**Results:** The mean ( $\pm$ standard deviation) age of the study population was  $25.7\pm 6.7$  years. There were only four (6.5%) females in the cohort. Most of the patients were single (78.3%) and unemployed (65%). At least three months after buprenorphine–naloxone maintenance treatment, relapse rate was 66.6%.

**Conclusions:** Our results suggested patients, who were never married and those with an education of less than 8 years were more likely to relapse to opioid use. We also found a relationship between average daily heroin dose and poor outcome as reflected by illicit opioid use during treatment. The reason for this finding may be the increased need for substitution treatment among heroin dependent patients who use higher doses. Future research is needed to determine whether modifying these factors may lead to improved treatment outcomes.

**Keywords:** buprenorphine, naloxone, maintenance, relapse, treatment

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### [PP-134] *Schizophrenia and other psychotic disorders*

## Continuing clozapine treatment with lithium in patients with neutropenia or leukopenia

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Clozapine (CLZ) is a second-line antipsychotic drug that is used for treatment-resistant schizophrenia. Despite its effectiveness, CLZ has some serious side effects. Agranulocytosis and neutropenia are life-threatening side effects of CLZ. There are an incidence of agranulocytosis of around 1% and neutropenia of about 3%, with the highest risk within the first 6–18 weeks of treatment.

Lithium increases the neutrophil count and total White Blood Cell (WBC) as a side effect. The mechanism is not completely understood: direct stem cell stimulation and stimulation of granulocytemacrophage colony-stimulating factor have all been suggested. There isn't a defined serum level for neutrophils but a minimum lithium serum level of 0.4 mmol/l may be required.

We present a series of three hospitalized patients with schizophrenia. While they had demonstrated poor response to multiple antipsychotic trials, CLZ was started.

**Case 1,** E.Y was 24-year-old female with a history of schizophrenia for 6 years and has had suicide attempts. Leukopenia occurred (WBC: 3.60 K/uL) 3 weeks after starting CLZ treatment (400 mg daily). CLZ treatment continued with lithium. The leukocyte counts became normal after administration of lithium (300 mg daily). Time without blood dyscrasia after lithium administration was 6 months. The patient had a normal WBC count of 4.630 K/uL in last examination.

**Case 2,** A.A was a 50-year-old female diagnosed as schizophrenia for 25 years. Neutropenia (neutrophil: 1.450 K/uL, WBC: 2.950 K/uL) occurred 4 weeks after starting CLZ treatment. Treatment with CLZ (300 mg daily) continued with lower dosages of CLZ (100 mg daily) and lithium after hematology consultation. The neutrophil counts became normal after administration of lithium (600 mg daily). Lithium treatment continued at a dose of 300 mg daily. Time without blood dyscrasia after lithium administration was 30 months. During the 30 months of treatment, the patient's WBC and neutrophil counts remained in the range of 4.170 K/uL to 8.340 K/uL for WBC and 1.90 K/uL to 4.250 K/uL for neutrophil.

**Case 3** A.I was 43-year-old female diagnosed as schizophrenia and Obsessive compulsive disorder for 27 years. 8 weeks after initiation of treatment with CLZ neutropenia (neutrophil: 0.950K/uL, WBC: 1.80K/uL) occurred. CLZ (400 mg daily) was discontinued after hematology consultation. Schizophrenia symptoms severely worsened after CLZ withdrawal. Symptom control after CLZ re-challenge with lithium(600 mg daily) was good. The neutrophil counts became normal after administration of lithium. Time without blood dyscrasia after CLZ re-challenge was 8 months. Lithium treatment continued at a dose of 300 mg daily. The patient had a normal WBC count of 6.650/uL and neutrophil count of 3.40 K/uL in last examination.

In our own experience the patients responded well to CLZ treatment, in terms of clinical improvements in psychotic symptoms and reduction in suicide. Lithium may be useful in increasing the WBC in patients in those, who develop neutropenia or leukopenia while treated with CLZ as in our cases. If the WBC continues to fall despite lithium treatment, consideration should be given to discontinuing CLZ. Patients who are unresponsive to other antipsychotics and remain significantly distressed with poor quality of life and psychotic

symptoms should be considered for CLZ usage in combination with lithium when neutropenia or leukopenia occurred.

**Keywords:** clozapine, leukopenia, lithium, neutropenia, schizophrenia

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**[PP-135] Mood disorders**

## Frequency of alcohol and drug use disorders in patients with bipolar disorder followed in a specialized mood disorders unit and investigation of their clinical characteristics

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**Objective:** In a community based study (the Epidemiologic Catchment Area (ECA) Study), it was reported that the lifetime prevalence of alcohol use disorder (abuse or dependence) was 13.5% and drug use disorder (abuse or dependence) was 6.1%, in the USA. In bipolar patients the lifetime prevalence of alcohol use disorder was 44.7%, drug use disorder was 33.%, and any substance use disorder was 56.1%. The aim of this study was to identify the frequency of alcohol and drug use disorder (ADUD) in bipolar patients who are followed in a specialized mood disorders unit and to investigate the clinical characteristics of the sample.

**Methods:** Mood disorders and alcohol/drug use disorder modules of the Structured Clinical Interview for DSM-IV, Axis I Disorders (SCID-I) and Alcohol Use Disorders Identification Test (AUDIT), the Michigan Alcoholism Screening Test (MAST), Drug Use Disorders Identification Test (DUDIT) and Drug Abuse Screening Test (DAST-10) were applied to 292 bipolar patients in the euthymic state.

**Results:** In our sample ADUD was 6% (18/292). Among patients with ADUD, 15 of 18 were male and 3 were female. ADUD in males (12%) was higher than women (1.8%), and this difference was statistically significant ( $\chi^2(1)=12.86, p<0.001$ ). Alcohol use disorder rate was detected as 5% in general (15/292), 9% in men (12/125) and 1.7% in women (3/167), respectively. The rate of drug use disorder was found as 4% in general (12/292), 8% in men (10/125) and 1.1% in women (2/167).

**Conclusions:** The rate of bipolar patients with ADUD comorbidity followed up in our unit was found to be lower than those reported in the literature. In the 2012 report of Turkey Statistical Institute (TÜİK), which was published in 2012, the frequency of using alcoholic beverages in Turkey was reported to be 10.4% in general population, 17.2% in males and 3.8% in females. In the 2013 report of Turkey Review Center for Drugs and Drug Addiction (TUBİM), it was reported that in individuals between 15-64 years old, the rate of using any substance at least once in a life time (lifetime prevalence of substance use) was %2.7 in general population, %3.5 in men and %2.6 in women. Akkaya et al. reported that the rates of psychoactive substance abuse and alcohol dependence 3.2% and 4.9% respectively. In this study, the rate of psychoactive substance abuse was similar to our study. Discrepancy between the overall results of alcohol-drug use disorder in the literature and our study may ensue from well treatment compliance in our unit, inaccurate statements of patients, and low rates of alcohol-drug abuse among Turkish population compared with western society. We suggest that multi-centered studies which compare the rates of general psychiatry outpatient clinics and specialized mood disorder clinics would make an important contribution to the literature.

**Keywords:** alcohol, drug comorbidity, bipolar disorders, mood disorders

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**[PP-136] Obsessive compulsive and related disorders**

## Schizo-obsessive disorder: a case report

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Schizophrenia and obsessive compulsive disorder (OCD) the relationship between has attracted the attention of physicians for many years. Several studies suggest increased prevalence-rates of obsessive-compulsive symptoms (OCS) and even of Obsessive compulsive disorder (OCD) in patients with schizophrenic disorders. 10-52% of obsessive-compulsive symptoms and 7.8 - 26% of OCD rate in patients with

schizophrenia reported. The research on comorbidity between OCD and schizophrenia: On one hand, it is argued that high prevalence of comorbidity has implied common risk factors (neuroanatomical and neuropsychological correlates) and a causal relationship between these mental illnesses. Generally the dopamine system in schizophrenia and the serotonin system in OCD is considered to play a major role. In clinical practice improvement of obsessive-compulsive symptoms with serotonergic agents that neurochemical disturbances in the serotonin system in OCD have suggested.

The case is a 22 year old male, single, high school graduate, unemployed, who lives with his family. The patient was admitted with complaints of often bathing, staying too long in the bathroom and toilet. In the past, he had been admitted to various institutions but he did not benefit from treatment. Three months ago, he has not been cleaned sufficiently with the idea of a knitting needle stuck into the anus in the toilet and rectum was wounded. Patient was taken to the emergency hospital by his family and operated. In this study, a OCD patient with schizo-obsessive disorder who has been a non-responder to antidepressants for the last two years but whose symptoms improved after the addition of amisulpride 200 mg/d, is presented in the light of the literature examining in the framework of the history of disease

The role of dopamine in OCD is not well known. Serotonin-dopamine receptor antagonists and dopamine receptor antagonists to treat refractory OCD successfully showed the role of the dopaminergic system in the pathophysiology of OCD. Two of these neurotransmitter systems are known to interact with each other. Obsessive compulsive disorder is still considered primarily an anxiety disorder, though historically there has always been a question of whether obsessive-compulsive symptoms might be more properly considered as psychotic in nature, the so-called schizo-obsessive disorder, or as subtype.

**Keywords:** schizo-obsessive disorder, schizophrenia, Obsessive compulsive disorder

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### [PP-137] Anxiety disorders

## Choking phobia induced by Sjögren Syndrome: a case report

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Sjögren's Syndrome (SS) is a chronic autoimmune disorder of the exocrine glands with associated lymphocytic infiltrates of the affected glands. Dryness of the mouth and eyes results from involvement of the salivary and lacrimal glands. It can present with psychiatric symptoms; most commonly compatible with depression and anxiety. This paper introduces choking phobia induced with SS case. The interesting part in this case is that the patient was admitted to the internal medicine a myriad of times and in these admissions, his psychiatric complaints, such as fear of choking, prevailed over others; yet, SS was not considered.

The 65-year-old patient was admitted to outpatient psychiatry service with complaints such as, fear of choking, sleep disorder, anhedonia, introversion and loss of motivation.

About one year earlier, anxiety, which he developed about choking to death while he was in taking solid foods, resulted in sleep disorder and weight loss of more than 30 kg. The anxiety used to last all day long with the symptoms of tachycardia, sweating, dyspnea and swallowing problems. The patient was admitted to the emergency room many times with these complaints; nonetheless, the doctors could not diagnose nor ease his anxiety.

In addition, he was admitted to the internal medicine with gastrointestinal complaints such as xerostomia, stomachache, dyspepsia, meteorism and constipation. The examinations exposed antral gastritis and he was medicated with proton-pump inhibitors.

In his psychiatric history, he has suffered from depressive and hypomanic episodes since he had been 22-year-old. At his last psychiatry appointment, he was medicated with aripiprazole 5 mg/day and buspirone 15 mg/day, notwithstanding, his complaints did not cease and he was hospitalized to our inpatient service for detailed examination. He was diagnosed as bipolar disorder II and panic disorder and had HAM-D score of 36. At first, venlafaxine 37.5 mg and olanzapine 5 mg were administered, and then doses were incrementally increased to 150 mg and 10 mg, respectively.

His xerostomia and xerotalmia complaints led authors to suspect from SS; therefore, he was consulted to rheumatology clinic. Both Schirmer test (< 5 mm in 5 min) and ANA titres were positive (at a dilution of 1:100), as well as anti Ro/SS-A antibody test. Anti La/SS-B titre, other SLE and RA markers, and tests of the complement system were negative. His salivary gland scintigraphy results revealed decrease in extraction and excretion functions in bilateral parotis and submandibular glands; hence, SS diagnosis was confirmed. Electroencephalogram and MRI showed no biological abnormality. All scans were clear of malignancy about his loss of weight.

Examining patients with multiple somatic complaints and mental symptoms, psychiatrists should keep SS in mind and consult rheumatology to search for SS autoantibodies in the serum, after a careful physical examination to emphasize signs of dry mouth and

eyes. The diagnosis of primary SS could bring about a better adapted prescription of corticosteroids or immunosuppressive agents, together with specific psychotropic drugs, can induce remarkable relief from the psychiatric disorder. In general, this consideration holds for all autoimmune diseases.

**Keywords:** Sjögren syndrome, choking phobia

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**[PP-138] Psychopharmacology**

## Menstrual irregularity due to venlafaxine

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B.A. is a 48 years old female patient. She is 63 kg and her BMI was calculated as 28. She had never had a psychiatric treatment. She has two children. She had never had a gynecological problem before she appealed to us. Her periods were normal. Her complaints were loss of appetite, loss of energy, loss of interest and concentration problems. Her MADRS score was 30 and Beck Depression Scale score was 31. We started to give her extended-release venlafaxine 75 mg per a day. 20 days after she began to use her drug, she appealed us because of her extended period and increased vaginal bleeding. She consulted to gynecologist. There was no gynecological problem. Her complete blood cell count was normal as were a series of tests for platelet aggregation. Her FSH and LH degrees were normal. After her 13 day long period her treatment was continued under control of a gynecologist. Her follow up period was the same with previous one. We stopped venlafaxine treatment. After discontinued the drug, her period got normal just before the medication. No reason was found for her period abnormalities. We suspected that venlafaxine might be the culprit. We found one published report describing vaginal bleeding associated with venlafaxine. In addition, several cases of menstrual irregularities have occurred with two other antidepressants: fluoxetine and bupropion. SSRI's may reduce platelet aggregation by inhibiting serotonin reuptake. Venlafaxine is also inhibitor of serotonin reuptake. This mechanism may contribute to the impact of this drug on menstrual irregularity. This case report supports that venlafaxine may cause vaginal bleeding and we must be careful about using SSRI's and SNRI's patients with who may have risk factors for bleeding.

**Keywords:** venlafaxine, menstrual regulation

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**[PP-139] Psychopharmacology**

## Lamotrigine-induced Stevens-Johnson-TEN Syndrome in a patient with bipolar mood disorder: a case report

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Stevens-Johnson syndrome (SJS) and TEN are rare, acute, life-threatening allergic reactions, which affect skin and mucous membranes. Anticonvulsant drug-induced Stevens-Johnson syndrome may occur with the use of anti-epileptic drugs such as phenobarbital, phenytoin, carbamazepine and lamotrigine. This clinical picture usually appears within two months after the beginning of treatment and characterized by life-threatening severe skin reactions. In this paper, a case that developed SJS-TEN in the third week of lamotrigine therapy and her treatment process is presented.

A 19-year-old female patient with complaints of unhappiness, loss of appetite, insomnia, decrease in academic performance, difficulty concentrating which has existed for the last 2 months was admitted to our outpatient clinic. On psychiatric examination, her mood was

depressive and she was sad. In her psychiatric history, it was learned that there were periods of time -up to 20 days- when she was feeling herself a little more energetic, sleep late at night, she had an increase in financial spending and self-care. In the light of available data, the patient was diagnosed as bipolar mood disorder, type 2 (current episode is depressive) according to the DSM-IV diagnostic criteria. She was initiated lamotrigine 25 mg/day therapy. Daily dose of lamotrigine was increased to 75 mg/day by the end of the third week. The patient was admitted to the emergency room on the day 24. On physical examination, there were erythematous maculopapular rash and crusted lesions on face, extremities, trunk and buttocks. Additionally, mucocutaneous ulcerations on the lips and oral mucosa; redness of eyes, eyelids-the conjunctiva edema and visual acuity loss were present. The patient was admitted to the dermatology clinic with the diagnosis of lamotrigine-induced SJS. SJS and TEN are hypersensitivity reactions that may occur due to many drugs and can cause life-threatening skin reactions. TEN is accepted as severe form of the SJS and differential diagnosis is based on according to the afflicted body surface area. If involvement of body surface is under 10% SJS, between 10-30% is SJS-TEN coexistence, while over 30% is considered TEN. In our case, because the entire body surface involvement is close to 30%, it was evaluated as SJS-TEN coexistence. The role of drugs in the etiology of SJS has been reported as 50%. In clinical trials of lamotrigine treatment for bipolar disorder and other mood disorders, when used alone, the incidence of skin reactions is 0.08%. Skin reactions, occurring due to lamotrigine and other antiepileptic drugs, starting from a simple morbilliform rash and urticaria, covers a wide range which could cause serious consequences that may be up die. Initiation of lamotrigine treatment with higher doses or rapid increase of the dose, increase the risk of allergic skin reactions. Mortality rate of SJS and TEN is under 5 %. Mortality usually occurs due to staphylococcus or pseudomonas skin infections or pulmonary sepsis. In SJS cases, age of patient, the involvement of epidermal decomposition in skin lesions and quitting the drug immediately when reaction is observed, are the predictors of prognosis.

**Keywords:** lamotrigine, Stevens-Johnson, bipolar mood disorder

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### [PP-140] *Psychopharmacology*

## Galactorrhea induced by fluoxetine in a patient diagnosed with trichotillomania: a case report

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Galactorrhea should be considered in the differential diagnosis of other medical conditions (pituitary tumors, sarcoidosis, hypothyroidism, hyperthyroidism, PCOS, empty sella syndrome) while several drugs can cause galactorrhea. Galactorrhea is a very common side effect in psychiatric patients. In some cases, galactorrhea has been reported to appear as a side effect during treatment with different types of antidepressants. In some studies, antidepressant drugs via the serotonergic system, has been shown to lead to increased prolactin. In this article, here we are going to present a case of a 43-years old, married female with trichotillomania. The hair-pulling behavior had first appeared when she was 13 years of age. She recovered spontaneously in this period. She started to pull out of her scalp hair again when her daughter was born, eight years ago. She had recurrent hair pulling behavioral the bathroom, especially after she forced her daughter to eat. She had a repeated attempts to decrease or stop hair pulling in every two months period. She reported a feeling of mounting tension before the act of hair pulling and the tension was alleviated when she pulled the hair out. Hair loss in both parietal and temporal regions was prominent. She was covering that region with a wig and her social functioning was significantly impaired. She was diagnosed to have trichotillomania according to the criteria of DSM IV. There was no comorbid Axis I psychiatric disorders. Initially, we prescribed paroxetine 5 mg/ day and increased up 20 mg/day in 2 months. Galactorrhea was not observed during the paroxetine treatment but we ceased paroxetine due to weight gain and started fluoxetine. She noticed white-creamy colored discharge from both of breast on the fourth month of treatment. There were no abnormalities in blood chemistry, thyroid function tests and beta human chorionic gonadotropin. Magnetic resonance imaging of the hypothalamic/pituitary area was normal. FSH, DHEAS and estradiol levels were normal and the serum prolactin level was 56.6. Galactorrhea was not observed when we ceased fluoxetine treatment. We continued her treatment with psychotherapy. The temporal relationship between reducing and cessation of fluoxetine and the remission of galactorrhea suggests that galactorrhea may occur because of fluoxetine treatment. Therefore, further research is required to better understand the mechanisms of actions and adverse events of SSRIs.

**Keywords:** galactorrhea, fluoxetine, prolactin, trichotillomania

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**[PP-141] Personality disorders****Reliability and validity of the Turkish version of level of personality functioning for DSM-V: a preliminary report**

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**Objective:** Collaborative Longitudinal Personality Disorders Study has claimed that in assessing personality psychopathology, "generalized severity is the most important single predictor of concurrent and prospective dysfunction". Distorted thinking about self and others is a common factor in personality disorders and it's supported with extensive literature. Maladaptive patterns of mental representations about self and others have a structural function in conceptualization of general psychopathology of personality. Based on this primary feature of the Level of Personality Functioning (LOPF), it has been suggested that LOPF will allow clinicians to assess the existence and severity of personality disorders in all subjects. LOPF consists of two domains called self and interpersonal. The "Self" domain consists of identity and self-direction dimensions, the "interpersonal" domain consists of empathy and intimacy dimensions.

**Method:** In this study, it was planned to investigate the validity and the reliability of Turkish version of LOPF scale. Permission has been granted by A.E. Skodol and D.S. Bender, who were members of DSM-5 Personality Disorders Work Group. Afterward LOPF was translated in Turkish and then retranslated in English. LOPF, the Quality of Object Relations Scale (QORS), the Personality Organization Diagnostic Form (PODF) and the Global Assessment of Functioning (GAF) were applied to 102 patients who were admitted to Erenkoy Research and Training Hospital for Psychiatric and Neurological Disorders and assessed for starting a psychotherapy program. Internal consistency and item total correlation analysis of LOPF were conducted.

**Results:** After statistical analysis were conducted, it has shown that internal consistency level of LOPF was good (Cronbach-alpha:0.87), and item total correlation coefficients were between;  $r=0.69-0.74$ . Correlation analyses, which were conducted for convergent validity of GAF and LOPF has showed mild relationship for identity, self-direction and empathy dimensions, and no relationship for intimacy dimension of LOPF. Identity dimension of PODF showed high relationship with identity and self-direction dimensions of LOPF, and good relationship with empathy and moderate relationship with intimacy dimensions of LOPF. It has been showed that PODF-immature defenses and all dimensions of LOPF have moderate-to-good relationships, and PODF-mature defenses and LOPF-identity and self-direction dimensions have good relationship, empathy and intimacy dimensions have moderate relationships. PODF-reality testing and LOPF-identity, self-direction and empathy dimensions have moderate relationship, and intimacy dimension has mild relationship. PODF-Global Personality Organization and all dimensions of LOPF had moderate to good relationships. Similarly, there were moderate to good relationships between QORS and LOPF dimensions.

**Conclusion:** As DSM-5 work group suggested before, GAF scores and LOPF has showed mild relationship. This data has supported that GAF is insufficient at representing maladaptive functioning, which takes place in personality disorders. Moderate to high relationship with PODF, which is based on a parallel theory has suggested that assessment of personality functioning has also represented the personality organization. QORS domains have showed that this relationship has endured also at qualitative level. These findings showed reliability and validity level of the LOPF scale is sufficient. Study is proceeding for inter-rater reliability analysis, factor analysis, and predictive validity analysis.

**Keywords:** personality functioning, assessment, reliability, validity

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S174**

**[PP-142] Psychopharmacology****Bilateral pedal edema caused by the use of olanzapine in a patient with bipolar disorder**Efruz Pirdogan<sup>1</sup>, Ceren Meric<sup>1</sup>, Atilla Tekin<sup>2</sup>, Omur Gunday Toker<sup>1</sup>, Julide Guler Kenar<sup>1</sup>, Omer Akil Ozer<sup>1</sup><sup>1</sup>Sisli Etfal Research and Teaching Hospital, Department of Psychiatry, Istanbul-Turkey<sup>2</sup>Cizre State Hospital, Department of Psychiatry, Hakkari-Turkey

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Systemic diseases, vascular and/or lymphatic system abnormalities, non-steroidal anti inflammatory and antihypertensive drugs, steroid, immunotherapies, calcium channel blockers and alpha adrenergic antagonists can cause edema. Olanzapine unusually can cause peripheral edema. Some hypothesis about how olanzapine can cause peripheral edema was proposed. In this article, here we present a case of a 41-year-old female patient with bipolar disorder. The patient has a history of dirtiness obsessions and cleaning compulsions for nine years but she has not used any psychiatric medication until her symptoms increased and insomnia, anxiety, anhedonia were added. She had the diagnosis of OCD and MDD and the treatment of fluvoxamine and trazodone was started in the other hospital which she applied. Two weeks later, she applied our hospital with the symptoms of irritability, discomfort, distractibility, decrease in the need for sleep and increases in speak and activity adopted for a purpose, then she was hospitalized in our inpatient clinic. In her examination with SCID-1, she had the diagnosis of bipolar disorder manic episode according to the criteria of DSM-IV-TR and valproate 1000 mg/day and olanzapine 5 mg/day were started. Two weeks later, she was discharged with the same treatment. Bilateral pedal edema was observed in the fourth month of the treatment. In the examination according to other etiological factors, like echo cardiography and bilateral lower extremity venous system doppler, no pathology was found. Serum electrolyte values, renal function tests, thyroid function tests and complete blood count results were normal. No pathological sign was found in the consultation of internal medicine. The patient reported that there is no change in her diet and liquid intake. Olanzapine 5 mg/day was ceased by decreasing gradually. One week later, in her physical examination it was observed that bilateral pedal edema regressed. The clinicians should be aware that bilateral pedal edema can occur in the patients who are treated with olanzapine.

**Keywords:** pedal edema, bipolar disorder, olanzapine**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S175****[PP-143] Psychopharmacology****Corticosteroid induced psychotic depression: a case report**Serkan Zincir<sup>1</sup>, Pelin Kartal<sup>2</sup>, Selma Bozkurt Zincir<sup>3</sup><sup>1</sup>Golcuk Military Hospital, Department of Psychiatry, Kocaeli-Turkey<sup>2</sup>Maltepe University, Faculty of Medicine, Department of Psychiatry, Istanbul-Turkey<sup>3</sup>Erenkoy Mental Health and Neurology Training and Research Hospital, Department of Psychiatric and Neurological Disorders, Istanbul-Turkey

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Corticosteroids are widely used in treating many medical disorders. It has been stated in literature for a long time that, affective symptoms is one of the possible adverse effects of corticosteroids. Psychiatric disorders, which are often triggered by corticosteroids include mania, depression, psychotic or mixed mood, cognitive impairments and milder psychiatric disorders such as irritability, insomnia, anxiety and unstable temperament. In short-term use of corticosteroids, euphoria and hypomania are observed very often whereas depressive symptoms are seen more often in long-term corticosteroid therapy. In this paper, a case of major depression with psychotic features, which is probably related to the use of corticosteroid is presented and treatment process is reviewed.

A 29-year-old male patient was admitted to our clinic due to the suicide attempt trying to throw himself out from the window of the room where he received chemotherapy. On his psychiatric examination; His affect was distressing, mood was depressive and reality testing was impaired. The patient was not making eye contact, his speech was monotonous and tone of his voice was low. Thought of death was ongoing. 20 days ago complaints of sadness, crying, loss of appetite, persistent sleep, thoughts of death, unwillingness to talk, when he spoke, began to form nonsense sentences. From the medical history of the patient it was learned that, 6 months ago he received a diagnosis of lymphoblastic lymphoma and began chemotherapy. Four months ago, in addition to chemotherapy, he has been treated with methylprednisolone 80 mg/day (p.o) for a period of one month. For the last one month, he was on dexamethasone 20 mg/

day (p.o) treatment. There was no history of psychiatric illness in the patient's history and in the family history. The clinical picture was considered as cortisone-induced psychotic depression and, in consultation with hematology department, dexamethasone treatment was discontinued. Treatment regimen was arranged as haloperidol tablet 10mg/day, biperidene tablet 4 mg/day, olanzapine Tablet 5 mg/day, sertraline tablet 50 mg/day. On the absence of clinical improvement, ECT under general anesthesia was planned. At the end of the 4<sup>th</sup> ECT session, the patient's eye contact and increase in the speech amount was notable. There was no ambiguity in the thought content and no association clutter. ECT treatment was completed in seven sessions and drug treatment was held olanzapine tablet 10 mg/day and sertraline tablet 50 mg/day.

The risk factors for psychiatric disorders triggered by corticosteroids are not fully understood and cannot be predicted in advance. Dose of corticosteroid appears to be the most important risk factor. Corticosteroid dose of below 40 mg per day is the low risk, intermediate risk is between 40 to 80 mg, there is a high risk above 80 mg.

In the literature, there is quite limited data on psychiatric symptoms caused by corticosteroids and is largely based on case reports. Therefore, clinicians should be cautious about psychiatric side effects of corticosteroids, the clinical picture should be closely monitored and patients should be informed against possible side effects.

**Keywords:** steroid, psychotic depression, electroconvulsive therapy

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### [PP-144] *Mood disorders*

## Lithium-induced sinus bradycardia

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Lithium is the most frequently used mood stabilizing drug in the bipolar affective disorder treatment and prophylaxis. Its therapeutic index is extremely narrow. In addition to its neurological, gastrointestinal, renal, and endocrine side effects, it can rarely cause the cardiovascular side effects such as the life threatening cardiac arrhythmia. The cardiac symptoms can generally be determined in EKG. The changes such as T wave flattening in EKG due to the lithium usage, slowing in the ventricular conduction, elongation in the QT interval and atrioventricular block can be observed. In this presentation, the male patient in the age of 42, whose sinus bradycardia has developed with the lithium treatment will be presented. 42 year-old male patient has been monitored with the diagnosis of the bipolar affective disorder for 18 years. His attacks have been under control for 8 years with the lithium 900 mg/day treatment and he has been in full remission. Two weeks after the lithium dose was increased to 1200 mg/day, he applied to the emergency service with the complaint of the fainting. In the first evaluation of the patient, it was determined that his pulse was 30, and his tension was 60/40. In his cardiovascular examination, the findings other than the bradycardia could not be recorded. In the ECG, the slow ventricular response atrial fibrillation was observed. In the coronary angiography no pathology was found. After the temporary transvenous pacemaker was inserted to the patient, and enoxaparine was started for atrial fibrillation. Upon the correspondence of the lithium value to the 1.8 mEq/dl, the lithium was stopped and the liquid treatment was continued. With the decline of the lithium level to 0.4 mEq/dl on the 5<sup>th</sup> day of the treatment, the cardiac rhythm turned to the sinus rhythm. The patient was discharged by passing to another mood stabilizing valproic acid. The cardiac symptoms of the lithium occur depending on the place changed of the intracellular potassium with the lithium and they are similar to the ECG changes that the hypokalemia has formed: Flattening in the T wave, elongation in the QT interval and AV conduction delay and bradycardia can be observed. Due to the fact that the lithium represses the pacemaker in the sinus node, the life threatening bradycardia, hypotension, syncope and general condition impair can be observed. The long lasting lithium treatment shows cardiac toxic effect and can cause arrhythmia forming dangers to the life. If the patients, who apply to the emergency service have lithium usage story, it is required to research the lithium level by considering that the arrhythmia could be developed.

**Keywords:** lithium, bradycardia

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**[PP-145] Forensic psychiatry****Sociodemographic and abuse-related characteristics of sexual abuse survivors examined by the physical and mental health board of Dicle University**Seref Simsek<sup>1</sup>, Cem Uysal<sup>2</sup>, Mustafa Korkmaz<sup>2</sup>, Huseyin Aktas<sup>1</sup>, Rumeysa Alaca<sup>1</sup><sup>1</sup>Dicle University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Diyarbakir-Turkey<sup>2</sup>Dicle University, Faculty of Medicine, Department of Forensic Medicine, Diyarbakir-Turkey

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**Objective:** The present study aims to identify sociodemographic and abuse-related characteristics of sexual abuse survivors examined by the Physical and Mental Health Board of Dicle University.

**Methods:** As part of this study, 231 cases at and under the age of 18 years examined by the Physical and Mental Health Board of Dicle University's Medical Faculty between February 15, 2012 and December 31, 2013 were evaluated in terms of age, gender, mother's age, father's age, number of siblings, accused's age, abuse survivor's relationship with abuser, place where sexual abuse occurred, survivor's address, family structure, parents' educational background, survivor's intelligence level, presence of penetration, type of penetration, and report issued.

**Results:** Out of 231 cases referred to the board, 165 (71.4%) were girls and 66 (28.6%) were boys. The average age of the cases was 12.9±3.4 years. Regarding their family structures, the parents of 185 cases (80.1%) were alive and not divorced. Two hundred fourteen mothers (92.8%) and 172 fathers (73.3%) had received primary school education or below. One hundred ten cases (47.6%) involved penetration. The most frequent type of penetration that was identified in 62 cases (57%) was anal penetration. The most frequent diagnosis was Post-Traumatic Stress Disorder (PTSD). Among the cases for which a final report was issued, 86 cases (56.6%) did not experience the impairment of mental health, 33 cases (21.7%) were affected mentally but did not experience the impairment of mental health, and 33 cases (21.7%) experienced the impairment of mental health.

**Conclusion:** The current study suggested, in line with the results of similar studies in the relevant literature, that the survivors were mostly girls, the number of siblings was high, and both parents had very low educational levels. Nearly half of the cases involved penetration with the most frequent type being anal penetration. The sexual abuse survivors were mostly diagnosed with PTSD. The survivors usually came from families with low socio-economic and cultural levels. The study argues that a higher level of development in the society in general will help lessen abuse rates, particularly domestic abuse.

**Keywords:** abuse, sexual abuse, forensic medicine

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S177**

**[PP-146] Schizophrenia and other psychotic disorders****Effects of psychosocial rehabilitation program added to medication on schizophrenic patients: a controlled study**Mehtap Arslan Delice<sup>1</sup>, Erhan Kurt<sup>1</sup>, Derya Eryildiz<sup>2</sup>, Aylin Can<sup>1</sup>, Murat Emul<sup>3</sup><sup>1</sup>Bakirkoy Prof. Dr. Mazhar Osman Research and Training Hospital, Department of Psychiatry, Istanbul-Turkey<sup>2</sup>Avcilar Family Health Center, Istanbul-Turkey<sup>3</sup>Istanbul University, Cerrahpasa Faculty of Medicine, Department of Psychiatry, Istanbul-Turkey

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**Objective:** Contemporary approach to psychiatric diseases is to refer to population based care instead of hospital based care. In addition to medication, day hospital practices are reported to have positive results in schizophrenic patients. In this study, our purpose is to reveal the results of psychosocial rehabilitation program that we applied at Bakirkoy Day Hospital in schizophrenic patients under medication and compare them with the schizophrenic patients under medication who were not applied this program.

**Method:** 55 patients, who has continued Bakirkoy Day Hospital for minimum six months and completed their psychoeducation group therapy, which is a 14-week structured group therapy, one key person from their family having completed psychoeducation group, had not failed to attend personal consultancy interviews more than 3 times, worked three months or longer in a workshop or one of the fields

of business defined in headquarters and had been receiving medication as well and 45 control schizophrenic patients, who only receive medication were taken in the study. Positive and negative symptoms, life quality, social functionality, insights and ability losses of the participants were evaluated.

**Results:** No statistically significant difference was found between the two groups in terms of sex, age, marital status, having children, cohabitants variables ( $p>0.05$ ). The duration of education of rehabilitation+medication group was statistically significantly higher when compared to the group which only received medication ( $p<0.05$ ). Statistical significant difference was found between the groups between disease start age, number of hospitalizations ( $p<0.05$ ). Statistically lower results were obtained in rehabilitation+medication group when Positive and Negative Syndrome Scale total score, Ability Loss Rating Chart were compared between the groups ( $p<0.05$ ). The scores of the rehabilitation+medication group were significantly higher when compared in terms of Insights, Social Functionality Scale, Life Quality Scale for Schizophrenic Patients ( $p<0.05$ ).

**Conclusion:** This study is important because it shows the results of the approach to schizophrenic patients in our country in compliance with its progress in the world. Our study reveals that multidimensional psychosocial rehabilitation influences many fields and the need for other approaches in addition to medication.

**Keywords:** schizophrenia, psychosocial rehabilitation, psychoeducation

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### [PP-147] Perinatal psychiatry

## Near Term Pregnancies overlooked by psychiatrists

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Even in the well-developed countries, the rate of unplanned pregnancies is reported to be about %50. This rate is thought to be higher in the psychiatric population because of side effects of psychotropic medication like irregular menstruation, cognitive status or on-going psychotic states. It is supposed that clinicians should pay attention to the possibility of pregnancy and screen for it. Unfortunately, unwanted consequences of neglect can be seen in women mental health clinics. Here we present 2 near term pregnancy cases with psychiatric diagnoses who have been overlooked by psychiatrists.

**Case 1;** A 35-year-old woman was admitted to the psychiatric ward from emergency room with complaints of sleeplessness, aggression and claiming that she would be hurt by others. She has been married for 11 years, graduated from middle school, and gave birth to 2 children aged 10 and 4 months, who have been recently cared by their grandfather. Her previous psychiatric diagnosis was paranoid schizophrenia. The duration of her disease was 15 years with 2 previous admissions in two different psychiatry clinics.

Due to her psychiatric history, in her previous admission, she had been treated with haloperidol 20 mg/day, biperidene 4 mg/day and quetiapine 200 mg/day, she had been discharged with the same regimen. Although she had been reported to have irregular menstruation, no screening had been done for pregnancy. After her discharge, the weird feeling that she had been felt in her abdomen came out to be the moving of fetus. She had been learned about her pregnancy with a pregnancy test and an obstetric examination, it came out that she was 26 weeks old pregnant, later she gave birth in 32<sup>nd</sup> week.

**Case 2;** A 26 year-old woman was admitted to psychiatric ward from emergency room with complaints of sleeplessness, loss of appetite, increase in talking and goal oriented action, wasting too much money and irritability. She has been married for 8 years, graduated from primary school, gave birth to 1 child aged 7. Her previous psychiatric diagnosis was Bipolar Disorder, Type I. The duration of her disease was 10 years with 1 previous admission in a psychiatry clinic. She was on treatment of carbamazepine 400 mg/day, quetiapine 200 mg/day and olanzapine 2.5 mg/day until 3 weeks ago, when she learned that she was pregnant for 24 weeks. She had continued regular follow up for her disease but doctors did not check any pregnancy for 24 weeks.

The first Schizophrenia case had been neglected in throughout her hospital admission. She had been thought to be obese and no pregnancy screening had been made although she reported to have irregular menstruations. In the second case that is a Bipolar Disorder patient, she had been neglected in her medical examinations in the outpatient clinic for 24 weeks.

Both of them were on psychotropic treatment that needed to be regulated due to pregnancy. Screening for pregnancy is vital in psychiatric population, not only in gynecology wards but also in outpatient clinics.

**Keywords:** perinatal psychiatry, pregnancy, neglect, pregnancy screening

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**[PP-148] Schizophrenia and other psychotic disorders****First episode psychosis associated with an arachnoid cyst: Four cases**

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Arachnoid cysts are of the organic causes of the first episode of psychosis. In most cases they are diagnosed by accident. The coexistence of arachnoid cysts with first episode psychosis had not been closely covered in the literature. A possible link between arachnoid cysts and psychotic symptoms has been given an increased interest and raised questions about the etiopathogenesis and the therapeutic approach.

We present four patients with first episode psychosis, who were also negative to other clinical evaluations including thyroid functioning. Their psychotic symptoms were suspected to be induced by the arachnoid cyst and it was controlled by moderate-dose antipsychotic administration.

Case 1 is a 21-old male patient, who was admitted due to mystic delusions, wish to die in the way of Jihad, plan to go to Syria to struggle against the enemies of Islam and aggressiveness towards his family. He let his beard grow for 6 months. An arachnoid cyst was found in the right side of axial plan in retrocerebellar region about 4.2X2.1 cm in size on his. Aripiprazole 30 mg/day PO and zuclopentixol decanoate 200 mg IM(per 10 days) were administered.

Case 2 is a 36- year- old male patient, who was admitted due to delusions of persecution and reference about his family and aggressiveness towards them. An arachnoid cyst was found in the anterior pole of right temporal lobe about 2.5x4.5 cm in size on his magnetic resonance image. We started paliperidone palmitate 150 mg IM (weekly) and quetiapine 300 mg PO. bid.

Case3 is a 52- year- old male patient, who was presented with intense delusion of jealousy about his wife. An arachnoid cyst was found in the posterior of the midline of the posterior cranial fossa about 3x4.5 cm in size on his magnetic resonance image. We administered amisulpride 400 mg/day PO, quetiapine 200 mg PO tid and biperidene 1 mg/day PO.

Case 4 is a 25 –year-oldmale patient with mystical and persecutory delusions for two years. And moderately controlled by risperidone 8 mg/day, Biperidene 2 mg /day, Quetiapine 100 mg /day and ECT was planned.. An arachnoid cyst was found in the posterior fossa of right side of cerebellar vermis about 3x4 cm size on his magnetic resonance image.

All the cases revealed no pathological and neurological signs. The MRI of the cases were consulted with neurosurgery, no surgical intervention was needed.

In this report, we present the clinical manifestations and treatment of the cases of first episode psychosis associated with arachnoid cyst. It is difficult to be absolutely certain whether the lesion had influence on the patient's psychiatric symptoms or not. However, given the anatomical and neuropsychological changes, one cannot exclude the possibility that the lesion played a significant role in this psychiatric presentation.

**Keywords:** first episode psychosis, arachnoid cyst, magnetic resonance imaging, computerized tomography

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S179**

**[PP-149] Addictions and related disorders****Double challenge for mental health practitioners: neglected intoxication by healthcare professionals and false-positive toxicology screen**

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Attempted suicide is one of the most common admission reasons to the emergency unit. Clinicians should pay attention to the required inspections. The removal of the substance like gastric lavage must be made during the first 4 hours in a conscious patient. The patient must be closely monitored in the emergency unit because of the long half-lives or long acting effects of the ingested medicine, until the patient is thought to be stabilized. Psychiatry unit should consult for the next intervention. However, we encounter that many clinicians sometimes do not take serious the suicidal overdose use, especially if the person has consciousness. On the other hand, some

pharmaceutical medications cause a false-positive result for amphetamines and alcohol on urine drug screen. This case report describes a patient who has ingested overdose decongestant drug with suicidal intention. Although early hours application to emergency department, she had been sent to psychiatry department without any intervention. In psychiatry department, agitation and false-positive ecstasy and ethyl alcohol screen were found.

A 19-year-old female patient, who was referred from a general hospital after suicidal attempt with an overdose of a decongestant drug containing Paracetamol 500 mg, dextromethorphan 20 mg and pseudoephedrine 30 mg. admitted to our inpatient psychiatry unit. After experiencing a conflict with her boyfriend she has taken nearly 20 pills and after 2 hours told her auntie about her attempt, who has taken the patient to the general hospital. As the patient was evaluated in the emergency unit, she was considered to be suicidal but no intervention was done and afterwards referred to our hospital. As she was admitted to the inpatient unit, she experienced a serious psychomotor agitation that she was needed to be physically restraint. Medical history could not reveal any highlights on her medical background. She was conscious, cooperative, oriented, her mood was labile, and has active suicidal ideas and plans. Her psychiatric examination showed no psychotic features.

On laboratory analysis, except iron deficiency anemia, biochemical parameters were in normal range. Also, drug screen was found to be positive in Ecstasy (MDMA/3,4-methylenedioxyamphetamine) and ethyl alcohol. She refused that she had recently used any illicit drugs. False positivity is suspected by paracetamol and pseudoephedrine.

Although it is so vital to prove the existence of drug and alcohol intake in the patients with psychiatric symptoms, unfortunately, frequently false positives and poorly specified relationships with daily used drugs. False-positive drug screening can result in incorrect diagnoses; delays in initiating appropriate care, or mislabeling and stigmatization of patients.

In this case, the neglect of drug overdose in the emergency unit resulted in a serious psychomotor agitation that she needed to be physically restraint. It is also important for the psychiatrist before admitting a suicidal patient that he/she had a proper gastric lavage after his/her attempt. Overdose of many non-illicit drugs may confound the toxicological screens, which mislead the clinician.

**Keywords:** overdose, amphetamine, alcohol, suicide

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### [PP-150] *Psychopharmacology*

## A case of chronic ataxia secondary to acute lithium intoxication

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Lithium is used for long-term prophylaxis and the treatment of acute episodes of bipolar disorder. Because of its narrow therapeutic range, lithium toxicity is not uncommon. We describe a bipolar patient who was treated with lithium lead to chronic ataxia secondary to acute lithium intoxication.

A 61 year-old man with a long-standing history of bipolar disorder was treated with 1200 mg lithium daily for ten years. He developed signs of lithium intoxication with clouding of consciousness, loss of appetite, tremor, changes in gait and somnolence. His serum lithium concentration had risen to 2.5 mEq/l and lithium treatment was discontinued. The blood tests and the spinal fluid were normal. In his psychiatric examination, he seemed untidy and older than his age with poor self-care, had little interest to interview with limited eye contact. He was conscious, but not oriented by time and place. His memory and attention was poor. He had irritability and poor judgment. Speed and volume of his speech was increased. In neurological examination ataxia and bilateral dysdiadochokinesia was assigned. On discharge, his cognition improved and the tremor completely resolved. However, cerebellar signs were prominent and the patient was unable to walk without help. The condition improved considerably during the first months but the patient still showed slight signs of cerebellar disorders such as ataxia. The lithium intoxication did not leave any mental after effects. We did not detect any acute pathology in cranial MRI.

In conclusion, acute lithium intoxication may cause several neurological manifestations such as tremor, ataxia, dysarthria, seizures and in the more severe cases encephalopathy and coma. Lithium toxicity can also cause electrocardiogram (ECG) changes, renal failure, gastrointestinal symptoms, including nausea, vomiting, diarrhea, bloating, and epigastric pain, neuromuscular manifestations such as peripheral neuropathy or myopathy. These changes are usually reversible. However, few cases of persistent neurological deficits have been reported.

**Keywords:** ataxia, intoxication, lithium

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**[PP-151] Schizophrenia and other psychotic disorders****A clinical case of treatment resistant schizophrenia: 60 hospitalizations and 342 ECT sessions in 36 Years; lack of social support or under treatment?**

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It is reported that twenty and 25 percentages of patients with schizophrenia is resistant to treatment. The treatment resistance in schizophrenia is defined by many authorities. One of the generally accepted definition criteria is inadequate response despite treatment with different atypical antipsychotics, two or three times at least four-six weeks; the other acceptable one is although the use of two different typical or atypical antipsychotics in monotherapy during four-six weeks, inadequate treatment response is obtained. Duration of hospitalization in treatment resistant cases is longer. In addition, when considering all the expenses and loss of functions, the cost of resistant cases to population is higher. In this case, sixty years old female with schizophrenia was presented. She was hospitalized from emergency department where she came with his son, because of acute psychotic symptoms, refusal of treatment and homicidal thoughts. It was learned that age of onset schizophrenia was 24, her complaints was begun in a postpartum period, she was diagnosed with schizophrenia and her number of hospitalization was 60. Although clozapine, haloperidol, amisulpride, risperidone, olanzapine, aripiprazole, quetiapine, chlorpromazine, sulpiride, zuclopenthixol, fluphenazine, lithium and valproate were used adequate doses and duration; a total of 342 ECT sessions were administered in her hospitalizations; response or partial response was achieved, she had no long-term adequate functioning and well-being. In most recent admission, she had significant improvement with clozapine 275 mg/day and valproate 1000 mg/day. In this presentation, schizophrenic patient with excessive hospitalizations and many more recurrences despite all treatment procedures is discussed.

**Keywords:** schizophrenia, treatment resistance, social support

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**[PP-152] Addictions****Thyme use in a psychotic patient: a case report**

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Substance abuse is defined as recurrent pattern of substance use manifested by significant adverse consequences without tolerance, withdrawal and compulsive use. Examples of substances that can be abused are alcohol, amphetamines, caffeine, cannabis, cocaine, phencyclidine, hallucinogens, inhalants, nicotine, opioids and sedative-hypnotic-anxiolytic drugs. Additionally, abuse of various plants such as cat mint, poppy seeds, kava, khat and peyote is reported. Thyme is widely used in our country among the public and it has various application areas such as cramps solvent, disinfectant and expectorant. Drinking thyme tea, ingestion of thyme mixed with honey, rubbing the body with thyme tincture, thyme bath are mentioned as forms of use. Herein a psychotic patient, who previously had mixed substance abuse, using thyme plant as self-medication is reported and discussed within the context of substance use disorders.

A 22 year old male patient, living with his parents was hospitalized because he had complaints such as ongoing self-talk, inappropriate laughter, insomnia, loss of appetite and irritability. He had outpatient follow-ups because of drug abuse and he had psychotic symptoms since two years which caused his hospitalization three times in acute psychosis clinics. "To get rid of cannabis addiction", he used various substances, among them "thyme was selected" and he claimed that "thyme is better than other herbs to be heady", and therefore he stated that continuously he used thyme. After antipsychotic treatment and 7 ECT sessions psychotic symptoms greatly declined. On 6<sup>th</sup> week of his admission, he was discharged with risperidone 4 mg/day, biperidene 4 mg/day, risperidone 50 mg injection/two weeks.

Some herbal products sold without prescription may affect the central nervous system and drug interactions might be seen in addition to direct psychoactive effects. It is known also that some plants are widely used for treatment of psychiatric diseases. Studies showed that

thyme, oregano, thyme oils and extracts have antitumor, antimicrobial and antioxidant effects on blood lipids. Thymol which is the main active ingredient of thyme is used for antiseptic mouthwash. Thyme was referred as an herbal drug used for the medication of nightmares and headaches and inhaling his vapor is used for melancholy and epilepsy. In our case thyme is used in patient's own words "to get rid of cannabis addiction".

Also he stated the exhilarating potential of thyme and advantage of the relaxing effect. In our case, continuous and intensive use of thyme is emphasized as well as its use in the form of cigarettes which is not included previously in the literature. Comorbid psychotic disorder and substance use of patient confound when considering the effects attributed to the use of thyme. In order to provide more information in this area, further research is needed to enlighten the physiological and psychotropic effects of herbal products, withdrawal symptoms and dependence syndrome.

**Keywords:** thyme, herb, substance abuse

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### [PP-153] *Psychopharmacology*

## A case of delirium associated with biperidene in a five year old boy

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Delirium is a common syndrome of abrupt onset, fluctuating course, with prominent cognitive symptoms including decreased attention and awareness, additional deficits such as memory, or disorientation and evidence of an underlying physiological cause. It is rarely seen in children outpatients. Antipsychotics are widely used in several psychiatric conditions in children. It is well known that extrapyramidal side effects of these agents are more common in children. Biperidene is a common medication to treat these side effects which has anticholinergic properties. Only a case report of delirium associated with biperidene has been reported in an adolescent patient. We report here a case of delirium associated with more than 3 mg use of biperidene in a five year old patient and aim to discuss the treatment of this patient. To our knowledge, this is the first case of delirium associated with biperidene in a patient who is younger than six years. Clinicians must be aware of these side effects when using biperidene in young children.

**Keywords:** delirium, side effects, antipsychotics

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### [PP-154] *Schizophrenia and other psychotic disorders*

## Association of catatonic schizophrenia and autoimmune diseases- Ankylosing Spondylitis

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Schizophrenia patients or their relatives have been reported to have either higher or lower than expected prevalence of some autoimmune disorders, including rheumatoid arthritis, ankylosing spondylitis, type 1 diabetes, thyroid disorders and celiac disease. The purpose of the case report was to estimate the association of schizophrenia with ankylosing spondylitis and other autoimmune diseases. A 27-year-old, single male, university graduate, unemployed; was hospitalized with mutism, nutrition denial and paranoid delusions. After psychiatric examination, laboratory tests, evaluating his psychiatric history for 4 years; catatonic schizophrenia was diagnosed as well as 9 year old with a comorbid diagnosis of ankylosing spondylitis. While we were planning to apply electroconvulsive treatment, antipsychotic treatment was received the response in 3 days.

Schizophrenia is associated with a larger range of autoimmune diseases than already suspected. Our case report required that the arthropathies appear before the patient was diagnosed with schizophrenia, which may have influenced this result, since many cases of

arthropathies have onset much later than the age at onset for schizophrenia as with another researches. Future research on comorbidity has the potential to advance understanding of pathogenesis of both psychiatric and autoimmune disorders.

**Keywords:** ankylosing spondylitis, autoimmune diseases, catatonic schizophrenia

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### [PP-155] *Mood disorders*

## Left temporal lobe tumor and bipolar disorder comorbidity

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The aim of this case report to investigate mania due to a left temporal lobe neoplasm previously diagnosed with Asperger Syndrome. Left hemispheres brain tumors involving the atrophic and cystic lesion in the cortex which could be the reason of mania have been rarely described in the literature. In such cases, early neurologic signs might be confounded and hard to make the differential diagnosis from some of the psychiatric disorder. Mania secondary to left brain neoplasm is an extremely rare phenomenon which has not been previously reported in the literature. Brain magnetic resonance imaging (MRI), baseline electroencephalogram (EEG), and neuropsychiatric evaluations were used to examine the relationship between the patient's brain lesion and behavioral disturbances.

A patient diagnosed as Asperger syndrome in a childhood period developed mania during the course of following period. Some of the psychiatric symptoms related with social cognition impairment, inability to maintain social relationships and recognizing social clues were the main problem of the patient. He has experienced multiple manic and depressive despite the use of antipsychotic, anti-depressive and mood stabilizers drugs. As a result of further investigation test results, cystic and atrophic tumor in temporal lobe hippocampal region and choroid plexus papilloma were observed. Those of the symptoms related with mood and behavioral disturbance, social cognition impairment and occupational disability could be well explained by the organic brain lesion. It was also reported some of the organic problems related with perception and motor coordination determined by the further neuropsychological evaluation. EEG tests results were in a normal range

Organic lesion in temporal lobe might be a trigger of the emotional and behavioral disturbance. This case suggests that clinicians should be aware of unexplained cases presented with manic and depressive symptoms. In conclusion; right temporal lobe astrocytoma associated with bipolar disorder has been described in literature. It could be the first case report associated with left temporal hypothalamic tumor, which will cause bipolar disorders.

**Keywords:** temporal lobe, tumor, bipolar, headache, somatic complaint

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### [PP-156] *Psychopharmacology*

## Hepatic enzyme levels in adolescent patients treated with buprenorphine/naloxone combination "Suboxone®" and additional psychotropic agents

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**Objective:** The purpose of this study was to assess the changes in liver enzyme values associated with sublingual buprenorphine/naloxone combination (Suboxone®) treatment and co-medication with psychotropic agents among opioid dependent subjects aged 15–18.

**Methods:** Trends and changes of liver enzyme levels (ALT and AST) were evaluated among 59 adolescent subjects aged 15-18 before and following 8 weeks of Suboxone® treatment (2, 4, or 8 mg/day) and co-treatment with psychotropic medicines in an alcohol and drug

dependence inpatient treatment unit.

**Results:** Mean levels of liver enzymes were significantly higher than baseline at weeks 2 and 4 (ALT;  $p < 0.0001$  and AST;  $p < 0.0001$ ; ALT;  $p = 0.003$  and AST;  $p = 0.016$  respectively). However there was no statistically significant difference in AST and ALT levels between baseline and week 8. Five patients experienced a fivefold increase in ALT levels and eight patients experienced a fivefold increase in AST levels. Transaminase levels of one patient did not return to normal limits within two weeks after the cessation of treatment. There was statistically significant difference in mean AST and ALT levels between baseline and week 8 in patients receiving risperidone ( $p = 0.039$ ;  $p = 0.011$  respectively).

**Conclusion:** Suboxone® treatment may lead mostly to asymptomatic liver function test abnormalities but there is also a possibility of marked liver function test abnormalities at therapeutic doses in adolescents. (The majority of the abnormalities seen were mild elevations, marked liver enzyme elevations were found in 8.9% of subjects.) Co-medication with some psychotropic agents was much more robustly associated with liver enzyme elevations. These results suggest that liver enzyme levels should be monitored carefully in patients treated with Suboxone®, especially in patients using additional psychotropic agents.

**Keywords:** buprenorphine, heroin, liver enzymes, naloxone, opioid dependence

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### [PP-157] Others

## The comparison of anxiety, depression and childhood trauma in individuals with a history of single and multiple suicidal attempts

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**Objective:** Being exposed to trauma in childhood is an independent risk factor for suicide attempts. Early traumatic experiences and omissions may be associated with negative emotional, cognitive and neuro development changes and these can be predisposed many mental disorders, including suicidal behavior. The most important underlying risk factors of recurrent suicidal attempts defined as; exposure to unfavorable life events in the early developmental period, the presence of suicidal attempt which occur in adolescence, impulse control disorders. The aim of this study is investigating the relationship between multiple suicide attempts and childhood trauma. Our hypothesis is, the patients who have multiple suicide attempts have more traumatic experiences in childhood.

**Method:** 96 patients that has been followed in the Bursa Sevket Yilmaz Training and Research Hospital outpatient clinic or inpatient treatment in the psychiatric ward who had previously participated in suicide attempts were included to the study. Further information is given orally to patients prior to application and informed consent form was signed by patients. Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI), childhood traumatic experiences scale (DES) has been applied to patients. Results were divided into two groups as single and multiple suicide attempts.

**Results:** 96 patients who had suicide attempts were included in the study. 76 patients were female and 20 were male. 41 patients had a history of one, while 55 patients had multiple attempts of suicide. The mean age of patients, who attempted suicide once was  $25.3 \pm 7.6$  years and  $26.3 \pm 7.4$  years for multiple attempters. There were no statistically significant differences between the socio-demographic variables of patients like age, gender, marital status, education level, occupation, family suicide history, family history of psychiatric disorders among single or multiple suicide attempt groups ( $p > 0.05$ ). In Table 1, between the two groups, there is no statistically significant difference in terms of BDI, BAI, physical neglect, and emotional neglect scores whereas there is statistically significant difference between physical abuse, emotional abuse and sexual abuse scores (respectively  $p = 0.00$ ,  $p = 0.016$ ,  $p = 0.004$ ).

**Conclusion:** In psychiatric disorders, a significant association between childhood trauma and suicide attempts can be found. Individuals having multiple suicidal attempts lead to important business and economic costs for emergency services, toxicology, psychiatry clinic and intensive care units. With a history of suicidal attempts at an early age or multiple history of suicidal attempts of individuals, clinical follow-up and therapy have an important place. However, in these subjects, the questioning of the features of childhood trauma seems to be important in clinical follow up.

**Keywords:** suicide, childhood trauma, depression, anxiety

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**[PP-158] Psychopharmacology****Spontaneous ejaculations related with aripiprazole**Oguzhan Bekir Egilmez<sup>1</sup>, Mustafa Celik<sup>1</sup>, Aysun Kalenderoglu<sup>1</sup>, Behice Han Almis<sup>2</sup>, Sema Saglam<sup>2</sup>, Emel Koyuncu Kutuk<sup>2</sup>, Feridun Bulbul<sup>3</sup><sup>1</sup>Adiyaman University, Faculty of Medicine, Department of Psychiatry, Adiyaman-Turkey<sup>2</sup>Adiyaman Research and Education Hospital, Adiyaman-Turkey<sup>3</sup>Gaziantep University, Faculty of Medicine, Department of Psychiatry, Gaziantep-Turkey

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Sexual side effects due to antipsychotic drugs are commonly observed. Impotence and erectile dysfunction are most frequent sexual side effects but spontaneous ejaculations without sexual arousal has also been described previously with zuclopentixol, trifluoperazin and thiotixen, risperidon, and ziprasidon. To the best of our knowledge, there hasn't been a report relating aripiprazole to spontaneous ejaculations.

Mr A was 24 years old, was married for 5 years. He was being followed at psychiatry outpatient clinic for 3 years. He was using risperidon 4 mg/day for 3 years. His delusions were controlled with this treatment. After his marriage he complained from erectile dysfunction and loss of sexual interest and we planned to change his treatment. Risperidon was stopped and aripiprazole, which has a lower sexual side effect profile was prescribed at a dose of 30 mg/day. He came to our clinic 2 weeks after introduction of aripiprazole suffering from spontaneous ejaculations without sexual arousal 3-4 times a day. He stated that ejaculations had started 1 week after introduction of aripiprazole. He was consulted to urology department and no organic pathology was detected. He continued aripiprazole at same dose for 1 more week and came to control again. He was still complaining from spontaneous ejaculations and therefore aripiprazol dosage was reduced to 15 mg/day. Spontaneous ejaculations stopped three days after dose reduction and he denied loss of sexual interest or erectile dysfunction. He has used aripiprazol 15 mg/day for 6 months, and he didn't report recurrence of spontaneous ejaculations. Remission in psychotic symptoms has also been maintained.

Enhancement of dopaminergic transmission has been related to sexual hyperarousal both in humans and in animals. Risperidon decreases dopaminergic transmission and therefore is frequently associated with sexual side effects. Aripiprazole is a partial dopamin D2 agonist in humans and substitution of risperidone with aripiprazole might have increased dopaminergic transmission causing spontaneous ejaculations

**Keywords:** aripiprazole, spontaneous ejaculation, sexual side effects

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**[PP-159] Eating disorders****Confusional state induced by factitious thyrotoxic agent use in attempt to lose weight: a case report**

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Eating disorders (ED) are among the most challenging topics encountered in psychiatry clinics, as they are associated with highest morbidity and mortality rates, affecting both physical health and psycho-social functioning. In spite of classified under a common title, various clinical manifestations might be associated with ED presentation. Restrictive behavior, binge eating, purgative behavior, excessive exercise, body checking and avoidance, body image disturbances and physical symptoms such as weight loss, amenorrhea, and reduced beard growth are frequently seen symptoms in patients suffering from EDs. But there are also less prevalent ways of clinical presentation. Here we present a case of recurrent confusional states caused by chronic levothyroxine use in an effort to lose weight.

A 48-year-old female was admitted to psychiatric emergency unit (PEU) with an acute onset confusion, disorientation, mutism and irritability. In her mental status examination, she had blunted affect, ambivalence, verbal stereotypy. Because she was not fully cooperative, no further information could be revealed. In her history, she had had a similar episode which needed her to be hospitalized for ten days. She was hospitalized again with the provisional diagnosis of acute confusional state. Routine laboratory workup revealed severe thyrotoxicosis. Further laboratory analyses supported an external thyrotoxic agent use. When questioned, she denied taking any medication apart from the prescribed ones. A detailed anamnesis obtained from family members suggested a purging disorder.

After administering propranolol and olanzapine, her symptoms resolved gradually in three days. Considering all of the information, final diagnosis was made as purging disorder which is classified under other feeding and eating disorders title in DSM-5 and she was discharged with olanzapine 15 mg/day.

Although there are numerous ED diagnoses and manifestations exist in literature, presentation with confusional state in patients with ED is a rare entity. Also both ED and thyrotoxicosis are rare causes of confusional state. Thus, with this report we would like to point out that clinicians should not fail to notice less frequent presentations of psychiatric conditions.

**Keywords:** eating disorders, thyrotoxicosis factitia, confusion, purging

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### [PP-160] *Psychopharmacology*

## Aripiprazole induced premature ventricular contractions: a case report

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Aripiprazole is a novel antipsychotic with a pharmacodynamics profile that distinguishes it from other antipsychotics. Aripiprazole is a partial agonist at dopamine D2 receptors, a partial agonist at serotonin 5-HT1A receptors, and an antagonist at 5-HT2A receptors. Studies have shown that the atypical antipsychotic aripiprazole is effective and well tolerated in the treatment of acute bipolar manic and mixed episodes. Aripiprazole is recognized as one of the antipsychotics associated to the least cardiovascular effects in addition to having a low incidence of long QT, but there isn't any aripiprazole induced premature ventricular contractions reported. We describe a patient who developed premature ventricular contractions after treatment of aripiprazole.

A 40 year old male patient was hospitalized because of mixed episode of bipolar disorder. The patient was taking 900 mg/day of lithium. Aripiprazole (10 mg/day) was added on treatment. On the second day of aripiprazole add-on treatment, he had developed palpitation, shortness of breath, sweating. He hadn't any cardiovascular disease before the admission. Twelve lead electrocardiogram and 24- hour Holter monitoring showed premature ventricular contractions. Aripiprazole was switched to risperidone 2 mg/day. Neither palpitation nor shortness of breath was experienced after the switch.

Premature ventricular contractions induced aripiprazole treatment is an unexpected side effect. The mechanism of the premature ventricular contractions in this case is unknown, but might be caused by a change in ion channels, because some drug-induced arrhythmias account for acquired long QT syndrome. Premature ventricular contractions have been implicated in the development of left ventricular dysfunction and cardiomyopathy. If the clinician decides to begin aripiprazole treatment, cardiac effects must be kept in mind.

**Keywords:** aripiprazole, premature ventricular contractions, side effect

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### [PP-161] *Addictions*

## Treatment resistant somatic symptoms after single dose synthetic cannabinoid misuse

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Synthetic cannabis is a psychoactive drug encompassing synthetic chemicals that produce psychoactive effects similar to the effects of cannabis. It is often known by the brand names "K2" and "spice" both of which are generalized trademark use for any synthetic cannabis product. Some studies suggest that synthetic cannabinoid intoxication is associated with acute psychosis, worsening of previously stable psychotic disorders, and it may trigger a chronic psychotic disorder among vulnerable individuals. Single dose synthetic cannabis misuse caused somatic complaint, treatment resistance headache and somatic pain, is going to be shared in this case report.

A 21 year-old male patient applied to the hospital with treatment resistant headache, pain in his back and arthralgia. Those are the complaints that have been first described in August 2013 after he was exposed to single dose synthetic cannabinoid (derivated from Bonsai plant). According to patient's claim, it was the first and last misuse of this chemical agent. After being exposed, some of the somatic complaints, especially headache, which was localized on apex part of the head and spread the entire head, have been described by the patient. In addition to his headache, arthralgia, tingle in his back part of the body and eye pain in the covers began after being exposed the synthetic cannabinoid. Most of the drugs (anxiolytic, antidepressant, pain killer) have been used to attenuate the severe pain but none of them improved to his complaint. We decided to conduct further investigation to elucidate the pathogenesis of his complaints. Biochemical, neuroimaging and neurological tests have been applied. Computerized Tomography and Electroencephalography results were in a normal range. Triacylglycerol; 256, Plasma Fe; 48, Total Cholesterol; 142, immunochemical, sedimentation, urine and other biochemical parameters were within the acceptable range. We couldn't find any organic etiology describing the current symptoms of patient. To provide a relief of his pain, we decided to start low dose antipsychotic for somatic symptoms (sulpiride) and selective serotonin reuptake inhibitor (Sertraline) while he was in the follow up period.

There is limited knowledge in the literature related with synthetic cannabinoid misuse and clinical presentation. We should be aware of somatic complaints after single or chronic misuse of synthetic cannabinoid agent called "Bonsai" in daily life. Not only an atypical clinical presentation (unexplained headache) but also a psychotic exacerbation could be seen after single dose bonsai misuse. Further investigation should be needed to understand the pathological pathway of this synthetic agent.

**Keywords:** synthetic cannabinoid, somatic complaint, abuse, single dose

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#### [PP-162] *Psychopharmacology*

### ADHD and disruptive mood dysregulation disorder treatment with olanzapine and methylphenidate: a case report

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Attention deficit hyperactivity disorder (ADHD) is one of the most common disorders in childhood which deficits of inattention, hyperactivity and impulsive behavior. Disruptive Mood Dysregulation Disorder is characterized by severe recurrent temper outbursts that are inconsistent with developmental level and manifest verbally or behaviorally. The disorder can co-exist with ADHD and conduct disorder. In treatment of ADHD most commonly used pharmacological agent is methylphenidate. Atypical antipsychotics (e.g. risperidone, aripiprazole, olanzapine...) can be added on the treatment in some cases because of unsatisfactory clinical response and comorbidities such as conduct disorder, pervasive developmental disorders, disruptive mood dysregulation disorder, mental retardation. Olanzapine is one of the FDA-approved atypical antipsychotic, which antagonize the dopaminergic (D1, D2, D4), serotonergic (5-HT<sub>2A</sub>, 5-HT<sub>2C</sub>, 5-HT<sub>6</sub>), histaminergic (H<sub>1</sub>), alpha<sub>1</sub>-adrenergic and muscarinic (especially M<sub>1</sub>) receptors. It is used increasingly for the treatment of mood disorders, schizophrenia, conduct disorder and pervasive developmental disorders at child and adolescent psychiatry clinics. Studies pointed out that it caused mostly dry mouth, weight gain, increase appetite, sedation and hyperlipidemia. In this article, we report a 8-years-old male patient, who have ADHD, disruptive mood dysregulation disorder and conduct disorder, treated with olanzapine and OROS methylphenidate. This issue deserves to get attention that these two psychopharmacologic agents were usable concomitantly for ADHD and its comorbidities.

**Keywords:** attention deficit hyperactivity disorder, disruptive mood dysregulation disorder, methylphenidate, olanzapine

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**[PP-163] Eating disorders****The Behavior of eatingscrew, with radiological signs: a case of pica**

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Pica is the behavior of eating non-food ingredients without nutritional value, continuously for at least a month. This behavior can be seen with many physical diseases and psychiatric disorders or by itself. This poster presents a case of pica behavior.

A 19 years old female patient was admitted to our service, due to destructive behaviors to herself and around. She complained for self-harming behaviors like cutting herself, punching the wall, and feelings of dizziness and blurring in her eyes. She declared that she did not feel any pain because of these harming behaviors. She reported that she was watching her brain out, felt like seeing a gush of blood from her brain. She complained for hearing voices like 'get up, take the knife, go to the bathroom, etc.' She stated that she had been trying to get rid of the discomfort of voices by turning up the volume of the television. Her mother declared that the patient fought and cursed other children. For several months she has been eating objects such as glassware, plastic cups etc. and she also hurt herself by these objects. Two months before, olanzapine 10 mg/day, sertraline 50 mg/day and lorazepam 1.25 mg/day treatments were initiated by a psychiatrist. Ten days later she was discharged without any benefit. On mental state examination, she was conscious, cooperated, and oriented. Her speech was clear, and she often gave brief answers to questions. Her affect was appropriate and mood was euthymic. There were uncertain visual and auditory hallucinations. No delusion was detected. Brain MRI and EEG findings were normal. Positive and negative symptoms scale, the Hamilton Depression Rating Scale and the MMPI were applied. Complete blood count and routine biochemical tests were normal. Mild mental retardation (57 points) was detected. No accurate diagnosis was made. The patient's current treatment was stopped and valproic acid 1000 mg/day, risperidone 2 mg/day, clonazepam 1 mg/day were started. In the course of clinical follow up, psychotherapeutic interviews were conducted with the patient, however she could not adapt to even simple behavioral techniques. She cut her breast and face with plastic cups and said that she had a headache and heard voices, after self-harming she felt relaxed. There was no sign of any improvement in symptoms.. She unscrewed the bed that she was sleeping on. The screw was observed by radiography image in the stomach. She was consulted by a general surgeon, no surgical intervention was applied. During the next days she swallowed new screws, which was observed by radiography. In 7<sup>th</sup> week of admission to the inpatient clinic, she was discharged with limited medical benefit.

The cause and the treatment of Pica behaviors are not well known, and require treatment alone or sometimes together with the underlying disease. Treatment of this disease usually fails; new treatment methods are needed.

**Keywords:** pica, radiological sign, screw

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**[PP-164] Mood disorders****Antidepressant effect of daylight on women: a cross-sectional study**Halil Ozcan<sup>1</sup>, Unsal Aydinoglu<sup>1</sup>, Atakan Yucel<sup>1</sup>, Ibrahim Tardus<sup>2</sup>

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**Objective:** Recently, it has been shown that daylight has an antidepressant effect and bright light therapy is a treatment method on depression of which efficacy has been proven. We will present a cross-sectional study in terms of daylight effect on our hospital population.

**Methods:** A total of 248 patients, who were hospitalized in The Hospital of Ataturk University Medical Faculty between December 2014-February 2014 were included in the study. Patients (106 female, 142 male) were divided into two groups; 146 were in rooms getting daylight at least 3 hours and 102 were in rooms getting less than 3 hours per day, with no differences age and gender. Anxiety and depression symptoms of patients were screened by using the Hospital Anxiety Depression Scale. Individuals having a central nervous system or psychiatric disorder and using psychotropic medications were excluded.

**Results:** Of the patients, 48 were hospitalized in a surgery department and 200 were hospitalized in an internal medicine department. The

mean age of the patients was  $52.5 \pm 17.7$  years. The average length of hospitalization was  $11.2 \pm 17.2$  days, and mean d of hospitalization was  $3.5 \pm 3.7$  days, respectively. Anxiety subscale score was  $19.3 \pm 3.5$  in the group of daylight and  $19.4 \pm 4$  in the group of less daylight, respectively. Depression subscale score was  $16.6 \pm 2.8$  in the group of daylight and  $17.6 \pm 3.4$  in the group of less daylight, respectively. Between groups, anxiety subscale scores were not statistically different ( $p=0.76$ ), however depression subscale scores were statistically different ( $p=0.01$ ). No difference was found among depression and anxiety scores between individuals those staying in a single room and multi-person room ( $p=0.62$ ,  $p=0.69$ , respectively), number of hospitalizations ( $p=0.58$ ,  $p=0.12$ , respectively) and duration of hospital stay ( $p=0.47$ ,  $p=0.57$ , respectively). According to gender, anxiety score of males with daylight was  $19.8 \pm 3.5$  and without daylight was  $21 \pm 3.9$ . Anxiety score of males with less daylight were lower than those of daylight group but did not differ significantly ( $p=0.79$ ). Depression score of males with daylight was  $16.6 \pm 2.8$ , without daylight was  $17 \pm 3.3$ . Depression score of males with daylight were lower when compared to those without daylight but did not differ statistically ( $p=0.50$ ). Among females, anxiety score with daylight was  $18.2 \pm 3.8$ , without daylight was  $18.7 \pm 3.5$  and did not differ between the groups ( $p=0.47$ ). Mean depression score of females with daylight was  $16.6 \pm 2.8$ , without daylight was  $18.9 \pm 3.1$  and a significant difference between groups was found ( $p < 0.001$ ).

**Conclusion:** In the light of these results, the effects of sunlight on decreasing depression symptoms may be more pronounced in females than males, however anxiety symptoms may not be affected by having daylight or not. We did not make a psychiatric diagnostic interview; this is a limitation of this study. Antidepressant effect of daylight needs to be studied with further studies.

**Keywords:** anxiety, daylight, depression

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#### [PP-165] *Mood disorders*

### The relationship between suicide attempt, impulsivity, level of functionality and temperament-character traits in bipolar disorder patients: a controlled study

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**Objective:** The primary aim of this study was to compare temperament-character traits, impulsivity and level of functionality in bipolar I and II disorder patients with and without suicide attempt.

**Methods:** Fifty-two BD-I patients, 49 BD-II patients and 50 age- and sex-matched healthy control subjects were enrolled in this study. Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I), Temperament and Character Inventory (TCI), Barrett Impulsiveness Scale (BIS), Hamilton Depression Inventory Scale (HAM-D) Young-Mania Rating Scale (YMRS), Bipolar Functioning Scale (BFS) and Suicide Intent Scale (SIS) were administered to the patient and control group.

**Results:** There was no statistically significant difference in terms of age, gender and educational status between the patient and control group ( $p < 0.05$ ). The mean age was  $35.69 \pm 12.10$  and  $32.00 \pm 9.24$  in the patient and control group, respectively. 70.3% of the patient group and 60% of the control group were male. 26.7% of the patient group and 20% of the control group were unemployed. It was learned that 38 subjects in the patient group had attempted suicide. 23 of these subjects had BD-I and the rest of the group had BD-II. There was a statistically significant difference in cooperativeness (C), self-directedness (SD), self-transcendence (ST), novelty seeking (NS2) subscales and BFS, BIS total scores between the groups.

**Conclusion:** In our study the C, SD, ST scores, which indicate a predisposition to personality disorder were significantly higher in bipolar disorder patients with suicide attempt, suggesting an association between suicide attempt and personality disorder in bipolar patients. Also higher impulsivity scores and poorer functionality in suicide attempters suggested us that these attempts could be impulsive and could have ruined the functionality of these patients.

**Keywords:** bipolar affective disorder, temperament, suicide, impulsivity, functionality

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**[PP-166] Autism****Daily living skills and quality of life in children and adolescents with autism spectrum disorders**Sule Kocas<sup>1</sup>, Sumeyye Bozkurt<sup>1</sup>, Songul Derin<sup>1</sup>, Funda Suleyman<sup>1</sup>, Ilyas Kaya<sup>1</sup>, Resa Aydin<sup>2</sup>, Ayse Kilicaslan<sup>1</sup>, Suleyman Salih Zoroglu<sup>1</sup><sup>1</sup>Istanbul University, Istanbul Faculty of Medicine, Department of Child and Adolescent Psychiatry, Istanbul-Turkey<sup>2</sup>Istanbul University, Istanbul Faculty of Medicine, Department of Physical Therapy and Rehabilitation, Istanbul-Turkey

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**Objective:** The present study aimed to investigate the quality of life and daily living skills of children and adolescents with Autism Spectrum Disorders.

**Method:** Twenty-one patients with autistic spectrum disorders with coexisting mental retardation (ASD group; 14 males, 7 females; mean age: 11.4 (sd: 4.6) years) and 18 patients with only mental retardation (MR group; 14 males and 4 females; mean age: 10.8 (sd: 3.1) years) were recruited from Outpatient Unit of the Istanbul University, Faculty of Medicine, Child and Adolescent Psychiatry Department. All patients were diagnosed according to DSM-IV criteria and their mothers completed the Pediatric Quality of Life Inventory and Autism Behavior Checklist (ABC). All mothers also filled in the Daily living skills scale (DLSS), formed by the authors, and rated their son's or daughter's level of independence on 28 items covering the domains of personal care, meal-related activities and housekeeping. The Chi-Square, Mann-Whitney U, Kruskal Wallis and Spearman Correlation Tests were used for the statistical analyses.

**Results:** Both groups were comparable for age, gender, socio-economic status and level of mental retardation (for all  $p < 0.10$ ). Clinically assessed level of communication was lower in the ASD group ( $p: 0.035$ ), however mother reported language score in the ABC did not differ ( $p: 0.32$ ) between groups. Mean scores of the mother reported total ABC scores were 77.4 (sd: 35.9) and 56.4 (sd: 34.7) in the ASD and MR groups, but the difference did not reach statistical significance (0.08). The groups did not differ in the physical, psychosocial and total quality of life scores, however, daily living skills score was significantly lower in the ASD group ( $p: 0.02$ ). The DLSS score in the participants correlated with the clinically assessed level of language ( $p: 0.001$ ,  $r: 0.52$ ), but statistically significant association could not be demonstrated with age ( $p: 0.17$ ), level of MR (i.e., mild, moderate or severe) ( $p: 0.13$ ) and ABC language score ( $p: 0.17$ ). When the associations were analyzed separately for each group, clinically assessed level of language correlated with the DLSS score in the ASD group ( $p: 0.005$ ,  $r: 0.59$ ) but not in the MR group ( $p: 0.78$ ,  $r: 0.07$ ).

**Conclusions:** The first results of this ongoing study revealed that children and adolescents with ASD have significant limitations in a variety of daily living skills compared to those with similar mental levels. Clinical level of language may be a more important predictor of daily living skills in patients with ASD than the age and IQ levels.

**Keywords:** autism spectrum disorder, living skills, mental retardation, quality of life

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**[PP-167] Obsessive compulsive disorder****Aripiprazole augmentation in childhood Obsessive compulsive disorder: three case reports**

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First-line treatment for Obsessive compulsive disorder (OCD) includes selective serotonin reuptake inhibitors (SSRI) and Cognitive-Behavioral Therapy. However, an important proportion of the childhood OCD cases do not respond to their treatments. Augmentation prescriptions are recommended especially for the children with OCD, who do not respond to two different SSRI regimens. In OCD augmentation therapy, mostly the atypical antipsychotics, e.g. risperidone, olanzapine, and quetiapine are used. In this presentation, we aimed to present three pediatric OCD cases, which were resistant to two different SSRI treatments and prescribed aripiprazole for augmentation therapy.

**Case 1:** 17-year-old male patient had contamination obsessions and cleaning and counting compulsions for the recent one year period.

The OCD symptoms did not respond to the fluoxetine 20-60 mg/day and afterwards sertraline 50-200 mg/day therapy. While he was on sertraline 200 mg/day, risperidone were added on and tapered to 4 mg/day. He had partial remission. However, because of the extrapyramidal symptoms and lack of optimal efficacy, risperidone were switched to aripiprazole and tapered to 20 mg/day. In the progress, the patient had almost whole recovery for OCD symptoms in the fourth month of this regimen. Side effects of aripiprazole included "headache, fatigue, and insomnia" and disappeared in the fourth week of treatment.

**Case 2;** A 9-year-old female patient had contamination obsessions and cleaning and checking compulsions for the recent one year period. The OCD symptoms did not respond to the fluoxetine 20-60 mg/day and afterwards sertraline 50-150 mg/day therapy. While he was on sertraline 150 mg/day, aripiprazole were added on and tapered to 15 mg/day. In the progress, the patient had almost whole recovery for OCD symptoms in the sixth month of this regimen. Side effects of aripiprazole included "dizziness and insomnia" and disappeared in the fourth week of treatment.

**Case 3;** A 16-year-old female patient had contamination obsessions and cleaning and checking compulsions. The OCD symptoms did not respond to the sertraline 50-200 mg/day and afterwards paroxetine 20-40 mg/day therapy. While he was on paroxetine 40 mg/day, olanzapine 5 mg/day were added on. The patient did not want to use olanzapine because of sedation. Olanzapine were switched to aripiprazole and tapered to 15 mg/day. In the progress, the patient had almost whole recovery for OCD symptoms in the seventh month of this regimen

Aripiprazole is a partial dopamine agonist and its prescription for childhood psychiatric disorders, e.g. bipolar disorder, autism, and schizophrenia is increasing. Scarce number of case reports was presented on aripiprazole augmentation for child and adolescent OCD. The results of the previous case reports and these three cases suggest that aripiprazole is an effective and safe alternative as augmentation for childhood OCD treatment. To investigate aripiprazole efficacy and safety in childhood OCD, randomized controlled treatment studies are needed.

**Keywords:** aripiprazole, obsessive compulsive disorder, augmentation

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### [PP-168] *Psychopharmacology*

## Supraventricular tachycardia developed after suicide attempt with extended release form of bupropion: a case report

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A case of supraventricular tachycardia, which was developed after suicidal attempt with extended release form of bupropion, will be discussed in this report.

A 28 year old female patient was admitted to hospital with complaints such as fatigue, reluctance, malaise and excessive sleepiness request starting about 4 months ago. With the initial diagnosis of major depressive disorder 150 mg/g of extended-release bupropion treatment was started 4 months ago. The patient was brought to the emergency room following a failed suicide attempt with 25 pills containing extended release form of bupropion. In her medical history there was not any history of organic or psychiatric disease and she was not receiving any other medical treatment. Her family told that she never had a suicide attempt and also her symptoms were partially improved after starting the treatment with bupropion 4 months ago. It was noted that the suicidal attempt occurred after an impulsive family stressor. The patient was oriented, cooperative and conscious on admission. On physical examination her blood pressure was around 90/60 mmHg with a pulse rate 170 beats/min. The biochemistry, complete blood count, urinalysis results were in normal limits. After starting her initial medical treatment with a diagnosis of drug intoxication we performed a mental status examination to assess patient's behavioral and cognitive functions. Her mental status examination revealed that she was establishing eye contact, a good self-care and she was cooperated. The spontaneity of speech and intonation was decreased. Her affect was depressive and anxious. She was having sense of regret about her suicidal attempt. There were no perception and memory deficits. At the same time the electrocardiogram (ECG) of patient was taken because of rapid heart rate. We have observed supraventricular tachycardia with a ventricular rate of 169/min on her ECG. The patient was evaluated by a cardiologist and successfully converted to sinus rhythm after administration of adenosine. On her bedside echocardiography, no structural heart disease that can lead to supraventricular tachycardia was observed. Her hemodynamic parameters were normalized and she was admitted to psychiatry clinic for follow up.

Several cases of extended release form of bupropion overdose with ventricular tachycardia, sinus tachycardia or other kind of arrhythmias have been reported in the literature. In our case we wanted to report a case of supraventricular tachycardia after intake of high doses of bupropion for suicide attempt, despite the 4 months use of extended release form of bupropion without any side effects,

**Keywords:** bupropion, suicide, supraventricular tachycardia

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**[PP-169] Psychosomatic medicine- Consultation liaison psychiatry**

## Psychiatric consequences of lightning: a case report with 3-year follow up

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Lightning injuries affect 800 to 1000 persons per year. Lightning current may flow internally for an incredibly short time and cause short-circuiting of the body's electrical systems. It seldom causes any significant burns or tissue destruction. Long-term problems are sleep disturbances, anxiety attacks, pain syndromes, peripheral nerve damage and phobias. In this case we report a patient, who has been followed up in a psychiatry clinic for three years due to psychiatric signs and symptoms after a lightning. Our aim is to discuss the relationship between diffuse neurologic damage and psychiatric consequences in lightning patients.

**Keywords:** lightning, psychiatry

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**[PP-170] Psychopharmacology**

## Neuroleptic malignant syndrome in an adolescent with olanzapine: a case report

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Neuroleptic malignant syndrome (NMS) is an uncommon but potentially fatal idiosyncratic reaction characterized by the development of altered consciousness, hyperthermia, autonomic dysfunction, and muscular rigidity on exposure to neuroleptic medications. NMS was previously associated with the use of high-potency neuroleptics, cases have begun to emerge as atypical. The mortality and morbidity associated with NMS can be decreased with early recognition, early discontinuation of the neuroleptics and aggressive treatment. This article presents a olanzapine-induced case in an adolescent, and treatment of NMS.

The patient was a 15-year-old male adolescent with a history of mental retardation and epilepsy. The patient's initial presentation to us on 28.04.2011 behavioral changes, irritability, numbness in hands and feet, talking to himself, cursing the people around him were in the emergency department with complaints. To our clinic for further evaluation and treatment of patients were being treated. As a result of consultation of pediatrics for the etiology of mental retardation, organic pathology was excluded and by pediatric neurology with a diagnosis of non-convulsive status epilepticus 500 mg of valproic acid was started. Behavioral problems in patients who continued risperidone 1 mg and 5 mg biperiden was added and patients with a reduction of complaints had been externa. For 2 years he was treated with behavior therapy and using risperidone and biperiden was not needed. Patients with insomnia complaints in the outpatient clinic controls olanzapine 2.5 mg unrest began. In patient history we learned that he was brought to emergency department 5 consecutive days and the treatment was performed olanzapine 5 mg SC. He was brought to the emergency department because the family noted that the child had a tactile fever; was rigid, diaphoretic, tremulous, and difficult to arouse; and had persistent urinary incontinence. The patient was admitted to the pediatric intensive care unit, where he remained rigid and unresponsive except for incoherent speech. Biochemical tests were performed and elevated creatine kinase drew attention. He was treated for a presumptive diagnosis of NMS with IV benzodiazepine and hydration. To reduce the sequela of NMS; urinary alkalization with sodium bicarbonate to maintain a urinary pH of 6.5 to 7.0; cardiac, pulse oximetry, and vital sign monitoring; and supportive care, including IV saline hydration were started. Additionally, we began physical

therapy to prevent contractures. Observation of the patient revealed no side effects associated with the MNS, and he began to take food and medications orally and to co-operate partially. Insomnia was not evident. Decreased rigidity and tremor were observed. Vital signs were stable and the patient was discharged on the 34<sup>th</sup> day.

Bambrick and Wilson reported that, MR has relative risk especially for recurrent NMS. NMS have been reported in the mortality rate of 4-30%. In this article, it has been reported that NMS induced by olanzapine in an adolescent on the basis of mental retardation. We want to emphasize the relationship between mental retardation, epilepsy and NMS associated with the use of atypical neuroleptics, and the importance of the monitoring as well as the follow-up.

**Keywords:** neuroleptic malignant syndrome, olanzapine

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### [PP-171] Others

## Assessment of the extent of needs for mental health care of patients with schizophrenia in Diskapi Community Mental Health Center

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**Objective:** Community mental health concept is the assumption that individuals needing mental health services will make use of such services if they are available in their communities. While rehabilitation work for patient with mental illnesses in our country was only performed within a hospital or a daytime hospital so far, community- based practices were started in 2008. The target of this model is to follow the treatment of the patients with severe mental illness frequently in the community. Assessment of needs for care is crucial in the evaluation of ongoing changes from care to community mental health. This study aims to assess the extent of needs for mental health care of patients with schizophrenia in Diskapi Community Mental Health Center (CMHC).

**Method:** The study was conducted in Ankara Diskapi CMHC in the months of June-December 2013. One hundred fifty four patients diagnosed with schizophrenia or schizoaffective disorder selected from the center's data bank. After registration, patients were evaluated by interview and identifying the care needs of patients for the evaluation and risk assessment prepared forms were filled in together with patients and their relatives.

**Results:** Of the 154 patients, 41.6% were female. The average age of patients was  $37.3 \pm 12.2$  years. 85.7% of participants were diagnosed as schizophrenia, 14.3% as schizoaffective disorder, 65.7% were unemployed, 35.1% of the patients interrupted their education due to poor health, 83.7% did not receive any means of support for their health condition. The 36.2% of the patients were devoid of public support. The 69.5% of the patients were unaware of their condition, 39,5% had a history of self-mutilation, 94.2% had an access to objects that could be used in a suicide attempt. The 21.9% were socially isolated.

**Conclusion:** The present study conducted at Diskapi CMCH enables us to determine the issues that require more attention at CMCH's. The majority of the patients were unemployed and having financial problems, and they were unable to receive support for poor health, thus devoid of social support. One of the most important issues was that almost half of the patients had additional health problems and their treatment regimens were interrupted, and this problem must be urgently addressed by relevant departments through consultation. The education of patients and their families should be a priority topic as the majority of patients lack awareness about the disease. Social isolation of the patients and lack of social relations are also of high priority issues.

**Keywords:** patient care, community mental health services, schizophrenia

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**[PP-172] Addictions and related disorders****Alcoholic hallucinosis**

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Temporary hallucinations and delusion were found in 43% of alcohol dependence cases. Alcoholic hallucinosis is usually accompanied by vivid hallucinations, and can be found in individuals between 40 – 50 years of age, who have been using alcohol for over 10 years. Has a higher prevalence amongst male population. Disease occurs shortly after stopping an excessive intake of alcohol or reducing the intake amount. Auditory hallucinations can occur as if heard from a third person and can be persecutory and terrifying. These hallucinations can be intermittent or continuous; can be instant or last for days. Cognitive functions are usually unaffected, and reality testing is disrupted in accordance to hallucinations. A rare case of alcohol hallucinosis is presented in this paper.

The patient is a 58 years old male. He finished primary school and has no other education. He has 30 years of alcohol consumption history. The patient, willing to give up alcohol consumption, was referred to our hospital's "Alcohol and Substance Addiction Treatment Center" (AMATEM), and was presented with increasing inability to sleep, nervousness, and lately hearing voices when there is nobody around especially when he does not take alcohol or drink less than usual. Psychiatric examination, following his admission, showed that he looked older than his actual age and has a decreased self-care. His mood was anxious and affect was in accordance with his mood. Examining his perception revealed his auditory hallucinations to be of an insulting nature; telling him that he is worthless, that he is being ignored, and rejecting his wishes. The patient had a clear consciousness and was cooperative, and he was well oriented towards people, places and time. He had a normal attention and adequate insight and judgment. His complete blood count was normal except a slight increase in GGT level [GGT: 71 U/L (12-64)]. His treatment consisted of diazepam 60 mg/day for detoxification, folic acid and vitamin B supplements, and olanzapine 10 mg/day for the psychotic symptoms. Detoxification treatment stopped gradually and on the 19<sup>th</sup> day of the treatment perceptual disturbances disappeared. The patient was discharged with clinical recovery on the 21<sup>st</sup> day of his admission. Outpatient follow-ups were arranged.

Delirium due to the general medical condition was excluded due to the normality of patient's lab work results. Delirium Tremens excluded that the patient's consciousness was clear, his orientation and attention was adequate and his clinical course was not fluctuating. Schizophrenia was excluded atypical onset age, correlation between the onset of psychotic symptoms and the time he stopped alcohol use, and discontinuity in the course of disorder. The clinical picture evaluated as 'alcohol-induced psychotic disorder' according to DSM-5. In our patient, auditory hallucinations have completely disappeared after 19 days. Alcoholic hallucinosis is a rare disorder, its pathophysiology has not yet been discovered completely, and it needs a careful differential diagnosis. Patients usually respond well to the treatment, and patients should be informed, that a relapse in alcohol consumption also greatly increases the risk of a recurrence.

**Keywords:** alcohol dependence syndrome, alcoholic psychosis, hallucination

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**[PP-173] Posttraumatic stress disorder****Risperidon treatment for mourning in a five-and-a-half-year-old child: case report**

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It is intended to present here, a five-and-a-half-year-old child with the symptoms of self-mutilation behavior and thought after the death of aunt.

Reviewing the knowledge in literature and comparing it with the case is the method being followed.

A five-and-a-half-year-old child brought to our clinic first time in February 2014 by his parents. A year ago, after the death of aunt who has taken on the role of parents, difficulty falling and maintaining asleep, decrease appetite and loss in weight, constipation, recurrent aunt images and death subjects in his talking and games, intensive guilt, depressive mood and passive suicide thought occurred. His mother indicated that he attempted suicide two weeks ago, saying he wants to die because he misses his aunt and wants to go to her side. During

psychiatric interview, following points are noticed: intensive guilt, depressive mood, statements about his aunt being in heaven and how much he misses her. 0,5 mg/d dose risperidone treatment begin for the patient due to his impulsive behavior.

Children's perception of death is related to their cognitive and emotional development. According to psychoanalytic theory, little children's capability of understanding and accepting death is limited to their cognitive and emotional maturity. On the other hand according to cognitive theory, irreversibility, finality, inevitability, universality, causality, personal deadness and un predictability are basic properties of death. How death is explained to child, religious and cultural values of parents are important for children's understanding of death. If death is not explained clearly, the children behave as they observe from the family. The possibility of depression and guilt is higher for children in families, which death is not spoken or explained. The symptoms of our case are considered as they occurred during the concrete operational period. Because of risky behavior of the child, risperidone treatment planned. Nowadays, risperidone treatment is used for psychiatric disorders and conduct disorders in children and adolescents. Our case will be discussed comparing with mourning cases in literature.

**Keywords:** death, mourning, risperidone

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#### [PP-174] Neuroscience: Neuroimaging - genetics - bioindicators

### Can electroencephalographic cordance patterns distinguish trichotillomania and Obsessive compulsive disorder?

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**Objective:** According to the DSM-5, trichotillomania (TTM) is now considered as an obsessive-compulsive spectrum disorder (OCD). Nevertheless, this change did not suffice the biological overlaps and distinctions between OCD and TTM. Quantitative EEG is a widely available and noninvasive method for diagnostic screening and thus may serve as a unique tool for investigating brain electrical activity differences between OCD and TTM. Taken together, the ultimate goal of this study was to study the quantitative EEG differences between TTM, OCD patients and health participants.

**Method:** Thirty-nine TTM patients, forty OCD patients and twenty-three healthy controls were enrolled for this study. We calculated theta and beta cordance values for each electrode and frequency band that provide an index of regional cortical activity.

**Results:** Post-hoc t-tests for theta cordance values did not show any significant results. Regarding beta cordance values, we found a significant right frontal activity differences between TTM and OCD cases ( $p=0.013$ ) but not with healthy controls ( $p=0.19$ ). Significant differences were also observed in the prefrontal beta cordance values between TTM and OCD cases ( $p=0.001$ ) but not healthy controls ( $p=0.15$ ). Lastly, there was a difference between healthy controls and OCD cases in regards to left temporal beta cordance values ( $p=0.010$ ).

**Conclusion:** One main finding of this study was the greater discordance in the right frontal and prefrontal beta activity for OCD patients compared to TTM. In addition to this, we found a significantly higher concordance for left temporal beta activity compared to healthy subjects only for OCD patients. These findings replicated the previously well-defined left frontotemporal dysfunction in OCD patients. In addition to this, our demonstrated activity differences in the right and prefrontal areas between OCD and TTM may help us to understand the underlying physiopathology between OCD and TTM.

**Keywords:** obsessive compulsive disorder, trichotillomania

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**[PP-175] Psychopharmacology**

## Leukopenia due to atomoxetine use: a case report

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Atomoxetine is a non-stimulant selective noradrenergic reuptake inhibitor, with FDA approval for the treatment of attention deficit hyperactivity disorder (ADHD). It is considered as a safe drug in terms of drug abuse. Atomoxetine is a commonly used drug in children and adolescents and leukopenia is a rare side effect of atomoxetine. In this case, we discuss a 11 year-old-male patient using atomoxetine without a history of hematologic disorders. Leukopenia was occurred in therapeutic doses of atomoxetine After discontinuation of atomoxetine treatment improved leukopenia This finding suggests us to be aware of potential leukopenia side effect of atomoxetine.

**Keywords:** atomoxetine, attention deficit hyperactivity disorder, leukopenia**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S196****[PP-176] Sleep disorders**

## Turkish validation and adaptation of Children's Chronotype Questionnaire (CCTQ)

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**Objective:** Chronotype refers to the time of the day that a person's physical functions and cognitive functions are active. Simply this is a circadian phase preference of a person. The study of circadian rhythms, known as chronobiology, is all about the differences between chronotypes: 'larks' (so called morning people) and 'owls' (or night people). A few tests are used to determine chronotypes. The CCTQ is a parent-report, 27-item mixed format questionnaire measuring chronotype of children in multiple domains: the midsleep point on free days (MSF), a morningness/eveningness scale (M/E) score, and a five-point chronotype (CT) score. The aim of this study is adaptation of Children's Chronotype Questionnaire (CCTQ) into Turkish Language and validating the instrument in Turkish population.

**Method:** 101 children, aged nine through eighteen constituted the sample of the study. We compared the CCTQ and MESC scores of children to examine the validity of CCTQ. To assess the test/retest reliability, we also wanted the parents to re-fill the test 15 days after the first application.

**Results:** The internal consistency and external validity of the Turkish CCTQ was sufficient to compare MESC-Turkish. As a result of this research carried out in accordance with methodological research principles, correlation between the M/E scores of CCTQ and MESC was significant.

**Conclusion:** The Turkish version of CCTQ has been found to be valid and reliable in Turkish children.

**Keywords:** chronotype, morningness, eveningness, Turkish CCTQ, MESC-Turkish

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**[PP-177] Psychopharmacology****A side effect of fluoxetine, ecchymoses: case report**Secil Aldemir<sup>1</sup>, Ercan Dalbudak<sup>1</sup>, Merve Topcu<sup>1</sup>, Pinar Yurtbasi<sup>2</sup><sup>1</sup>Turgut Ozal University, Faculty of Medicine, Department of Psychiatry, Ankara-Turkey<sup>2</sup>Turgut Ozal University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Ankara-Turkey

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Prescription of selective serotonin reuptake inhibitors (SSRIs) famous with safer side effects is common in treatment of psychiatric disorders. Among antidepressants, cases with abnormal bleeding following especially SSRIs use have been reported. In the literature, abnormal bleeding and hematologic side effects like ecchymoses due to SSRIs such as fluoxetine, fluvoxamine, sertraline, paroxetine have been stated as well.

A 33-year-old graduated female patient applied to the psychiatry clinic with complaints of fatigue, irritation, feelings of uselessness, lack of pleasure in doing anything and being a night owl. According to the findings via psychiatric examination and psychometric assessment, she was diagnosed as having major depressive disorder due to DSM IV criteria and prescribed 20 mg/day fluoxetine. By the fourth week of the treatment, she responded to the treatment. At the twelfth week, she reported discoloration in different places on her body, especially localized below extremities. She also added that she had not had any injury. Dermatological consultation revealed that this discoloration was due to ecchymotic lesions. Hematologic consultation concluded normal findings. Blood tests including complete blood cell count, prothrombin time, partial thromboplastin time, bleeding time and other hematologic screening tests were run as well. The blood tests were found to be normal. Also hematologist reported that the discolorations were not found to be in relation to any hematologic problem. Because of the ecchymoses, fluoxetine use was stopped. Instead, escitalopram 10 mg/day was prescribed to the patient. After one month, she reported that new ecchymoses had not occurred; the old ones and depressive symptoms had started to heal. When the patient's complaints, her history, examination and laboratory findings were assessed all together, it was concluded that ecchymoses could be due to fluoxetine use. The current paper aims to focus a case demonstrating occurrence of ecchymoses due to fluoxetine use.

Although it has not still known clearly about the relationship between fluoxetine and ecchymoses seen at twelfth week of the treatment without proof of any hematologic problem, it was thought that the fluoxetine use could lead hematologic side effects.

It was reported that the side effects due to fluoxetine use could be manifested in form of bleeding ecchymoses. The relationship between fluoxetine use and bleeding and ecchymoses could be understood by focusing the role of serotonin platelet functions

When literature findings and information gathered from the patient were examined all together, It was thought that the ecchymoses are associated with fluoxetine use. In this case, ecchymoses disappeared following cessation of drug.

As a result, fluoxetine and other SSRIs influence the aggregation of platelets by inhibition of serotonin reuptake in platelets. This may lead bleeding, petechiae and ecchymoses. Considering the literature findings regarding hematologic side effect due to SSRI use, it was suggested that SSRIs should be used with caution.

**Keywords:** ecchymoses, fluoxetine, side effect

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**[PP-178] Psychopharmacology****Galactorrhea during escitalopram, sertraline, clomipramine treatments used at different times: a case report**

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Hyperprolactinemia and galactorrhea are very common in psychiatric patients because of the mechanism of action of antipsychotic drugs on dopamine receptors. This side effect could also appear during antidepressant treatment. Hyperprolactinemia has been reported to occur as a side effect during treatment with different types of antidepressants including tricyclic antidepressants, selective noradrenaline reuptake inhibitors, selective serotonin reuptake inhibitors (SSRI). In some case reports this side effect has been linked with the dosage of the medication used. Besides, galactorrhea due to SRI usage has been proposed to be a result of direct stimulation of serotonin to prolactin release or indirect effect of serotonin as dopamine antagonist. In this paper we described a case that has been using escitalopram,

sertraline, clomipramine at different times for the treatment of her Obsessive compulsive disorder. During her treatment with all three SRIs, she complained about galactorrhea and prolactin elevation. There was no pituitary adenoma determined by computer tomography and magnetic resonance imaging. OCD is a condition in which prevalence ranging from 1.9-3.3%, and the execution of extensive research on the biological origins. SRIs are the first choice in the initial stage of pharmacotherapy of obsessive compulsive disorder. A tricyclic serotonin reuptake inhibitor clomipramine and selective serotonin reuptake inhibitors fluoxetine, fluvoxamine, paroxetine, sertraline exist at this list. Clomipramine has more side effects due to its affinity on non-serotonergic receptors. In addition as mostly used antiobsessional agent clomipramine is accepted as the most well-known drug regarding to antiobsessional effect. In our case various SRIs are used with monotherapy at different times but; because of galactorrhea developed in the initial dose, pharmacotherapy could not be maintained effectively. In this article; we purposed to discuss galactorrhea side effect of SRIs and resumption of treatment in OCD.

**Keywords:** galactorrhea, escitalopram, sertraline, fluoxetine, prolactin

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### [PP-179] *Personality disorders*

## The validity of the Turkish version of DSM-5 Clinician's Personality Trait Rating Form: a preliminary report

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**Objective:** The researches, which were conducted after the release of DSM-III revealed some problems in the model of categorical personality disorders. The alternative model of DSM-5 for personality disorders consists of the impairment of personality functioning and the pathological personality traits. Pathological personality traits were organized in 5 large domains: Negative affectivity, detachment, antagonism, disinhibition and psychoticism. There are 25 specific trait facets in these large domains. Diagnoses for specific personality disorders are obtained from these traits. Each domain gives opportunity to define both maladaptive and adaptive features of personality. It has been suggested that by this procedure it would be easier to give a definition for extent of personality disorders.

**Method:** In this study, it was planned to investigate the validity of Turkish version of clinician's personality trait rating form (CPTRF). Permission has been granted by A.E. Skodol, who was a member of DSM-5 Personality Disorder Work Group. Afterwards, CPTRF was translated in Turkish and then retranslated in English. CPTRF, The Quality of Object Relations Scale (QORS), The Personality Organization Diagnostic Form (PODF) and The Global Assessment of Functioning (GAF) were applied to 102 patients who were admitted to Erenkoy Mental Hospital and assessed for starting a psychotherapy program. Validity analysis of CPTRF was conducted.

**Results:** Negative affectivity domain scores of CPTRF has showed mild to moderate negative relationship with GAF, PODF-Identity dimension, and total and triangular level scores of QORS, and a moderate positive relationship with primitive level scores of QORS in the correlation analyses, which were conducted for convergent validity.

Attachment domain scores of CPTRF has showed mild to moderate negative relationship with GAF, PODF-Identity and PODF-object relations dimensions, triangular level score of QORS, mature level scores of QORS, and moderate positive relationship with primitive level scores of QORS.

Antagonism domain scores of CPTRF were not related with GAF scores. There were mild to moderate negative relationship with PODF-Identity, PODF-mature defenses, PODF-Global personality organization domains, QORS-controlling level, QORS, mature level, QORS-total score, and there were a mild to moderate positive relationship with PODF-immature defenses and QORS-primitive level. Impulsivity has found to be negatively related with GAF, PODF-identity, PODF-mature defenses, PODF-object relations, PODF global personality organization level, QORS-controlling level, QORS-triangular level, QORS-mature level, QORS total score, within a power range of mild to moderate, and it was found to be positively related mild to moderate with PODF-immature defenses, QORS primitive level, QORS-searching level.

Psychotism has been found to be negatively related mild to moderate with GAF, PODF-identity, PODF-mature defenses, PODF-object relations, PODF global personality organization level, QORS-triangular level, QORS-mature level, QORS total score, and there were mild positive relationship with PODF-immature defenses, and strong positive relationship with QORS primitive level.

**Conclusion:** This preliminary data has showed that validity level of CPTRF is sufficient in all domains. Our study is proceeding for inter-rater reliability analysis, factor analysis, predictive and discriminant validity analysis.

**Keywords:** clinician's personality trait rating form, personality domain

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**[PP-180] Schizophrenia and other psychotic disorders****Rapid onset apathy following basal ganglia infarct: a case report**

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Apathy is conventionally defined as an absence or lack of feeling, emotion, interest or concern and often correlated with cognitive deficits, functional impairment and depression. Akinetic mutism is characterized by profound apathy and lack of verbal and motor output despite preserved alertness.

We reported here the case of a 36-year-old male with no history of neuropsychiatric disorders and had pure apathy and akinetic mutism after the onset of a left brain vascular lesion located in the head of the caudate nucleus.

Mr. B, a 36-year-old married man, was admitted to the psychiatry service with the complaints of severe slowness of movements and speaking. He did not eat, drink and speak spontaneously. The complaints of the patient had started the in two months slowly. He had not history of any psychiatric and neurologic disorder. He had not any history of alcohol and substance use and family history of any psychiatric disorder.

According to his psychiatric examination; He was alert and his affect was apathic. He had spoken spontaneously rarely, the tempo and rhythm of his speech was decreased. His associations were normal and goal directed. His mood was euthymic and there was not any finding of depression. His psychomotor activity was severely decreased and had not revealed voluntary movements and goal-directed behavior. MRI findings showed gliotic ischemic lesion of left corona radiata and nucleus caudatus. The neuropsychiatric assessment of the patient revealed decreased problem solving ability, impaired memory and abstract thinking. Scale for the Assessment of Negative Symptoms (SANS) scores was 91. He was prescribed risperidon 4 mg/day per oral. The symptoms of the patient were significantly improved. The SANS scores were 39 and 34, respectively.

This case highlights the key role of the lesions of basal ganglia in the development of pure apathy and akinetic mutism. It is proposed that apathy may be explained by the impact of lesions or dysfunctions of the basal ganglia, because these lesions or dysfunctions lead to diminished extraction of the relevant signal within the frontal cortex, thereby inhibiting the capacity of the frontal cortex to select, initiate, maintain and shift programs of action.

The case which we illustrated here, also alerts the physician about the neuropsychiatric syndromes, which mimics the negative symptoms of the psychosis and may challenge the differential diagnosis

**Keywords:** akinetic mutism, apathy, basal ganglia

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**[PP-181] Sleep disorders****Female postmenopausal patient having orgasms during sleep**

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At present, there is an increasing level of interest about abnormal sexual behavior occurring during sleep, which is called sleeping sexuality or atypical sexual behavior during sleep and sexomania. ICDS-2 treats this phenomenon as a variant of confusional excitation, which is included in parasomnia classification. This disorder may present itself as creating sexual sounds during sleep, speaking or yelling, masturbation, caressing someone else, sexual intercourse during sleep, aggressive sexual behavior, ictal orgasm, ictal automatic sexual behavior, ictal pelvic motion that looks like a sexual intercourse.

The case is a 69 years old female patient, who is an elementary school graduate, married and housewife. She appealed to our clinic on October 2013 with complaint of having orgasm in her sleep at least once a week, at most once in two weeks interval. In late periods, her orgasms got intense enough to cause sub-sclerotic hemorrhages in her eyeballs. She had no dreams of sexual content prior to orgasms. MRI scan was clear and EEG showed no signs of any epileptic pathology. She was treated with 1 mg/day clonazepam. She returned for control visit 3 months after medical treatment. She reported no orgasm during her sleep after clonazepam treatment.

There are 3 such cases in the literature as far as we know. Our patient is the oldest patient in respect to those reported in the literature. As this is a rare pathology, we thought this case would draw attention to this problem and would supplement the literature.

**Keywords:** sleep, parasomnia, orgasm

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**[PP-182] Attention deficit-hyperactivity disorder**

## Usage of atomoxetine for encopresis and attention deficit-hyperactivity disorder

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Atomoxetine, an effective treatment alternative of attention deficit-hyperactivity disorder (ADHD), is a selective presynaptic norepinephrine reuptake inhibitor. Also atomoxetine is shown as one of the options in the treatment of nocturnal enuresis and encopresis. A case with encopresis and ADHD will be presented in terms of atomoxetine treatment.

A 7-year-old boy was admitted to our outpatient clinic with complaints of restlessness, forgetfulness, getting bored quickly, academic failure in the school and soiling his underwear. In his psychiatric examination; he was conscious, oriented, his cooperation was fluent and understandable. He had concentration problems, hyperactivity and impulsivity. There was no hallucination and delusion. He also had encopresis occurring 5 to 6 times a week for 1 year. His intelligence level was within normal limits according to psychiatric examination and IQ testing. The diagnosis was compatible with ADHD combined type and encopresis with constipation and overflow incontinence according to DSM-V. There was no history of psychiatric treatment. First of all, for the treatment of encopresis, behavioral intervention was suggested, but he and his parents did not adapt the recommendations. Atomoxetine, 18 mg/day, was initiated; and the dose was titrated up to 40 mg/day. The patient was invited to medical examination monthly. In the first month of follow-up period, the symptoms of attention deficiency, impulsivity decreased and school achievement improved. Furthermore, encopresis was observed only three times in a month. At the end of fifth month, he tolerated the medication well, and there was no encopresis.

Encopresis is described as the repeated passage of feces into inappropriate places. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition describes two subtypes as "with constipation and overflow incontinence" and "without constipation and overflow incontinence." The relationship between encopresis and attention difficulties, disruptive behavior, academic failure was declared. Coexistence of encopresis and ADHD symptoms are observed frequently. In the previous study, the efficacy of imipramine was demonstrated on encopresis. In addition, uses of atomoxetine and methylphenidate treatments were shown in two children with encopresis and ADHD. In our case, we observed the effects of atomoxetine on encopresis and ADHD however in terms of this observation needs to be studied with further studies.

**Keywords:** attention deficit hyperactivity disorder, atomoxetine, encopresis

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**[PP-183] Obsessive compulsive disorder**

## Obsessive compulsive disorder: subtypes, severity and sexual dysfunction

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**Objectives:** Obsessive compulsive disorder (OCD) and Major Depression are known to have significant impact on sexual functioning. In this study, we assessed if the sexual dysfunctions differed according to the severity and subtypes of obsessions and compulsions in OCD patients, either with a comorbid Major Depression or alone.

**Method:** The study population consisted of 68 outpatients between 16-61 years of age with a DSM IV diagnosis of OCD, who were

followed at the anxiety outpatient unit of Psychiatry Clinic of Sisli Hamidiye Etfal Research and Teaching Hospital between 2006-2009. Patients were evaluated with Structured Clinical Interview for DSM-IV (SCID-I) for OCD diagnosis, sociodemographic form, Arizona Sexual Experiences Scale (ASEX) for sexual dysfunction, Yale-Brown Obsessive-compulsive Scale (YBOCS) to assess the severity of the illness and YBOCS checklist to assess obsession and compulsion subtypes. Patients diagnosed as alcohol or substance dependence, physical illness, dementia and mental retardation were excluded.

**Results:** In our population 60.3% (n=41) of the patients had sexual dysfunction (SD) and 39.7% (n=27) had not. 77.9% (n=53) of the patients were female, 22.1% (n=15) were male. Sexual dysfunction was significantly higher in women (67.9%) than in men (33.3%). Medication or YBOCS severity did not affect sexual dysfunction. However, YBOCS Obsession scores were positively correlated with the scores of sexual arousal, ability to reach orgasm, satisfaction from orgasm in ASEX and ASEX total score. In OCD subtypes, patients with fear of contamination had sexual dysfunction. When we excluded the patients with Major Depression, the relation between sexual dysfunction and the fear of contamination was still significant.

**Conclusion:** Major Depression comorbidity in OCD patients increases the risk of sexual dysfunction. Fear of contamination in OCD patients significantly increases the risk of sexual dysfunction even in the absence of Major Depression comorbidity. OCD patients, especially the ones with the fear of contamination should be carefully assessed for sexual dysfunction and its implications to patient's quality of life even before starting any medication.

**Keywords:** Obsessive compulsive disorder (OCD), sexual dysfunction

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#### [PP-184] *Psychopharmacology*

### A case of bruxism induced by fluoxetine and treated by gabapentin

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Bruxism can be induced by several psychotropic drugs like antidepressants, antipsychotics and amphetamines. Several cases of drug-induced bruxism who were treated with buspirone were reported but there is only a case report and a clinical trial for treatment of bruxism with gabapentin. We report here a case of bruxism induced by fluoxetine and treated by gabapentin.

A 43-year-old woman was using fluoxetine 20 mg, for major depression and generalized anxiety disorder. She was also diagnosed with OCD. Her symptoms improved but she reported severe bruxism symptoms during night and day. She had severe teeth grinding, clenching, jaw pain and temporal headache. She was experiencing difficulties opening her mouth in the mornings. Referring to the prior case reports, she was given buspirone 10 mg/day bid for 2 weeks but significant improvement was not observed. She also reported Restless Legs Syndrome (RLS) symptoms such as paresthesia and pain. Gabapentin was started with titration and increased to a final dose of 300 mg. After 5 days of the treatment, she reported full remission. RLS symptoms also improved. She reported only minimal dizziness as a side effect and she was very satisfied with her treatment. She was also referred to the group treatment for bruxism and comorbid disorders.

Gabapentin may be an effective treatment option for bruxism with its anxiolytic, antispasmodic effects. Gabapentin also increases sleep quality and it is also a treatment option for comorbid restless legs syndrome.

**Keywords:** bruxism, psychopharmacology, restless legs syndrome

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S201**

**[PP-185] Forensic psychiatry****Forensic-psychiatric evaluation of two cases with penis amputation and other self mutilative lesions, who were accused with parents murder**Ismail Ozver<sup>1</sup>, M. Feyzi Sahin<sup>1</sup>, Huseyin Keles<sup>1</sup>, Sakir Ozen<sup>2</sup><sup>1</sup>Ministry of Justice, Council of Forensic Medicine, Istanbul-Turkey<sup>2</sup>Bakirkoy Prof. Dr. Mazhar Osman Research and Training Hospital, Department of Psychiatry, Istanbul-Turkey

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Klingsor Syndrome has been used to describe the act of external genital self-mutilation in psychotic patients. Genital self-mutilation acts have also been reported in personality disorder and substance abuse patients. Here we report two cases both with penis self-amputation and parents murder. Both cases were examined at Council of Forensic Medicine.

**Case 1:** A 21 years old single male. He had left school from the first year of secondary school and he is unemployed. He was living with his family in Istanbul before the crime. He has history of mixed substance use for 8 years and 5 times addiction treatment cures in hospital. One year before our examination, he murdered his mother with a gun while squabbling with her about money, under the effect of substance. He told that he had amputated his penis in prison because of his relatives' blames. He has reactive depressive findings, borderline and anti-social personality traits. No active psychopathology was found. There were many psychopathic scars on his body. His penis was amputated by half. In reference to our psychiatric observations and evaluation, it was decided that he might be under effect of substance and he was responsible for the murder crime.

**Case 2:** 36 years old male, single, unemployed patient. He has graduated from elementary school. He used to live with his parents in a small town until a year ago. He was accused with murder of his father by hitting a thin metal wand onto his head while squabbling with him about a remote control device. He did not have history of substance use. In his anamnesis, it was learned that he had started to run away from home and several maladjusted attitudes, when he was 14 years old. He had shaved his eyebrow before. He had gone to army but he was reported as draft-exempt after three months in army. He started to receive psychiatric treatment after 18 years old but he didn't take his medications regularly. When he was 23 years old, he amputated his penis and testicles with scissors under the effect of persecutory delusions and auditory hallucinations. When he was 25 years old, he amputated his tongue. There were many cut trails and burn scars on his body, which cannot be defined as due to the anti-social behavior. One year before our examination, he put a torpedo toy (an explosive toy common in Turkey) to his anus and fired it. After that, his anus needed to be blocked surgically due to the injuries in perianal tissue and he had to live with colostomy. In our examination, he was diagnosed as schizophrenia because of active persecutory delusions, bizarre attitudes and cognitive impairment. It was decided that he did not have criminal reasonability for murder crime.

Patients with schizophrenia and similar psychotic disorders, don't have criminal responsibility. It is not easy to predict the risks in severe and chronic psychotic situations. On the other hand, psycho-education of family members may reduce the risk of such behaviors.

**Keywords:** self penis amputation, parents murder, criminal responsibility, Klingsor syndrome

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S202**

**[PP-186] Others****Sexual trauma history in the female psychiatric population and long term effects**

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Childhood sexual abuse is a traumatic experience significantly associated with adult psychopathology and have been reported by 15-22% of adult women in the general population. Childhood histories of physical or sexual abuse are associated with a higher risk of depressive episodes, mania and psychosis .

However, these problems are predicted and evaluated for near term effects, mostly neglecting the fact that these exposures substantially cause a major psychiatric disorder in the long-term, even requiring a psychiatric hospitalization. Here in this case series we present female patients with sexual abuse or rape stories, who were treated with serious major psychiatric disorders, emerging after years.

**Case 1;** A 24 years old female, single patient, suicidal was admitted to the psychiatric ward with the diagnosis of Major Depression. The

onset of her disease started 5 years ago, after her uncle raped her 6 years ago. Number of attempted suicide was twice in the last 2 years.

**Case 2;** A 45 years old female patient, divorced 12 years ago, still living with her mother, was admitted to the psychiatry ward with reference delusions. She had a history of sexual and physical abuse history when she was 7. The onset of her disease is 10 years after her experience. She has been medicated for 28 years with the diagnosis of Paranoid Schizophrenia and had many suicidal attempts.

**Case 3;** A 51 years old female patient, who has been divorced 25 years ago and living with her sister. She was admitted to psychiatric ward with agitation, increase in speech, having auditory hallucinations. She was raped by 7 people 36 years ago, 2 years before onset of her disease. She had been admitted to psychiatry ward for 6 times.

**Case 4;** A 30 years old female, married for 9 years was admitted to psychiatry ward, diagnosed as depression with psychotic features. She has been suffering from auditory hallucinations for a week accompanying depressive symptoms. She was abused by her father and grandfather, when she was 7. The onset of her disease was recognized 5 years after the incident, since when she attempted suicide and had been admitted to the hospital for 5 times.

To decide the level of the penalty intentioned for abuse and rape perpetrators according to Turkish Penal Code, victims are being sent to forensic psychiatry units in order to be evaluated for the psychiatric outcomes. The evaluations mentioned are being held almost during the 6 months after the incident and the last psychiatric conclusion is made maximum 1 year after. However, we know that traumas especially that take place in the early years of human life might cause a major psychiatric disorder even after years.

The onset of the psychiatric diseases in all our four cases is years after abuse or rape histories; 6, 10, 2 and 5 years after. None of them has a psychiatric evaluation or any intervention after their traumatic experiences. Rape and abuse victims have the risk to have many psychiatric diseases.

**Keywords:** sexual abuse, rape, psychiatric examination, onset of disease

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### [PP-187] *Obsessive compulsive disorder*

## Family functioning and the levels of depression and anxiety in patients with Obsessive compulsive disorder

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**Objective:** Obsessive compulsive disorder (OCD) is a chronic, distressing and disabling disorder that has negative effects on social and leisure activities, occupational, school and family settings. The aim of this study is to determine the family functioning and the levels of depression and anxiety in patients with OCD and compare them with healthy controls.

**Methods:** Forty consecutive patients OCD, who were admitted to the outpatient clinic, were recruited to participate in the study. The control group consisted of 40 healthy hospital employees and their relatives. OCD patients and control subjects were matched for sociodemographic characteristics. Psychiatric disorders were assessed by means of the Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) (SCID-I) in patients. The levels of depression, anxiety and family functioning were assessed with Hamilton Depression Rating Scale (HDRS), Hamilton Anxiety Rating Scale (HARS) and the family Assessment Device (FAD), respectively.

**Results:** Compared with the control group, OCD patients had significantly higher anxiety and depression scores and more deterioration in problem solving, communication, affective responsiveness, behavior control, affective involvement, family roles and general functions scores.

**Conclusions:** Our study provides evidence that there was a deterioration in family functions in patients with OCD. Therefore, approaches targeting family functions may be beneficial in the treatment of these patients.

**Keywords:** anxiety, depression, family functioning, Obsessive compulsive disorder

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S203**

**[PP-188] Schizophrenia and other psychotic disorders****Isoniazid induced psychosis: a case report**

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Tuberculosis is a leading cause of mortality worldwide due to infection diseases. Isoniazid is the first line drug therapy for prophylaxis and treatment of tuberculosis. Isoniazid may cause neurologic side effects including peripheral neuropathy, convulsions and ataxia and psychiatric side effects including euphoria and psychosis. We report here a case with acute psychotic symptoms in the course of prophylactic isoniazide treatment.

A 53-year-old woman referred to outpatient clinic and hospitalized with persecution and reference delusions and agitation. She did not have a psychiatric history except some short-term conversion symptoms seen especially in stressful conditions. In addition, she had no history of systematic disease and substance use. Her husband was diagnosed pulmonary tuberculosis 3 months ago and isoniazide 150 mg/day treatment was started as prophylaxis to the patient. In the tenth week of isoniazide therapy, she was anxious and had some preoccupations about her husband's disease. She was referred to a psychiatrist for her anxiety and negative thoughts and sertraline and hydroxyzine was prescribed. She experienced tremor after first use of these medications, and denied to use anymore because the thoughts of poisoning by her son and daughter-in-law. In her mental status examination, reference and persecution delusions and agitation were observed. MMSE score was 26. Isoniazide was discontinued and risperidone 2 mg/day treatment was given. Her symptoms resolved completely within a week. In her outpatient follow up visits, no psychotic symptoms were observed during 11 months.

In the evaluation of patients with acute psychotic symptoms, some characteristics may suggest psychosis caused by medical conditions: late onset (>40), co-occurring systematic diseases and medication use, lack of negative symptoms and cognitive deficits. Neuropsychiatric symptoms related to isoniazide can develop days or months after initiation of isoniazide treatment. If psychotic symptoms are thought to be related to isoniazide, it should be discontinued. In some cases, it was reported that psychotic symptoms were relapsed after reintroduction of isoniazide and it may be more severe. Atypical antipsychotics were reported to be effective in the treatment of isoniazide induced psychotic symptoms.

**Keywords:** isoniazide, antituberculosis therapy, psychosis

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S204**

**[PP-189] Sleep disorders****A near hanging case with dissociative disorder presenting with parasomnia**Selcen Dogru Kosker<sup>1</sup>, Esra Aydin Sunbul<sup>1</sup>, Hayal Ergin Toktas<sup>2</sup>, Fusun Mayda Domac<sup>2</sup>

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The role of traumatic events in childhood has been reported in the etiology of both dissociative disorders and sleep disorders. The association between dissociative disorders and sleep disorders such as parasomnia has been mentioned in some studies. Dissociative disorder is seen in 41.6 percent of patients, who have non-REM parasomnia. Sleepwalking is a parasomnia that is characterized by sudden arousals from deep sleep and this arousal is associated with motor activity, which may be elaborate and purposive. It has been suggested that, in some cases, sleepwalking may be understood as a motoric reenactment of a repressed traumatic experience. Here we present a patient diagnosed with a dissociative disorder presenting with parasomnia.

A 37-year old female patient was presented to psychiatric emergency service with near hanging while she did not remember that suicide attempt. It was reported that patients' complaints had begun after her sister death with hanging. She had found her sisters' death body and twenty days later her complaints had begun. Sleepwalking-like symptoms were described as follows: she would get up and walk in her sleep, generally after 60-90 minutes of sleep, and would often leave the house in her nightclothes. She was absent minded at times, did not hear anything that was said to her. Finally, she attempted to suicide with hanging in one of the nights and she was amnesic along the whole period.

Psychiatric examination showed the presence of anxiety and dissociative amnesic processes. Based on the SCID-D (Structured Clinical Interview for DSM-IV Dissociative Disorders), she was diagnosed as not other specified (NOS) dissociative disorder. Her Hamilton Depression Rating Scale was 10, Hamilton Anxiety Rating Scale was 18 and Epworth Sleepiness Scale and Sleep Index Score were 4. Video-polysomnography (V-PSG) was performed one night. During sleep, epileptic activity and motor movement disorder were not observed. We would suggest that in certain traumatized patients dissociative mechanisms might come into play within the attack as part of their response to the intense arousal from slow wave sleep associated with distress and/or behaviors normally kept in check. Primitive sensorial restriction is necessary for the protection of individual's wakeful awareness. During such episodes, the individual may be considered to be awake rather than asleep, but no more fully conscious of themselves than the daytime wakeful individual with an alleged dissociative mechanism operating to produce amnesia.

In our case, the sleep pattern was coherent with dissociation while we cannot eliminate the diagnosis of parasomnia with one night V-PSG application. We need further researches to reveal the relationship between sleep and dissociative disorders.

**Keywords:** dissociative disorder, parasomnia, sleep disorder

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### [PP-190] *Psychopharmacology*

## Haloperidol-induced cardiopulmonary arrest: a case report

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Haloperidol is an antipsychotic, which is widely used in emergency and psychiatry units. Sometimes, it is encountered some serious complications associated with haloperidol use, particularly haloperidol induced cardiac ones. In literature, life-threatening arrhythmias have been reported as case reports. Here, we report a case that had haloperidol-induced cardiopulmonary arrest.

**Keywords:** haloperidol, cardiopulmonary arrest, side effect

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S205**

### [PP-191] *Epidemiology*

## Clinical and demographic characteristics of 0-3-year patients admitted to a university hospital outpatient clinic

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**Objectives:** In the very young children period (0-3), mental health studies have been growing in the past decade. Many publications in the literature of this period focused on neurodevelopmental disorders, such as autism, mental retardation. However, in this period, emotional and behavioral problems that significantly disrupt the harmony of family and child have been reported. It is estimated that 10–15% of the very young children have social–emotional or behavioral problems. Nevertheless, less than 8% of these children are admitted to mental health centers. In this study, we aimed to investigate our knowledge of the socio-demographic characteristics, presenting complaint and diagnostic evaluation of patients who admitted to 0-3 year clinic of ours outpatient department.

**Method:** Files of patients, who admitted to 0-3 outpatient clinic were evaluated, retrospectively.

**Results:** It has been found that 320 people admitted to our clinic to get help, 190 of these patients have attended their clinical evaluation. The mean age of the children was identified as 26 months, while the average maternal age was 26, and the average paternal age was found to be 35. In the group, we reached the detailed information, distribution of educational status of mothers has been observed as; 35% of primary school, 31% high school, 17% of middle school and 13% university graduates. Distribution of educational status of fathers has been observed as 34% of primary school, 30% of high school, 20% of university and 13% of mid-school. The most common complaints

observed was the speech delay. In addition, inappropriate eye contact, no reaction to his/her name and emotional-behavioral problems were other complaints.

**Conclusions:** When closely examined, the patient profile of our 0-3-year outpatient clinic, neurodevelopmental problems were observed to be the most common complaints. Striking findings were observed that the family, who has the diagnosis of neurodevelopmental regulatory problems, did not attend the follow-ups whereas the others, who have behavioral problems and get drug treatment, continued their examination.

**Keywords:** epidemiology, early childhood, psychiatry

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### [PP-192] *Psychosomatic medicine - liaison psychiatry*

## Self-esteem in patients with ankylosing spondylitis

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**Objective:** Ankylosing spondylitis (AS), which has an unknown etiology, is an inflammatory disorder, characterized by inflammation of the spinal joints and adjacent structures.

**Methods:** In this study, 60 patients from the department of physical therapy and rehabilitation with the diagnosis of AS, who were under treatment and follow-up and 50 healthy volunteers, who matched for age and gender were taken. Beck Depression Inventory (BDI), Rosenberg Self-Esteem Scale (RSES), Beck Anxiety Inventory (BAI) and Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) were performed to both patients and control group. Psychiatric disorders were determined using the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I).

**Results:** Compared to the control group, the anxiety and depression scores were higher and self-esteem scores were significantly lower in the patient group ( $p < 0.05$ ).

Like all the other inflammatory chronic diseases, depression and anxiety are commonly seen in AS patients.

**Conclusion:** Self-esteem of these patients should be considered carefully. More studies are needed on this regard.

**Keywords:** ankylosing spondylitis, self-esteem

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### [PP-193] *Autism*

## Sibling homicide by an 8-year-old girl with autism spectrum disorder

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This case report present an 8 years-old girl with a diagnosis of Autism Spectrum Disorder (ASD), who killed her 9-months-old brother by throwing him out of a window. Children with ASD exhibit various externalizing behaviors including harming others. A combination of poor emotion regulation and impaired understanding of others' emotions is associated with aggressive behavior in children with ASD. Her aggressive-impulsive behavior had increased during the last 1 year. Here, we discuss clinical picture and possible risk factors leading to violent behavior in this subject.

**Keywords:** autism, homicide, aggression

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S206**

**[PP-194] Psychopharmacology****Peripheral edema related to paroxetine discontinuation: a case report**

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Paroxetine is a selective serotonin reuptake inhibitor (SSRI), with antidepressant and anxiolytic characteristics. It can be frequently observed some side effects, associated with paroxetine cessation such as dizziness, vertigo, nausea, vomiting, anxiety, insomnia and irritability. Paroxetine induced peripheral edema has been reported. However, there has been no report on peripheral edema related to paroxetine cessation. Here, we report a case, which developed peripheral edema related to paroxetine discontinuation and whose peripheral edema was disappeared after beginning of the paroxetine treatment.

**Keywords:** paroxetine, peripheral edema, side effect

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S207**

**[PP-195] Anxiety disorders****Health anxiety and quality of life in living kidney donors**Murat Mutlu<sup>1</sup>, Halil Ozcan<sup>1</sup>, Erol Ozan<sup>2</sup>, Mustafa Keles<sup>3</sup>

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**Objective:** Kidney transplantation is the most effective treatment of end-stage renal failure. The first successful kidney transplantation was performed in 1958 in USA. Now there are many transplantation centers in the world today. Kidney transplantations from the cadavers are not enough to satisfy the need. Live organ donors are seen as the most important sources nowadays. We aim to indicate health anxiety levels and quality of life of living kidney donors, who were applied unilateral nephrectomy. Determining health anxiety levels and quality of life of the donors and providing psychological support if needed may increase the adaptation of donors to their daily life.

**Methods:** Thirty donors were applied unilateral nephrectomy in Ataturk University Medical Faculty Hospital and participated to the study. Sociodemographic data of the donors were recorded. Short-form -36 (SF-36) was used to evaluate quality of life of the donors and scores were compared with standardized scores for Turkish community. Health Anxiety Inventory-Short Form was used to evaluate health anxiety levels of donors and healthy volunteers and results were compared within groups. In the data analysis, IBM SPSS (V.21) was used. The normality of data was checked with Shapiro Wilk Test. Independent two types of t-tests were used for the analysis of data, which were normal. Chi-square analysis is used for the categorical analysis of data. Statistical significance level was accepted as  $p < 0.05$  for all evaluations.

**Results:** The average scores of physical function, physical role, social function, pain, emotional role of the donors were lower than the norm values Turkish community standard. There was no statistically significant difference between the donors in terms of general health, vitality, mental health and Turkish community standard outcomes. Health anxiety levels of the donors were found to be higher than healthy volunteers.

**Conclusion:** Our study shows that quality of life of the donors was generally lower than Turkish Community Standard values, and health anxiety levels of the donors were also higher compared with healthy volunteers. Therefore, providing social and psychiatric supports to the donors before and after the transplantation, and to find out the factors, which increases quality of life of the donors, in the future studies might help donors to live a more comfortable life after transplantation. This can also raise the number of people, who are planning kidney donation.

**Keywords:** donor, transplantation, anxiety, quality of life

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S207**

**[PP-196] Psychopharmacology****The improvement effect of duloxetine on a resistant tinnitus**Arif Demirdas<sup>1</sup>, Mehmet Akgonol<sup>1</sup>, Giray Aynali<sup>2</sup>, Kadir Demirci<sup>1</sup>, Inci Meltem Atay<sup>1</sup>, Abdullah Akpınar<sup>1</sup>, Fatih Unal<sup>3</sup><sup>1</sup>Suleyman Demirel University, Faculty of Medicine, Department of Psychiatry, Isparta-Turkey<sup>2</sup>Suleyman Demirel University, Faculty of Medicine, Department of Otolaryngology, Isparta-Turkey<sup>3</sup>Gazi Mustafa Kemal State Hospital, Department of Otolaryngology, Ankara

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Tinnitus is defined as the perceived sensation of sound without an external acoustic stimulus. Tinnitus sensations are usually of an unformed acoustic nature such as a hissing, ringing, whistling, or buzzing. It is not a disorder and it is a symptom with an incidence increasing with age. Although objective tinnitus has multiple possible causes such as (auto toxicity, vascular changes, cerumen, auto sclerosis, otitis media, palatal myoclonus, vestibular schwannoma and other intracranial pathologies etc.), the reasons for subjective tinnitus cannot be detected.

Tinnitus is a potentially distressing condition with a wide range of symptoms that can place a huge burden on patients and substantially impair quality of life. It's well known that up to 70% of tinnitus sufferers might present psychiatric comorbidities. Management of tinnitus includes counseling, cognitive behavioral therapy, sound therapy, hearing aids, cochlear implants, pharmacotherapy, and brain stimulation. Although there is no drug yet been approved by the international agencies (FDA etc.) for the treatment of tinnitus, some drugs are widely used all over the world such as betahistine, trimetazidine, ginkgo biloba, gabapentin and cinnarizin. In addition, some antidepressant and anxiolytic agents can also be used in patients with psychiatric comorbid conditions. We present the improvement effect of duloxetine in a 62-year-old female patient with nonpulsatile, subjective, and non-healing tinnitus with betahistine, trimetazidine, gabapentin treatment.

**Keywords:** tinnitus, duloxetine, management**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S208****[PP-197] Autism****Is autistic disorder a curable neurodevelopmental disorder? a case report**

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The pervasive developmental disorders (PDDs) are neuropsychiatric disorders characterized by specific delays and deviance in social, communicative development and stereotypic behaviors. Autistic disorder is one of five PDDs classified in DSM-IV. The prognostic factors are early diagnosis, IQ level, presence of joint attention, spontaneous speech in 5 years old and early started, well-structured special education programs. We will present an autistic case diagnosed early and started special education in 24 months. He is now 5.5 years old and none of the symptoms of PDD was determined in last psychiatric evaluation done before a month.

A 5.5-year-old boy was first applied to our policlinic, when he was 24 months by absence of speech, absence of response to his mother's stimulus and absence of looking when his name is called. His mother recognized that he did not make eye contact while breastfeeding. In first psychiatric evaluation, it was examined that he did not speak, had no eye contact, and did not look when called with his name. Stereotypic behaviors like shaking and turning around own axis were observed. The diagnosis was made as autistic disorder. Psycho-education about diagnosis and treatment process was given. Parents participated the treatment process actively after establishment of autism diagnosis. Besides the two hours of special education in a week, parents took care of their son for three hours every day. In tenth month of education, he started to take speech therapy in addition to present special education. Besides these therapies, he began to attend to kindergarten. He verbalized his first speech words in eighteen months of treatment and two months after this, he started to use two words sentences. He also started to make eye contact and to cuddle his parents. Parents did not mention to the last kindergarten about their son's diagnosis. In preschool development report, our case was defined as "willing to classroom activities, successful in explaining his feelings, chosen as a play friend by his classmates". In last psychiatric evaluation done last month it was observed that he could use 6-7 words sentences, could understand and perform directions, could imitate his friends and parents, give proper responses

to verbal and nonverbal stimulus. He did not have stereotypic behaviors. He is currently attending to kindergarten and does not have adaptation problems and nobody in kindergarten recognized that he was autistic.

Early diagnosis, timely started, well-structured special education programs and parents' support are important for favorable prognosis. The parents were in accordance and collaboration with treatment team in particular of behavior alteration homework. Favorable prognostic criteria for this case are early diagnosis in 24 months age, early and qualified special education, adequate parent support. Although presence of these prognostic factors, many autistic children don't improve in social and communication skills as reported in this case report. Good prognosis and absence of any autistic trait in last psychiatric examination is thought to be important for both the parents of autistic children's and treatment teams. It's accepted that autistic disorder isn't a curable neuropsychiatric disorder but some cases may have normal functionality in most domains of daily life.

**Keywords:** autism, early diagnosis, prognosis

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### [PP-198] *Others*

## Temperament characteristics of outpatients with suicide intervention

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**Objective:** In the present study, our aim was to examine the temperament characteristics of the patients with suicide.

**Methods:** Totally fifty patients, who applied to the emergency unit were included into the study. An age and gender matching control group was composed. SCID-I and TEMPS-A were administrated both groups.

**Results:** Of the patients, 30 (%60) were females while 20 (%40) were males. The mean age was 28.7 9.8 years and 64% of those was single. The mean scores of the patients on the items of depressive, cyclothymic, irritability and anxiety were higher than those of healthy controls. Of the patients, 28 (%69), had dominant several temperament characters. Nineteen patients (38%) had depressive temperament while, 12 (24%) had anxious temperament, 8 (16%) had cyclothymic temperament, 3 (6%) exhibited irritable temperament.

**Conclusion:** The present study suggests that some temperament characteristics might be associated with suicidal behavior.

**Keywords:** emergency, suicide intervention, temperament

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### [PP-199] *Schizophrenia and other psychotic disorders*

## Negativism associated globe vesicale

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Negativism is roughly known as a tendency to resist external commands, suggestions, or expectations, or internal stimuli, as hunger, by doing nothing or something contrary or unrelated to the stimulus. Patient may keep the food in his or her mouth and resist eating or may not answer any question asked and speak after the examination. Negativism is mostly associated with catatonia.(2) Here we describe a case of negativism associated globe vesicale without catatonia.

A 37-year-old female patient with 10 weeks of gestation attended to our clinic with her husband. She was refusing to talk so psychiatric history was acquired from her husband. According to him, she had a seven years history of psychosis and she had been on olanzapine treatment during last year before her referral until she learned she was pregnant 6 weeks ago. During the last ten days, patient was not speaking, eating, drinking or sleeping so she had been hospitalized to our psychiatry clinic. On physical examination, her abdomen

seemed to be bigger than expected for a gestation of ten weeks. On clinical observation, her refusal for going to toilet was realized and a gynecological consultation was requested. In abdominal ultrasound, her urinary bladder volume was nearly 1500 cc and compressing on uterus. Due to patient's resistance to urinate, a urinary catheter was placed and globe vesicale was resolved. Electroconvulsive therapy (ECT) was planned for her psychotic symptoms. After 7 sessions of ECT, she was discharged from the hospital with full recovery. Pulmonary complications like pulmonary embolism, pneumonia and aspiration; gastrointestinal complications like constipation due to decreased food intake and dehydration; dental complications due to decreased oral hygiene; genitourinary complications like urinary retention or urinary incontinence or infections; flexion contractures, postural nerve palsies and rhabdomyolysis due to immobilization can be seen in catatonia. Globe vesicale was associated with catatonia in literature but in our case, globe vesicale is associated with negativism without catatonia. Caution should be given to negativist pregnant woman because globe vesicale could be concealed by pregnancy.

**Keywords:** negativism, globe vesicale, pregnancy

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S209-S10**

### [PP-200] Others

## Habitual caffeine use in psychiatric patients: relationship with sleep quality and symptom severity

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**Objective:** The purpose of this study was to investigate the patterns of caffeine use and the one-month prevalence of caffeine intoxication among psychiatric patients in comparison with healthy controls. We also aimed to examine the association of caffeine consumption and the severity of the disorder and sleep quality in these patients.

**Methods:** Four hundred and one patients with various psychiatric disorders and 150 healthy controls were screened for current (one month) caffeine intoxication according to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. All participants were asked to complete Pittsburgh Sleep Quality Index (PSQI). The patients were also assessed with the Clinical Global Impression Scale (CGI) to determine symptom severity.

**Results:** The amount of daily caffeine consumption was statistically significantly higher in healthy control subjects than in patients ( $p < 0.05$ ). However, the prevalence of caffeine intoxication was greater among patients with a psychiatric disorder (8%) when compared with healthy controls (2.7%) ( $p < 0.05$ ). In the patients, the amount of caffeine consumption correlated positively with age ( $r = 0.122$ ,  $p = 0.015$ ), CGI ( $r = 0.166$ ,  $p = 0.001$ ), and PSQI ( $r = 0.158$ ,  $p = 0.002$ ) scores, indicating that patients with older age, poorer sleep quality, and more severe pathology consumed higher amounts of caffeine.

**Conclusions:** Caffeine intoxication was more prevalent in psychiatric patients than in healthy subjects. The amount of caffeine intake was shown to be associated positively with the severity of pathology and inversely with sleep quality. Further studies are needed to investigate the effect of regulating caffeine consumption on severity of pathology and sleep quality among psychiatric patients.

**Keywords:** caffeine intoxication, psychiatric patients, prevalence, sleep quality.

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**[PP-201] Mood disorders****Sexual functions and prolactin levels in patients with bipolar disorder: a preliminary study**

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**Objective:** Mood stabilizers and antipsychotic drugs are known to have adverse effects on sexual function. However, patients often refrain from speaking about sexual complaints that may be the cause of dose reduction and discontinuation of the drug without medical supervision. In this study we aimed to evaluate sexual functions of patients with bipolar disorder in remission period, considering prolactin levels and drug medications

**Methods:** We recruited 36 patients with bipolar disorder in remission according to DSM-IV diagnostic criteria. Prolactin and mood stabilizer levels were measured in all patients. Hamilton Depression Scale, Young Mania Rating Scale were used to assess if the patients within the study were in remissions and The Golombok Rust Inventory of Sexual Satisfaction (GRISS) was used to assess sexual dysfunction.

**Results:** 55.6% of patients were male (n: 16) and 44.4% was female (n:20). The mean age of patients was  $32.84 \pm 12.68$ . Prolactin levels were  $23.34 \pm 4.25$  and  $24.46 \pm 5.52$  respectively for females and males. Patients taking mood stabilizer (MS) and mood stabilizer plus antipsychotic (AP) treatment had different prolactin levels ( $15.17 \pm$  in MS treatment group and  $25.64 \pm 3.91$  in MS+AP treatment group,  $p=0.244$ ). Total GRISS scores were not different for MS and MS+AP treatment groups. We did not find an association between Total GRISS scores and prolactin levels. (Total GRISS scores:  $79.16 \pm 3.13$  in MS taking group and  $73.96 \pm 2.93$  in MS+AP treatment group,  $p=0,244$ ) As this is a preliminary study, the influence of sample size and difference on results was not statistically meaningful.

**Conclusion:** In our sample, patients with bipolar disorder in remission have moderate sexual dysfunction. Our results suggest that prolactin levels were not sufficient to demonstrate the sexual dysfunction. To enhance patient compliance it is necessary to focus more on sexual symptoms of patients receiving MS and AP treatment and to explore sexual dysfunction in detail.

**Keywords:** bipolar disorder, sexual dysfunction, prolactin levels

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**[PP-202] Epidemiology****Frequency and severity of symptoms of premenstrual syndrome and their correlation with depression and anxiety symptoms among university students in Istanbul**

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**Objective:** Premenstrual syndrome is a common problem in young girls. The objective of this study was to explore the frequency and severity of premenstrual syndrome symptoms and their correlation with depression and anxiety symptoms in university students.

**Methods:** Using a self-report questionnaire, we surveyed all eligible female students (n=252) enrolled in the psychology programs at a university in Istanbul. Subjects were asked about the frequency of symptoms during the previous six months. The instruments included personal information and Premenstrual Assessment form. Beck Depression Inventory and Beck Anxiety Inventory were used to investigate the depression and anxiety symptoms. Student's t-test and repeated measurement analysis of variance were used for statistical analysis.

**Results:** Mean age of participants in this study was  $20.3 \pm 1.9$  years. Mild, moderate and severe premenstrual symptoms were experienced by 65.1%, 25% and 9.9% of the subjects, respectively. Premenstrual symptom severity was significantly positively correlated with Beck Depression Inventory and Beck Anxiety Inventory scores.

**Conclusions:** Premenstrual syndrome is associated with physical, psychological, or behavioral changes and interferes with interpersonal relationships, educational performance and emotional well-being. The findings showed that majority of 18-30 aged women have

premenstrual syndrome symptoms. Strategies such as nutritional consulting or exercise programs should be adopted for management of premenstrual syndrome in university students.

**Keywords:** anxiety, depression, premenstrual syndrome

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**[PP-203] Others**

## Vitamin B12 and folic acid levels of psychiatric disorders

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**Objective:** Cognitive dysfunction is in a relationship with group of vitamin B and folate deficiency. Metabolism of myelin, membrane phospholipids and neurotransmitters defects could be seen in vitamin B and folate deficiency. So cognitive dysfunctions are common in some deficiencies especially the patients diagnosed with psychiatric disorders. The aim of this study was to investigate the associations between folate and vitamin B12 levels and psychiatric disorders.

**Method:** Vitamin B12 and folic acid levels of psychiatry and neurology patients were measured and recorded during one year. First-last name, age-sex, first B12 level measured within a year, values of folic acid and homocysteine were introduced to database of SPSS 11.0. T-test was used to compare the psychiatry and neurology groups, whereas Pearson correlation test was used to correlate the variables of age and vitamin B12, folic acid, homocysteine.

**Results:** In all group, vitamin B12 is positively correlated with folic acid. Homocysteine is negatively correlated with both B12 and folic acid. There are no differences between averages of vitamin B12 and homocysteine for psychiatry and neurology patients. However, folic acid levels for the psychiatry patients are lower than that of the neurology patients ( $p=0.009$ ).

**Conclusion:** B12 values obtained from a large patient population in one-year period revealed that it is possible that vitamin B12 values shift to the left, whereas positive correlation with age could be associated with nutritional factors in young patients. In addition, this finding should be investigated in the normal population. B12 and folic acid metabolism damage in males than females is consistent with the literature. Folic acid levels in psychiatric patients that have been found to be lower than that of neurological patients might be related to the patho-physiology of psychiatric disorders. However, further evaluation based on diagnosis in psychiatric disorders is needed. Homocysteine levels in patients with low vitamin B12 are important for patient follow-up. Also B12 and folic acid supplementation in psychiatric patients may be a safe method of augmenting.

**Keywords:** vitamin B12 deficiency, folate deficiency, psychiatric disorders, vitamin B12 and folic acid levels.

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**[PP-204] Posttraumatic stress disorder**

## Clinical and socio-demographic characteristics of adolescents with dissociative disorders

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**Objective:** The aim of this study was to define the characteristics of the adolescents with dissociative disorders (DD) and their families, including the presenting symptoms, exposure to trauma, experience of suicide and self-harm and socio-demographic features.

**Methods:** Forty-three patients (38 girls and 5 boys, aged between the ages of 12 and 18 years) participated in the study. All of them were

being followed up at the outpatient clinic for at least 6 months and diagnosed with DD according to the DSM-IV criteria. Their parents filled in a questionnaire, generated by the authors, about the socio-demographic characteristics, trauma experiences, attempted suicide and self-mutilation. Adolescent Dissociative Experiences Scale (ADES) and Posttraumatic Stress Reaction Index (PSRI) were also performed and the relationship between these data was investigated.

**Results:** The mean age at the first assessment was  $13.9 \pm 2.4$  years and the mean age at the time of diagnosis of DD was  $15.9 \pm 1.8$  years. The presented symptoms in the first assessment were as follows in order of frequency: attention problems (n=8), conversion symptoms (n=7), dissociative symptoms such as depersonalization, derealization, amnesia and fugue (n=7), anxiety symptoms (n=6), suicide attempts (n=4), hearing voices (n=4), depressive symptoms (n=2), behavior problems (n=2), homicidal and suicidal thoughts (n=1) and tics (n=1). One of the patients was referred for the legal consultation (n=1). About half of the parents (48.8%) described their marriage as quarrelsome and 11.6% of them were divorced. Psychiatric history was higher in the mothers than fathers were (32.6% vs. 20.9%,  $p=0.04$ ). The mean ADES score was  $163.9 \pm 61.7$  (between 61 and 296). No statistically significant relationship was found between ADES scores and age of patients, level of parental education, socio-economic status and the type of trauma. All of the patients reported a history of abuse and the mean score of the PSRI was  $53.4 \pm 14.7$  (between 24 and 80). The types of trauma, in order of frequency were emotional abuse (n=30, 69.8%), physical abuse (n=27, 62.8%), neglect (n=25, 58.1%), sexual abuse (n=25, 46.5%). Thirty-one (72.1%) patients described multiple trauma and 7 (16.3%) reported incest. The ADES score showed significant correlation with the PSRI ( $p=0.002$ ,  $r=0.46$ ). Suicide attempts (n=27, 62.8%) and self-mutilation (n=38, 88.4%) were very frequent in these patients.

**Conclusion:** Dissociative disorders are usually under-diagnosed and the symptoms are overshadowed by other psychiatric disorders. Our patients could be diagnosed with DD after a mean delay time of two years. All of the patients described exposure to trauma, and emotional trauma was the most frequent one consistent with the literature. Physical and sexual traumas were also very common. Thus, questioning the trauma, including sexual and physical trauma, should be an essential part of the psychiatric assessment in order to prevent late diagnosis and the consequences of it.

**Keywords:** dissociative disorders, trauma, adolescents

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### [PP-205] *Obsessive compulsive disorder*

## Cyproheptadine induced obsessive compulsive symptoms in a preschool girl

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Cyproheptadine is a first-generation antihistaminic with additional anticholinergic, antiserotonergic properties indicated for treatment of rhinitis, conjunctivitis, and urticaria and has been reported as a treatment for serotonin syndrome. Cyproheptadine is also beneficial in migraine prophylaxis and as an appetite stimulant. Adverse reactions to cyproheptadine include sedation, confusion, hallucinations, convulsions, hypotension, palpitations, and tachycardia. There have been published reports of delirium and central anticholinergic syndrome related with cyproheptadine. However, according to our knowledge, there is no report of cyproheptadine induced obsessive compulsive symptoms in children. We present a 6 years old girl, who developed disturbing sexual and religious obsessions and compulsion of asking the same questions many times while taking cyproheptadine 4 mg/day for a week that was started by family physician to improve her appetite. She had a history of generalized anxiety disorder, and a family history of panic disorder and Obsessive compulsive disorder. Her complaints gradually resolved within 2 weeks after discontinuation of cyproheptadine.

**Keywords:** cyproheptadine, obsessive compulsive disorder, adverse effects

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**[PP-206] Impulse control disorders****Self mutilation responding to colchicine treatment in an adolescent with familial Mediterranean fever**

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Familial Mediterranean fever (FMF) is an autosomal recessive auto-inflammatory disease characterized by recurrent episodes of fever and polyserositis. Here we present a 17 years old adolescent boy presented with self-cutting who was eventually diagnosed with FMF and his self-cutting was treated with colchicine successfully. He had been treated with carbamazepine 400 mg/day, paroxetine 40 mg/day, risperidone 2 mg/day and biperidene 2 mg/day in for 6 months for his self-cutting behavior. However, because no improvement was observed in self-cutting, he was referred to Istanbul Medical Faculty Child and Adolescent Psychiatry Department. He was complaining of "unbearable headaches" and he claimed that he was cutting himself to relieve his pain. His headaches had a periodic pattern and he had fever in these periods. He denied having joint or stomach pain during these episodes. He was referred to pediatric department and was diagnosed with FMF. He was started colchicine treatment and his self-cutting behavior disappeared within a few weeks. His psychotropic medications gradually discontinued. He continued colchicine treatment for six months and no self-cutting observed during this time. After six months, he discontinued his colchicine despite his pediatrician's suggestion to continue medication. After discontinuation of colchicine, self-cutting reemerged. He was advised to restart his colchicine and self-cutting disappeared again after starting colchicine.

**Keywords:** familial mediterranean fever, self mutilation**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S214****[PP-207] Psychopharmacology****Adolescent pregnancy and antidepressant in pregnancy: literature overview on a case**

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Adolescent period is a transition from childhood to adulthood by biological, psychological and social changes; The World Health Organization (WHO) suggests that adolescence occurs between 10-19 years of age. Sixteen million girls between the age of 15-19 and two million girls under the age of 15 give birth worldwide every year. Nowadays, one of every five girls and in underdeveloped areas, one of every three girls gives birth under the age of 18.

A 15 years old girl was referred to us by judicial authorities. In the anamnesis, we noted that the patient went to her boyfriend's house 3-4 months ago, after he told her "come to our house, my sister is here also", when the patient saw that there was nobody in the house. She got disturbed and wanted to leave but the boyfriend did not let her go, calmed her down saying "do not worry, I will not do anything". He brought a beverage to drink; she did not remember what happened after drinking it. When she regained consciousness, she was lying together with her boyfriend, she felt so bad and the boyfriend deceived her with false marriage promise. The patient found out that she was pregnant before coming to our polyclinic, when we asked her opinion about the coming child; the patient said, "she absolutely did not want to have an abortion, the child kept her hold on to life".

In the mental status examination, it was noted that she felt so unhappy, regret, she could not sleep at night, could not eat properly, wanted to die but would not do it because of her baby, that the incident kept coming to her mind. The patient had dysphoric affect, and depressive thoughts were dominant in her thought content. Major depression diagnosis was considered in this patient.

Drug use in pregnancy, although it is generally a concern of adult psychiatry has become a common condition in child and adolescent psychiatry along with the decrease in age at first sexual intercourse. According to Turkish Penal Code article 99, it is possible to terminate the pregnancy until the 20<sup>th</sup> week in pregnancies resulting from sexual abuse.

It is recommended that non-pharmacological treatments should be tried first in treatment of mild and moderate depression in pregnancy.

Regarding patients with more severe depression, psychotherapy alone may not be enough, therefore adding an antidepressant agent to the treatment may be necessary.

Antidepressant use in pregnancy has been shown to increase in recent years. In one study, it was shown that antidepressant drug use increased approximately fourfold between 1996-2005 and antidepressants were prescribed to 8% of pregnant women between 2004-2005. Our case was presented to draw attention to this topic, because adolescent pregnancies have become more common, it is thought that the number of adolescent pregnancies would keep increasing and in addition, use of drugs in pregnancy and studies on this subject have increased.

**Keywords:** pregnancy, adolescent, drug

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### [PP-208] *Psychopharmacology*

## Medication and treatment in case of exposure to sexual abuse: a preliminary study

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**Objective:** Criminal cases involving children and adolescents have been increasing. Therefore, physicians working in the field of children's mental health require more information and experience on the judicial aspect of the cases and professional practice. There is not an education specialized in forensic child and adolescent psychiatry in addition to child and adolescent psychiatry in our country and around the world. Therefore, criminal cases involving children and adolescents have been referred to child psychiatry policlinics for expert review. Besides preparing reports, patients with psychopathology have been also treated and followed in the child psychiatry policlinics. Trauma-associated disorders (posttraumatic stress disorder, acute stress disorder, and adjustment disorder) and affective disorders have shown to be the most common disorders in sexually abused children. Therapy methods such as trauma-focused psychotherapy, psychoeducation, game therapy, psychodynamic psychotherapy are commonly used methods. However, in cases of patient non-compliance, unresponsiveness to treatment or severe impairment, initiation of drug therapy may be considered. In our study, sociodemographic status, medication and response to treatment of the victims of child sexual abuse were evaluated.

**Methods:** 114 patients with no sexual abuse history, no mental retardation determined in the examination and no medication history due to any psychopathology were enrolled in the study and were asked "whether they had deterioration of mental health because of sexual abuse".

In evaluation of the initial diagnosis of the patients, 54 (47.4%) had no psychopathology, 24 had (21.1%) acute stress reaction, 23 (20.2%) had adjustment disorder, 8 (7%) had post traumatic stress disorder (PTSD), 3 (2.6%) had depression, 2 (1.8%) had impulsive suicide attempt diagnosis. After the first evaluation, in 91 patients (79,8%) no drug therapy has been initiated, whereas in 23 patients (20.2%) drug therapy has been initiated. However, of 23 patients who had drug therapy initiated, 12 (52.2%) did not continue their therapy, 10 (43,5%) continued to take medicine, 1(4.3%) continued the therapy intermittently. Considering the causes of discontinuation of medicine, of 12 patients 6 (50%) discontinued because they did not go to control visits, 5 (41.7%) because they did not want to take the medicine, 1 (8.3%) because of oversleeping side effect. Besides these patients, drug therapy was initiated in 9 patients at the 6<sup>th</sup> month.

**Conclusion:** Mental disorder and comorbid mental disorder rates were found to be high in abuse cases. Although a mental disease specific to abuse cases was not defined, it was determined that physical and sexual abuse increased the frequency of mental disorder. Most common mental disorders were determined as PTSD, major depressive disorder (MDD), mental retardation (MR) and attention deficit hyperactivity disorder (ADHD), respectively. PTSD treatment in children and adolescents include individual, family, group, behavioral, cognitive and psychopharmacological treatment approaches. In a study about fluoxetine in the treatment of children with PTSD, 92.2% of the patients had a little recovery, 3.8% had no changes in symptoms with the treatment and 3.8% had their symptoms worsened. In our study, fluoxetine has been a preferred drug among SSRIs.

**Keywords:** abuse, drug

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**[PP-209] Psychotherapies****Theory of mind in fibromyalgia patients: relations between attachment patterns and symbolization**

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**Objective:** The aim of this study is to evaluate fibromyalgia patients according to the theory of mind and study the relation between attachment and symbolization in those patients.

**Methods:** Forty-six patients diagnosed with fibromyalgia are taken into the study. During the same time span 48 individuals who did not have any psychiatric disease were picked as a control group. Fibromyalgia patients' group and the control group were both administered the following battery of tests: Reading The Mind In The Eyes, Dokuz Eylul Theory of Mind Scale, The psychometric evaluation of Experiences in Close Relationships-II, Beck Anxiety Scale, Beck Depression Scale, Rorschach Test. Fibromyalgia patients and control group were interviewed with the non-patient version of the SCID (SCID-NP) to exclude any axis I disorder.

**Results:** Dokuz Eylul Theory of Mind scale scores were found to be significantly different between the control group and the fibromyalgia patients. Fibromyalgia group had significantly lower scores on Dokuz Eylul Theory of Mind total scores, false belief, irony, metaphor and fauxpas subscores. Reading the Mind in the Eyes scores were not found to be significantly different between the control group and the fibromyalgia patients.

We looked into the link between ToM(theory of mind) abilities and symbolization abilities of fibromyalgia patients using Rorschach inkblot test. We noticed slight positive correlation in R (total number of responses), Ka (moving animal responses) and Reading The Mind In The Eyes total points which are all important predictors of abstract thinking, negative correlation was found for G (global number of responses), A% (ratio of animal responses), Akat (categorized animal responses) and Reading The Mind In The Eyes total points. A mid level positive correlation was found between Dokuz Eylul Theory of Mind total scores and H (human responses). Again mid-level positive correlation was found between Hkat (categorized human responses) and Reading the Mind in the Eyes.

When fibromyalgia patients were partitioned into two groups according to secure or insecure attachment no significant differences were found between those two groups. When the relation between anxiety and avoidance dimensions and ToM abilities in the patients was looked into, a significant negative correlation was found between Dokuz Eylul Theory of Mind total scores and avoidance dimension.

The relationship between attachment patterns and ToM abilities was measured using symbolization parameters as covariant. We found relation between Dokuz Eylul Theory of Mind total points and secure and avoidant attachment and even after we controlled for symbolization parameters H, K, Ka, Akat, Hkat this relationship kept.

**Conclusion:** Fibromyalgia patients were found to have lower ToM abilities compared to healthy controls. There is a relation between decrease in the symbolization abilities and ToM abilities. Attachment types are also related to ToM abilities. Those with insecure and avoidant attachment have worse ToM scores. The relation between ToM abilities and attachment is independent of symbolization abilities. It could be helpful to conduct a wider scale study with psychosomatic patient groups to further study ToM abilities. It is expected that mentalization-based psychotherapy might be beneficial for fibromyalgia patients.

**Keywords:** fibromyalgia, theory of mind, attachment, symbolization

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**[PP-210] Autism****Comorbidity in autism spectrum disorders: a sample of 258 cases**Koray Karabekiroglu<sup>1</sup>, Aytul Karabekiroglu<sup>2</sup>

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**Objective:** Autism spectrum disorders (ASD) are defined in terms of abnormalities in social and communication development in the presence of marked repetitive behavior and narrow interests. Patients with Asperger syndrome, as defined in the DSM IV, suffer from

autistic social dysfunction but without mental retardation or language delay. Pervasive developmental disorder-not otherwise specified (PDDNOS), is reserved for patients who are within the autistic spectrum but do not meet the threshold for any of the named disorders. Comorbid symptoms and disorders require considerable attention and become a focus for intervention and medical treatment. In this study, we aimed to investigate comorbid psychiatric disorders in a large sample of children and adolescents diagnosed with ASD.

**Methods:** In one-year period, all children and adolescents diagnosed with ASD (n:258) were included. All diagnostic interviews were made by the same child psychiatry specialist (first author). The sample is divided into three subgroups (Autism n:111, PDD-NOS n:125, Asperger n:22) and comorbidity rates were also assessed according to these subgroups and gender.

**Results:** The children were 16 months-18 year-old (Mean:  $6.3 \pm 3.9$  years), 90.3% were 12 years-old or younger, and 80.2% were boys. In the whole group, 74.4% (male:75.4%; female: 70.6%) (Autism: 75.7%, Asperger: 86.4%, PDD-NOS: 71.2%) had at least one comorbid psychiatric diagnosis (excluding mental retardation). Most common disorders were found to be Attention deficit hyperactivity disorder (ADHD) (56.2%), anxiety disorders (21.7%), mood disorders (8.1%), learning disorders (4.2%), and tic disorders (3.8%). While mood disorders were more in autism (14.4%) and Asperger (9.0%) groups, tic disorders (22.7%) and anxiety disorders (31.8%) were significantly more in Asperger group. All learning disorder and tic disorder cases were male. While anxiety disorders were more common in female ASD patients (27.4% vs. 20.2%), ADHD was more common in male patients (57.9% vs. 49.0%).

**Conclusion:** The results of this study reveal that most of the patients with ASD had comorbid psychiatric disorders and the rates differed between gender and ASD subtypes. In the previous comorbidity studies, nearly seventy percent of participants had at least one comorbid disorder and 40% had two or more. The most common diagnoses were anxiety disorder (41-45%), ADHD (28-31%), and oppositional defiant disorder (7-28%). Obsessive-compulsive disorder was more common in older children, and oppositional defiant disorder/ conduct disorder more prevalent in PDD-NOS.

**Keywords:** autism, asperger, comorbidity, pervasive developmental disorder

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### [PP-211] Others

## Does 'theory of mind' vary between people who prefer education in science and social? a comparison between students of fine art and medicine faculty

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**Objective:** The term 'Theory of Mind' (ToM) was first demonstrated by Premack and Woodruff (1978) and basically defined as the ability to make inferences about mental state. People's beliefs can be different from each other and they can act according to their beliefs. Comprehension of these differences is very important for successful social interaction and communication. ToM was tested for the first time in 1978 and has been evaluated in several studies in different ways. Reading the Mind in the Eyes Test (RMET) is one of the most commonly used tests for evaluating the ToM and emotion recognition skills. The theories, which has concerned women's high social awareness and empathy rates as well as the exhibition of lower performance in areas requiring systematization and men's high characteristics of autistic spectrum, also claim that the same situation can be valid for people who prefer science education along with social sciences. In this study, we aimed to test our hypothesis asserting that the scores of RMET is higher in students of fine art faculty than medicine and this difference may be related to gender.

**Method:** In our study, 38 students of the fine arts faculty and 41 students of medical school were enrolled on a voluntary basis. RMET was performed to participants (2) and scored from 0 to 32 according to correct answers. In addition, their faculties, gender, and age were evaluated. Student's t-test and Mann-Whitney U test were used for testing hypothesis. Significance was considered as  $p < 0.05$ .

**Results:** There were no difference between faculties as well as genders ( $p=0.689$ ,  $p=0.416$ , respectively). The most obvious difference was found between male and female students ( $p=0.071$ ) in the medical faculty.

**Discussion:** It is known that ToM could be disrupted at various levels in many psychiatric disorders especially in autistic spectrum disorders and schizophrenia. However, the effects of ToM on the quality of preferred education is poorly understood. There are various theories on this subject, and they are generally based on the evaluation of autistic spectrum features and the tests assessing ToM together. Although there are studies suggesting that the occurrence of the autistic spectrum disorders in families of engineering students was more than twice, when compared with control groups and autism in families of science students is also more than twice when compared with

social science students. There are no constant and consistent results about differences of ToM skills between education disciplines. In our study, we have not shown any significant difference between two groups who are educating science and social sciences. Studies on this topic with larger samples are needed.

**Keywords:** social sciences, science, theory of mind

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### [PP-212] Addictions and related disorders

## A case report of opioid dependence with transdermal fentanyl

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Fentanyl is a synthetic opioid agonist, which interacts primarily with the mu-opioid receptor. Fentanyl is approximately 75-100 times more potent than morphine in analgesic activity. These patches are designed to deliver fentanyl at a constant rate (25, 50, 75 and 100 microg/h), and require replacement every 72 hours in Turkey Abuse of transdermal patches is reported. Oral, rectal, inhalation and intravenous abuse of fentanyl patches were identified in many cases . Fentanyl patch addiction cases are reported rarely .

E.G., 40 years old, female patient was married and housewife, had two children. Breast cancer was diagnosed 5 years ago. Left mastectomy, chemotherapy and radiotherapy were administered. Liver metastases from breast cancer were identified 2 years later and transdermal fentanyl was administered for treatment of chronic cancer pain. Transdermal fentanyl was began with 25 mcg initial dose, 2 months later increased to 50 mcg dose/day and continued through 3 months. When fentanyl treatment was stopped, withdrawal symptoms consisting of yawning, rhinorrhea, tachycardia, sweating, tremble, restlessness and sleeplessness were observed. Patient could not tolerate these symptoms and began to use transdermal fentanyl again. She wanted to use 50 mcg/day, but 25 mcg was prescribed by her physician. Then, dosage was decreased to 12.5 mcg before her hospitalization to Erenkoy AMATEM clinic. She was admitted to our clinic with withdrawal symptoms. Buprenorphine-naloxone 4mg/day treatment was started to patient. Buprenorphine-naloxone was decreased to 2 mg/day and stopped when withdrawal symptoms were disappeared. Patient described depressive symptoms. Duloxetine 30 mg/day was initiated and increased to 60 mg/day. She was discharged with improvement.

As seen above DSM-5 criteria for "opioid dependence" were provided for our patient. Transdermal fentanyl patch can be used for the treatment of chronic pain including cancer pain and non-cancer pain. Environmental and biological factors are the risks for opioid dependence and abuse. Opioid dependence in males is 1.5 times more common than females. Comorbid depression, anxiety disorder, attention deficit-hyperactivity disorder and posttraumatic stress disorder increase the risk for opioid dependence. Depression is seen often in cancer patients. Antidepressant treatment must be initiated to patient for depressive symptoms. Clinicians must be careful when using transdermal fentanyl because of the dependence risk. Oncologists should consult to psychiatrists for treatment management.

**Keywords:** cancer, dependence, fentanyl

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### [PP-213] Others

## Job satisfaction and burnout among staff workers in a refugee camp

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**Objective:** Based on mixed methods of qualitative and quantitative methodological approach, this study was designed as a study that focuses on the two levels of understanding the phenomenon of Job Satisfaction (JS) and Burnout Syndrome (BS). The first level

was to identify the JS and BS by applying the Minnesota Satisfaction Questionnaire (MSQ) and Maslach Burnout Inventory (MBI) to the participating staff members at the camp. The second level was to focus on the implications of the burnout syndrome in an organizational view.

**Methods:** The study was designed as a cross-sectional one. MSQ, MBI, Beck Depression Inventory (BDI), Beck Anxiety Inventory, and socio-demographic variable form were given to the participants.

**Results:** Among the participants 97 (48.7%) were female and 102 were (51.3%) male. The mean age of the participants was  $29.46 \pm 7.91$  years. According to the subscores of Minnesota Satisfaction Questionnaire (MSQ) the rates for the intrinsic dissatisfaction was 46.2% (n=83) and extrinsic dissatisfaction was 61.8% (n=123). While intrinsic and extrinsic dissatisfaction was 40.7% (n=81), intrinsic or extrinsic satisfaction was 23.6% (n=47), and 35.7% (n=71) were satisfied from both. An MSQ satisfaction rates were not statistically significant when genders were compared. MBI-EE, BDI and BAI was statistically higher in females than males (<0.001, 0.001, <0.001 respectively). Inner unsatisfied staff had higher scores from MBI-EE, MBI-DP, BDI, and BAI and lower scores from MBI-PA than others (<0.001, 0.009, <0.001, <0.001, 0.001, respectively). On the other hand MBI-EE, MBI-DP, BDI, and BAI scores of the extrinsic unsatisfied individuals were higher than who were satisfied (all p were <0.001). Whereas, the MBI-PA scores of unsatisfied staff were higher than the others (<0.001). There were negative correlations between MSQ total score and MBI-EE, MBI-DP, BDI, and BAI and positive correlations with MBI-PA. 18-24 years of age participants had statistically significantly higher scores in BDI, BAI, and MBI-EE (0.01, 0.001 and 0.001, respectively) than others. The comparison of MBI-EE, MBI-DP, BDI, and BAI scores were lower in volunteer than assigned staff (<0.001, 0.008, 0.007, 0.005 respectively). Moreover, MSQ total scores were higher in volunteers (0.001). Working on the camp more than 12 months increased the MBI-EE, and BDI scores when compared to working less than (0.003, 0.026 respectively).

**Conclusions:** To the best of our knowledge, it is the first study that investigated the BS and JS among staff workers in refugee camps. Being young (<25), not being a volunteer, and working on the camp more than one year were the factors associated with BO and/or JS in refugee camp staff. From the results of the present study and accumulating literature, the risky staff should be evaluated in terms of depression, and anxiety symptoms, BO, and JS periodically for giving a qualitative and quantitative serve.

**Keywords:** burn out, job satisfaction, refugee camp, working staff

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### [PP-214] Addictions and related disorders

## Personality changes and substance dependence due to damage to the orbitofrontal circuit: a case report

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The orbitofrontal cortex (OFC) is a prefrontal cortex region in the frontal lobes in the brain and it is located just above the eyes. It has been proposed that the OFC is involved in sensory integration, in representing the affective value of reinforcers, and in decision-making and expectation. One clear extension of problems with decision-making is drug addiction/substance dependence, which can result from disruption of the striato-thalamo-orbitofrontal circuit. OFC connectivity disruptions may cause, impulsivity, personality changes and hyperactivity

Identifying Information: OD, 19 year-old white male, single, unemployed, dropped out sophomore year of high school, he is the second of three siblings.

Chief Complaint: Lighter fluid and cannabis consumption.

History of Present Illness (HPI): There was no complaint until 2009. Slowness of movement and stillness complaints began in December, 2009. Metronidazole treatment was initiated for diarrhea and followed by aphasia, seizures, headaches, urinary incontinence, lethargy, inability to walk in. He was admitted to intensive care unit for 42 days.

During this period, cranial MRI was conducted which revealed bilateral symmetrical diffuse involvement of the basal ganglia at the level of caudate nuclei. Psychiatric Examination: General Impression: Appearance older than biological age, decrease in self-care, attired appropriately, nonsensitiveness. Mood: euthymic, Affect: distressed, anxious. Perception: Auditory and visual hallucinations under the influence of lighter fluid Cognition: Fully oriented. Record: 3/3, Recall: 2/3 Interviews with his parents revealed dramatic personality changes. While he was a kind, sympathetic, coherent, respectful, shy, responsible person, immediately after discharge from intensive

care unit, he had hyperbulemia, excessive drinking (juice and coke), been tense, impatient, irascible, using foul language, demonstrating inappropriate behaviors, improper speech content, excessive interest in pornography even in public, talkativeness, restlessness. Specifically, he had been abusing boys between the ages of 5-6 overtly, even in the presence of their parents. He had been abusing lighter gas and synthetic cannabinoid approximately a year after his intensive care unit stay and personality changes.

Neurocognitive Tests: Digit Span revealed general weakness in attention and concentration, Wechsler Memory Scale revealed mild to medium impairment on visual recall and Benton Visual Retention Test performance was close to lower range limit. Wisconsin Card Sorting Test, Stroop Test, IOWA Gambling Task, Reading Mind in the Eyes Test and Go-no-Go test performances were all in normal ranges. Diagnosis: F19.2 Mental and behavioral disorders due to multiple drug use and use of other psychoactive substances; F07,0 Organic personality disorder.

Orbitofrontal cortex additionally share highly complex reciprocal connections with the sensory cortices, limbic areas, amygdala, and hypothalamus. When OFC connections are disrupted, varying cognitive, behavioral, and emotional consequences may arise. Previous studies has demonstrated personality changes in individuals with orbitofrontal cortex lesions. Phineas Gage, a well known case, had become fitful, irreverent, impatient of restraint, capricious and vacillating after a major head trauma. It might be concluded that similar personality changes also took place in our case. OFC has intense and complex connections with a wide range of other brain regions, which might have lead to complex nature of complaints in our case.

**Keywords:** orbitofrontal cortex, impulsivity, personal changes, hyperactivity, substance dependence

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### [PP-215] *Schizophrenia and other psychotic disorders*

## A suicide attempt, not taking but saving a life

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Suicide is the primary emergency for psychiatrists and it is a major public health problem. According to the numbers given by TUIK, 3225 people died in our country by suicide in 2012. Suicide accounts for a significant part of the excess mortality that is usually found in schizophrenia. Twenty to forty percent of patients with schizophrenia will make a suicide attempt sometime during their illness. Both in periods of psychotic aggravation-especially in which paranoid delusions are prominent-, and in periods of remission, when patients develop an insight for their illness and fear of their mental deterioration, suicide risk in this population seem to increase. Patients with schizophrenia, who attempt suicide, tend to use more lethal means in their attempts, have a strong intent to die and make multiple attempts. In accordance with these facts, we will present a schizophrenic patient who attempted suicide and diagnosed with myocardial infarction (MI), unrelated with his suicide attempt, by emergency department.

Our patient was a 32-year-old male suffering from schizophrenia for ten years. He came to hospital with his relatives and he was accepted to the emergency department. He attempted suicide by taking multiple drugs and cutting his left wrist with a knife. His cuts were superficial and he had no life-threatening risk due to intoxication. He was consulted to psychiatry. Patient's hospitalization in psychiatry service was planned after his general medical examination and monitorization due to intoxication was completed. However, in his routine blood samples troponin levels were found elevated. After his cardiac examination, he was diagnosed with NON-ST elevated MI. He was hospitalized in the cardiac intensive care unit. In his coronary angiography, 95% stenosis was detected in his intermediate coronary artery in which a stent was placed subsequently. He was followed up in intensive care unit for three days. Then he was transferred to psychiatry service. In his psychiatric examination, he had ideas of reference and delusions of persecution; as well as auditory hallucinations. Anti-psychotic medication was initiated and he was followed up 14 days in psychiatry service.

In our case, there might be a poor relation between multiple drug intakes and patient's heart attack. As mentioned before, he has been suffering from schizophrenia and he lacked of insight. Moreover, if he had not attempted suicide; he might have had a heart attack in a close future and probably he would not have come to hospital. Suicidal attempts in schizophrenia are very frequent. Nevertheless, this attempt, which saved our patient's life, is different from other attempts. Furthermore, this case shows us that performing detailed general medical examination for psychotic patients in emergency services could be lifesaving.

**Keywords:** myocardial infarction, schizophrenia, suicide

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**[PP-216] Mood disorders****Relationship between blood glucose levels and manic episodes in a patient with bipolar - I disorder: presentation of a case**

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Bipolar-I disorder (BD-I) is characterized by recurring episodes of mania, depression or mixed episodes without a certain pattern, and patients may have a completely normal mood between these episodes. Endocrinological and cardiovascular disorders in some patients with bipolar disorder may show a common pathophysiological mechanism or metabolic side effects of pharmacotherapy. Diabetes mellitus is among the most important of these disorders, and its frequency among patient population with mood disorders is 3 times higher than the general population

Our case was a 52 years old female patient, who is the , first child of a family with 7 children. She is married for 35 years; uneducated, and has a history of meningitis and convulsion when 3 years old.

She had Behçet's disease for 20 years, type 2 diabetes mellitus for 3 years, and metabolic syndrome and hypothyroidism. She was 52 years old, and she was diagnosed as having BD-I when she was 39 years old. After she was first diagnosed as BD-I, she had experienced 14 manic, 3 depressive and 2 mixed episodes, with multiple hospitalizations. She was diagnosed as type 2 diabetes mellitus 3 years ago and was being followed up while taking oral anti diabetic. There were no manic episodes in the first 2 years after DM diagnosis.2000-2011, although she regularly took her psychiatric medications, being hospitalized for 13 times in this period. She passed 2011-2013 period in remission under the control of psychiatric medications, but had 3 manic episodes in 2013 and was treated as an in-patient at our hospital. She also had an episode of hypomania and was treated on an outpatient basis. Her episodes were observed to fulfill the criteria for fast-cycles in the last year. She was hospitalized and treated at our hospital for 3 times in the last year, and her blood glucose regulation was observed to be uncontrolled just before these episodes. Her HbA1c value was 10.2 at hospitalization and level of triglycerides 514 mg/dL. The blood glucose levels returned to 150-200 mg/dL with insulin treatment, and the Young mania rating scale score decreased from 18 points at admission to 2 points. During hospitalization, a rapid decline in her manic symptomatology was observed at the 7<sup>th</sup> day, in parallel with controlling the blood glucose levels. Her HbA1c level of 10.2 is an important parameter reflecting the level of glucose control of 3 months' duration. It could not be clearly understood whether this increase in HbA1c was due to her non-compliance, it was due to a side effect of olanzapine disrupting blood glucose control, or to a relationship yet unknown between diabetes and bipolar mood disorder. Glucocorticoid / insulin signal mechanisms and immuno-inflammatory effector systems are intersection points, revealing the pathophysiology of the relationship between bipolar disorder and stress-sensitive general medical conditions. Unregulated blood glucose levels during manic episodes and regression of the manic episode with normalization of hyperglycemia, suggests an association of high blood glucose levels with higher frequency and severity of manic episodes in our patient.

**Keywords:** bipolar I disorder, diabetes mellitus, rapid-cycling

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**[PP-217] Psychopharmacology****A case of non-convulsive status epilepticus during lithium treatment**Melis Atlamaz<sup>1</sup>, Seyma Ciftci<sup>2</sup>, Fikret Bademkiran<sup>2</sup>

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Lithium has been widely used in the treatment of psychiatric and neurologic disorders, such as bipolar disorders and cluster headache. Neurological side effects of lithium are the commonest side effects. It occurs early and is preventable. Lithium therapy may induce a confusional state when serum levels are in toxic or therapeutic ranges. Lithium can also cause non-convulsive status epilepticus (NCSE), which may clinically resemble a non-ictal encephalopathy. On the other hand, all first and second-generation antipsychotic drugs have been implicated in increasing the risk of epileptic seizures. We describe the case of a patient, who developed NCSE with normal lithium serum levels. A 45-year-

old woman without a personal or familiar history of epilepsy, who had been suffering from bipolar disorder type 1 (DSM-IV) from the age of 35 years, was treated with quetiapine and SSRIs before, and with lamotrigine for one year. In January 2013, she began complaining about dizziness, hypersomnia. So, Lamotrigine therapy was washed out and instead of it, lithium therapy 1200 mg/g was administered to stabilize mood. After 4 months, she began to experience episodes of looking meaninglessly with loss of consciousness, which lasts a few minutes. By the time, her episodes progressed, after 8 months, she began to show a mild clouding of consciousness, slow speech, delayed reaction and disorientation lasting several hours. Then, a generalized tonic clonic seizure occurred. During unconsciousness period without motor symptoms, with EEG findings and diazepam response, recovering of unconsciousness and normalization of EEG parameters, non-convulsive status epilepticus was diagnosed. The serum lithium level (0.9 mmol/l) and other routine laboratory parameters were in the normal range. The brain MR scan was normal. Lithium therapy was immediately interrupted and antiepileptic therapy (phenytoin-levetiracetam) started primarily to stop seizures. After that, successive serial EEGs demonstrated an EEG background stability that correlated with clinical remission. Instead of lithium, lamotrigine was added to the treatment and other antiepileptic drugs ceased slowly. The case described developed NCSE clearly triggered by lithium therapy without systemic signs or symptoms of lithium intoxication and showing serum levels in the normal range. Seizures and NCSE can be the expression of lithium toxicity. In our case, lithium at therapeutic doses can trigger NCSE; thus, lithium therapy discontinuation should be recommended in the case of clinical and EEG pattern of NCSE onset. In one study, quetiapine had a very low rate of EEG abnormality risk among the very few subjects who received this agent; but in our case, it is not associated with quetiapine; as after lithium discontinuation, EEG returned to normal. Thus, when prescribing these drugs, patients should be informed for a lowered seizure threshold.

**Keywords:** lithium, lithium toxicity, non-convulsive status epilepticus

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### [PP-218] *Psychopharmacology*

## Persistent genital arousal disorder due to duloxetine withdrawal

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Human sexuality is composed of a complex interaction of biological and psychological conditions. Orgasm is a sudden discharge of accumulated sexual tension during the sexual response cycle, resulting in rhythmic muscular contractions in pelvic region characterized by sexual pleasure. Persistent Genital Arousal Disorder (PGAD) is a spontaneous, persistent, and uncontrollable genital arousal in women, with or without orgasm or genital engorgement, unrelated to any feelings of sexual desire. PGAD, first defined in modern literature in 2001, is a rare condition. Women with PAGD report a higher degree of psychological distress and even suicidal thoughts. Probable causes of PGAD are still controversial. Besides psychological stress factors, genital nerve sensitivity, intracranial abnormalities, vascular abnormalities of genitalia and some medications are still considered as possible causes of PGAD. Herein, we present a case that was treated with an antidepressant and had PGAD after cessation of antidepressant. A 39-year-old female patient applied to emergency room with persistent genital arousal symptoms. She had been using duloxetine 60 mg/day for treatment of her depressive symptoms and stopped duloxetine due to its side effects 2 days ago. She had hypothyroidism and she was on thyroid replacement medication. 5 years ago, she used antidepressant treatment for one year. She had no other medical problem in her knowledge.

With PGAD pre-diagnosis, all tests are completed to find out the etiology. In this process, her involuntary genital arousals continued to be observed. No significant organic pathology was detected and duloxetine treatment was restarted. With restarting of medication, her complaints were disappeared.

PGAD is a rare condition in women that causing a lot of suffering. The proposed etiologies of PGAD are multiple and may involve a range of psychological, pharmacological, neurological and vascular cases. In our case, no factor was found in investigation for finding out the etiology of PGAD. Because of the recovery of the PGAD after restarting duloxetine medication to the patient, it can be considered that, this case was connected with drug-withdrawal. Discontinuing selective serotonin reuptake inhibitor (SSRI) medication suddenly may lead to SSRI Discontinuation Syndrome and its effects may continue more than 18 months. SSRI Discontinuation Syndrome is one of the possible causes of PGAD. In this case, it is thought that PGAD had occurred with the serotonergic mechanism. Although it is not one of the main causes of PGAD; it is important to consider that PGAD may arise due to antidepressant withdrawal.

**Keywords:** duloxetine, persistent genital arousal disorder, persistent sexual arousal syndrome, orgasm

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**[PP-219] Attention deficit-hyperactivity disorder****Executive functions and social responsiveness in children with attention deficit-hyperactivity disorder**

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**Objective:** Attention Deficit - Hyperactivity Disorder (ADHD), consisting of attention problems, hyperactivity and impulsivity as core symptoms together with social difficulties, is one of the most common neurodevelopmental disorders of childhood. Children with ADHD have been suggested to have problems with executive functions (EF) and social functioning. The difficulties in EF have many everyday implications such as influence on academic achievement, and social competence. Social dysfunctioning may be of crucial importance for the prognosis of children with ADHD.

**Methods:** In this study, we examined the EF and social responsiveness of the children with ADHD and compared them with those of control group. Forty three children with the diagnosis of ADHD and age matched 33 controls were assessed by a detailed form for sociodemographic characteristics and Kiddie Schedule for Affective Disorders and Schizophrenia Present and Lifetime Version for clinical psychiatric diagnoses. Parents of the participants completed Behavioral Rating Inventory of Executive Functions (BRIEF), Social Responsiveness Scale (SRS).

**Results:** Inhibition, set-shifting, emotional control, initiation, working memory, planning and organization, organization of materials and monitoring subscores of BRIEF, BRIEF total score and SRS total score were significantly higher in the ADHD group ( $p < 0.05$ ). In the ADHD group, BRIEF total score were moderately correlated with SRS total score ( $r = 0.58$ ;  $p < 0.05$ ).

**Conclusion:** It was found that the children with ADHD demonstrated much more impairment in executive functions and social responsiveness. These problems necessitate clinical attention.

**Keywords:** attention deficit hyperactivity disorder, executive function, social responsiveness

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**[PP-220] Addictions****A case report of Wernicke's encephalopathy during alcohol dependence treatment**

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Thiamine (vitamin B-1) deficiency can result in Wernicke encephalopathy, a serious neurologic disorder. Dr Carl Wernicke, a Polish neurologist, described it in 1881 as a triad of acute mental confusion, ataxia, and ophthalmoplegia. Korsakoff amnesic syndrome is a late neuropsychiatric manifestation of Wernicke encephalopathy with memory loss and confabulation; sometimes, the condition is referred to Wernicke-Korsakoff syndrome or psychosis.

Thiamine deficiency is characteristically associated with chronic alcoholism, because it affects thiamine uptake and utilization. However, Wernicke encephalopathy may develop in nonalcoholic conditions, such as prolonged starvation, (AIDS), and can even develop in healthy infants given the wrong formulas. Alcohol abuse, AIDS, malignancy, hyperemesis gravidarum, prolonged total parenteral nutrition, iatrogenic glucose loading in any predisposed patient, and other disorders associated with grossly impaired nutritional status have been associated with Wernicke-Korsakoff syndrome.

S.I., A 36-year-old male patient is married, unoccupied and he has 5 children. Patient has been using alcohol since 16 years. His alcohol consumption has increased during the last 3 years. His nutrition was poor. He was treated for alcohol addiction in our clinic a year ago. He was sober for only two weeks after the discharge. He was admitted to our polyclinic with alcohol drinking. Diazepam 50 mg/day was initiated to patient for withdrawal symptoms. Ataxia, confusion and ophthalmoplegia were occurred when diazepam dose was decreased to 30 mg/day. Wernicke's encephalopathy was diagnosed to patient and thiamine 1200 mg/day and diazepam 60 mg/day treatments were initiated. Thiamine and diazepam doses were decreased during clinical observation and stopped after 15 days. Cranial MRI was normal. Following administration of thiamine, the patient's symptoms spontaneously resolved.

It becomes evident that the diagnosis of Wernicke's encephalopathy is based mainly on clinical presentation, although the combination of symptoms is present in only 10% to 38% patients, depending on the series and 19% of the patients do not have any of the classical symptoms. Our case also had ataxia, confusion, ophthalmoplegia. Oculomotor dysfunctions are present in about 30% of patients. Unfortunately, the syndrome quite often develops subclinical and it may be overlooked or misdiagnosed. In the patient presented, the symptoms were typical and the diagnosis was confirmed by the rapid improvement and full recovery after thiamine administration. According to the literature, all symptoms and especially ocular palsies, respond so dramatically to treatment, that failure to recover within a few days, should raise doubts about the diagnosis. In this case patient's symptoms spontaneously resolved. The 3 components of the classic triad of Wernicke encephalopathy are encephalopathy, ataxic gait, and some variant of oculomotor dysfunction. All 3 features of the triad are recognized in only about one third of cases. So assessing the case according to Wernicke differential diagnosis is important, when the clinicians notice one of the three characteristics.

**Keywords:** Wernicke's encephalopathy, dependence thiamin

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### [PP-221] *Anxiety disorders*

## Cognitive behavioral therapy for test anxiety

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**Objective:** Test anxiety is a physiological condition in which people experience extreme stress, anxiety, and discomfort during and/or before taking a test. Test anxiety treatments included medical treatment and psychotherapy. In this report, we want to discuss cognitive behavioral therapy for test anxiety.

**Method:** We perform 6 sessions cognitive behavioral group therapy for test anxiety. After six sessions, group therapy patient's scale scores was decreased significantly.

**Results:** Our group have 6 students, who have test anxiety. One patient was dropped out on second session and others completed the six-session treatment.

**Conclusion:** Test anxiety have physical symptoms, emotional symptoms, behavioral and cognitive symptoms and it can actually impair learning and hurt test performance.

Cognitive behavioral therapy (CBT) is very useful in treating anxiety disorders. It was noted that cognitive behavioral therapy was effective treatment for test anxiety in controlled trails. CBT helps to change the pattern of thinking that support the fear and help the sufferer overcome the negative beliefs.

**Keywords:** cognitive behavioral therapy, test anxiety, treatment

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### [PP-222] *Others*

## A case of acquired epileptic aphasia: landau kleffner syndrome

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Landau Kleffner syndrome (LKS) is first described by Landau and Kleffnerin1957 and characterized by acquired aphasia associated with paroxysmal electroencephalographic changes. It is seen rarely and the real prevalence is unknown. The onset of the syndrome is generally between 2 and 8 years with a peak onset of age 4-5 years old. Boys are twice common affected. Patients are referred to psychiatry for regression of speech, behavioral disturbance and hyperactivity, after the epileptic seizures. Here we report a four years-old boy with Landau-Kleffner Syndrome and discuss the referral reasons, clinical characteristics and the prognosis of the child.

B is a 4-year-old boy, who was referred to our outpatient clinic for regression of language skills, becoming withdrawn, difficulty to understand the instructions, a slowdown in movements. Approximately 1,5 years ago, patient had a complex-partial seizure and he had been hospitalized in intensive care unit. Sleep EEG findings were spike and slow waves on the bilateral temporoparietal regions. Electrical status epilepticus of sleep also existed and it is usually demonstrating severe cases. He had been treated with various antiepileptic drugs but got worse and exposed to adverse effects. We have consulted the case to the pediatric neurologist and steroid stoss therapy has been initiated. After a 4 month-follow up patient regained his comprehension and language abilities. Speech therapy is planned.

Although Landau Kleffner syndrome is a rare disorder, it should be brought to mind in epileptic patients who have regression in speech abilities. In typical epileptic aphasia, there is a coincidence with onset of aphasia and epilepsy. Epilepsy is usually observed several months before aphasia in LKS. Also clinical approach, treatment and prognosis are different in both circumstances. Multidimensional approach may improve clinical response.

**Keywords:** Landau Kleffner syndrome, aphasia, child psychiatry

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### [PP-223] *Attention deficit-hyperactivity disorder*

## Effects of atomoxetine on depression and anxiety symptoms in children with attention deficit-hyperactivity disorder: preliminary findings of a prospective, open-label study

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**Objective:** Attention deficit-hyperactivity disorder (ADHD) is a common socially impairing neuropsychiatric disorder with onset in childhood. Anxiety and depression symptoms may accompany the core symptoms of ADHD in nearly one third of the children. The aim of the study is to evaluate the effects of atomoxetine HCl on self-reported anxiety symptoms, self and parent reported depression symptoms as well as parent and teacher reported core ADHD symptoms in children diagnosed with ADHD.

**Method:** Twenty-five children aged between 7-12 years and diagnosed as having ADHD based on DSM-IV-TR criteria were enrolled in an open label trial for atomoxetine HCL treatment. None of the patients had a DSM-IV-TR criteria based neither major depression nor any kind of an anxiety disorder. Anxiety symptoms were recorded using the State-Trait Anxiety Inventory, depression symptoms using self and parent reported the Children's Depression Inventory and the core symptoms of ADHD using the Conners Parents/Teachers Rating Scales at baseline and after 6 weeks of atomoxetine HCl treatment.

**Results:** As reported by both parents and teachers on each subscale of the Conners Parents/Teachers Rating Scales (all p values ranged between 0.001-0.031), a six weeks of atomoxetine HCL treatment at an average dose of 1.10 mg/kg/day was associated with significant improvements in the core ADHD symptoms. Moreover parent reported depression and self-reported state anxiety scores decreased significantly (p: 0.004, p: 0.027). However, self-reported depression and trait anxiety scores did not show significant differences at the end of the six-week trial. Fourteen patients complaint about mild side effects mostly decreased appetite and irritability but none of the patients withdrew from the study.

**Conclusion:** The findings from this study demonstrate that even short-term atomoxetine treatment significantly improves core ADHD symptoms. In addition, atomoxetine treatment is associated with a significant decrease in anxiety and depression symptoms in ADHD even when these are not comorbid diagnosis.

**Keywords:** attention deficit hyperactivity disorder, atomoxetine, anxiety, depression

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**[PP-224] Attention deficit-hyperactivity disorder****Treatment choice in association of attention deficit-hyperactivity disorder with Williams and Moebius Syndromes: case reports**

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Williams syndrome is a neurodevelopmental disorder caused by micro-deletion at chromosome 7q11.23. It is associated with ADHD by 65-84%

Moebius syndrome is a rarely seen congenital syndrome with non-progressive nature, which is characterized by facial and ocular paralysis. It may be associated with mental retardation and ADHD.

Our aim is to present our experience regarding difficulties in the medical treatment of ADHD cases associated with syndromes and therapeutic effectiveness.

**Case 1:** A six-year old girl referred to our clinic with hyperactivity, inattention. She had been attending to special education; that she had been hyperactive and walked in the class during lesson. In the interview dysmorphic facial appearance was striking, she was diagnosed as Williams Syndrome. With initial diagnosis of ADHD, short-acting methylphenidate was prescribed, which was then gradually titrated up to 1 mg/kg. In the control visit, methylphenidate treatment was withdrawn due to ongoing complaints of inattention, hyperactivity and difficulty in adaptation to school in the patient who had newly onset nervousness, irritability and obsessions. Thus; atomoxetine therapy was prescribed and dose was escalated to 1.5 mg/kg. In control visits, there was improvement in hyperactivity and parents of the patient reported she had better attention and improved nervousness. The patient is still attending control visits.

**Case 2:** A nine-year old boy referred to our clinic with inattention, disinterest to lessons and hyperactivity. He had low academic success since first grade. In the interview, facial asymmetry and expressionless facial appearance were striking. He was diagnosed as Moebius syndrome. Methylphenidate was prescribed with initial diagnosis of ADHD, which was gradually titrated up to 1 mg/kg. However, it was withdrawn due to onset of phobias and visual hallucinations as well as lack of improvement in attention problems. Atomoxetine was then prescribed which was gradually titrated up to 1.2 mg/kg. In control visits, there was improvement in hyperactivity and academic success while he had no problem in adaptation to classmates. The patient is still attending to control visits.

Early diagnosis allows early introduction of treatment in ADHD and providing appropriate management can allow better prognosis in syndromic children. Dramatic occurrence of adverse effects in our patients suggests that there is an increased vulnerability to adverse effects of methylphenidate in syndromes when compared to other ADHD entities and that one should give attention regarding adverse effects, with close monitoring. These patients have great similarity to findings in the literature regarding adverse effects. No clinical improvement was achieved by methylphenidate; however, atomoxetine treatment provided marked benefit in our cases. These findings are inconsistent to studies proposing high success rates for methylphenidate in the literature. Although these cases suggest that atomoxetine treatment can be primarily preferred in patients with syndromes and ADHD regarding effectiveness and adverse effect profile, further studies are needed about atomoxetine treatment in association of syndromes with ADHD.

**Keywords:** attention deficit hyperactivity disorder, atomoxetine, Moebius syndrome, methylphenidate, Williams syndrome

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**[PP-225] Mood disorders****Can GnRH analogue (Leuprolide) be a reason of manic episode?**

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Progesterone and estrogen receptors are present throughout the brain, including hypothalamus and limbic system, two areas involved in regulating emotion and mood. Some medications may produce mood changes, including GnRH agonists, hormonal contraceptives, antihypertensive agents and lipid-lowering agents. In this case report, we present a woman with bipolar disorder who used leuprolide two months before her manic episode.

A 40-year-old, married, null par, housewife was hospitalized with a diagnosis of bipolar disorder-manic episode because of irritability, homicidal behavior, increasing PMA and insomnia. She has a 2-year-history of BPD. Before her affective symptoms appeared, she had used GnRH analogue (leuprolide) for 2 months. Her LH, FSH and estrogen levels were decreased and prolactin level was increased.

Hormonal contraception or hormonal imbalance may be a reason of human mood change. In a research, it is reported that ovarian suppression in young women was associated with depressed and anxious mood and decreased serotonin transporter density. In another study it was discussed that plasma prolactin, LH and cortisol concentrations were increased compared with the control values. Thereby we need to be careful when using hormonal medications in our patients.

**Keywords:** GnRH analogue, leuprolide, bipolar, mania, hormonal contraceptives

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### [PP-226] Others

## Evaluation of quality of life in homosexual men

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**Objective:** It has been suggested that the homosexually oriented individuals as compared to heterosexual individuals might have some differences in general physical health. Previous studies reported that HIV infection or high levels of psychological distress might have increased the health risks among gay men. The aim of the present study was to assess the quality of life among gay men.

**Methods:** The study included 40 men aged 18-35 years who defined themselves as homosexual and 40 men aged 18-34 years who defined themselves as heterosexual. A personal questionnaire developed by our group and involved some sociodemographic data of subjects, Bem Sexual Role Inventory (BSRI), and SF-36 Quality of Life Scale were applied in both groups.

**Results:** When gay men were compared to heterosexual men, there were no statistically significant differences for age, education in years, and cigarettes smoked per day. BMI scores were found to be statistically significantly lower in gay men as compared to heterosexual men. BSRI femininity and masculinity scores of gay men were significantly higher and lower than those of heterosexual men, respectively. The scores of gay men on SF-36 for general health, social function, emotional role, physical function, physical role, energy, and mental health were statistically significantly lower than those of the heterosexual men. It was found that SF-36 mental health score was negatively correlated to the idea that he is experiencing discrimination due to homosexuality ( $r = -0.276$ ,  $p = 0.042$ ).

**Conclusion:** The lower quality of life scores in homosexual men compared to heterosexual men can be resulted from higher levels of psychological distress in homosexuals. This idea seems to be supported by the detection of a negative correlation between SF-36 mental health score and the idea that experiencing discrimination due to his homosexuality.

**Keywords:** homosexuality, quality of life

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### [PP-227] Psychopharmacology

## Aripiprazole-induced sialorrhea and akathisia: a case report

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Second-generation antipsychotics (SGAs) may offer important benefits to children with mental health disorders. Recently, the use of SGAs in children has expanded to a number of mental health disorders including disruptive and aggressive behavior, irritability associated with autism spectrum disorders, mental retardation and mood disorders. Among atypical antipsychotics, clozapine is notorious for persistent hypersalivation that is distressing for the patients and interfering with treatment compliance. Hypersalivation is rarely reported with

risperidone, olanzapine and quetiapine. It was reported that aripiprazole increased salivation in 2% of adult patients as compared to 1% of patients on placebo; whereas in children it varied from 4–6% with aripiprazole compared to 0–1% with placebo. In one retrospective chart review of 30 children and adolescents (mean age 13.3 years, range 5–19), akathisia was recorded in as many as 23% of patients taking aripiprazole.

We report a case in which hypersalivation and akathisia emerged after the beginning of aripiprazole treatment. A 11-year-old boy was diagnosed as having Autism and Attention Deficit Hyperactivity Disorder (ADHD) according to DSM-4 and was receiving Methylphenidate extended release (OROS MPH) 54 mg/day. Subsequently aripiprazole 5 mg/day was added because of his irritability. Sialorrhea, akathisia, restlessness, sedation and muscle weakness emerged after 4 days of adding aripiprazole treatment. Within a week after discontinuation of aripiprazole, particularly sialorrhea and sedation gradually decreased. Aripiprazole may rarely produce severe sialorrhea and akathisia; patients should be informed about, and assessed routinely for these adverse effects.

**Keywords:** aripiprazole, akathisia, sialorrhea

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**[PP-228] Psychosomatic medicine - liaison psychiatry**

## Two young girls with condiloma acuminata

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**Background:** Ano-genital warts (HPV) or condiloma acuminata is one of the most common sexually transmitted diseases of the ano-genital tract in sexually active adults. The incident of ano-genital warts in children has increased dramatically since the last decades. This increase seen in children is most likely due to the increasing ano-genital infections in adults. While sexual transmission is being recognized as a possibility in children, other possible modes of transmission have been described. Recognizing the variability of modes of transmission, especially the nonsexual mode of HPV infection, is very significant in the pediatric population.

**Case 1:** A 7 years old girl was referred from dermatology clinic. She was first diagnosed as having ano-genital condiloma 4years ago. Her family history of HPV infection was not remarkable.

**Case 2:** A 5 years old girl; firstly they referred to dermatology clinic after her paternal grandmother had recognize genital lesion at the age of four. Last year her father had been diagnosed to have genital condiloma; her mother had warts in her in fingers almost ten years ago, and her parental grandmother had a history of ano-genital warts.

There was no significant evidence of sexual abuse in each two cases.

**Discussion:** In the past, the finding of HPV ano-genital infection caused the medical providers to pursue an investigation for sexual abuse. However, in the last decade there has been increasing evidence of nonsexual transmission of HPV in this population. The acquisition of HPV can occur in a variety of ways. Ano-genital warts are alone not an indicator for sexual abuse investigation and all aspects of the history, physical examination and interview are necessary.

**Keywords:** HPV, ano-genital wart, children

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**[PP-229] Anxiety disorders****Olanzapine use in a bipolar pregnant patient**Taha Can Tuman<sup>1</sup>, Ismail Karaatli<sup>2</sup>, Akif Asdemir<sup>2</sup><sup>1</sup>Abant İzzet Baysal University, Faculty of Medicine, Department of Psychiatry, Bolu-Turkey<sup>2</sup>Erciyes University, Faculty of Medicine, Department of Psychiatry, Kayseri-Turkey

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Atypical antipsychotics are gradually more frequently being used in the bipolar disorder. In psychiatric patients, whose illness continues in the pregnancy period, the drug usage is controversial and while the case notifications increase, our information is updated. Olanzapine comes to the fore with both its antipsychotic activity and mood stabilizing activity. In this presentation, the usage of the olanzapine with success during and after the bipolar affective disorder manic episodes in a pregnant patient will be presented. A 32-year-old woman patient applied to our polyclinics with the complaints of the fearing from the humans, insomnia, talking a lot, energy increase, desire to spend a lot of money, hearing sounds. In the story taken from the patient, it was determined that she was monitored with the diagnosis of the bipolar affective disorder and used the treatments of lithium 900mg/day and risperidone 2mg/g, however as she was pregnant, she stopped the drugs and she was 14 week pregnant.

She was hospitalized. After being consulted with the department of the gynecological diseases and birth, by considering the ending of the first trimester and with the approval of the family, the olanzapine 5mg/g treatment was started. In the follow-ups, the patient entered remission and the outpatient polyclinics continued her controls. She continued to use the olanzapine treatment until the end of the pregnancy. After the birth, any pathology was not determined in the baby. Now the baby is 2 years old and the healthy mother continued her treatment after the birth. The exacerbation of the symptoms in the psychiatric patients who remained without treatment during the pregnancy can give damages to the mother and baby. In the pregnant patient remaining without treatment, the irregular nutrition, cigarette, alcohol and substance use, attempts of giving damages to herself and the baby can be observed. In the literature, there are notifications of cases, which use olanzapine and give birth to the healthy baby as of the first trimester of the pregnancy. In a study that Goldstein and friends have realized, it has been declared that abortion has been determined in 17 of the 37 patients using olanzapine; however, no malformation has been determined in any one of 20 pregnant women giving birth. In our case, olanzapine has been used during the pregnancy and she gave birth to a healthy baby. In the two-year monitoring of the baby, any anomalies have not been determined. Due to the metabolic effects of the olanzapine, in the pregnant women using olanzapine, it should be monitored in terms of the gestational diabetes and excessive weight gain. Our case is a sample supporting the usage of olanzapine with success in pregnancy and it is compliant with the literature.

**Keywords:** bipolar, pregnancy, olanzapine**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S229****[PP-230] Cultural psychiatry****The identification of the opinions and beliefs of the health professionals about the psychiatric diseases**Gulay Yildirim<sup>1</sup>, Etem Erdal Ergan<sup>2</sup>, Sukran Ertekin Pinar<sup>3</sup>, Cagla Kilic<sup>2</sup><sup>1</sup>Cumhuriyet University, Faculty of Medicine, Department of Medical Ethics and History of Medicine, Sivas-Turkey<sup>2</sup>Numune Hospital, Department of Psychiatry, Sivas-Turkey<sup>3</sup>Cumhuriyet University Health Sciences Faculty, Sivas-Turkey

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**Objective:** To identify the opinions and beliefs of the health professionals about the psychiatric diseases

**Methods:** Three hundred and seventeen health professionals working in Sivas Numune Hospital have been included in this descriptive study. The data have been collected by Individual Information Form, questionnaire on psychiatric diseases, and Belief Scale on Psychiatric Diseases (BSPD). Total score of BSPD is 0-105. The higher scores of the scale and sub-scale mean negative beliefs. Percentage distribution, t test, ANOVA and Tukey's test were used for statistical analyses.

**Results:** 18.6% of the subjects declared that they had a relative with a psychiatric disease; 63.2% declared that they had problems with

people with psychiatric diseases. Half of the health professionals declared positive opinions about the schizophrenia patients; 41% declared that schizophrenia patients were dangerous and might hurt others. The median scores of BSPD subscales: dangerousness  $23.74 \pm 6.66$  (min: 6; max: 40), desperation-impaired interpersonal relations  $29.55 \pm 9.88$  (min: 0; max: 55), abashment  $1.76 \pm 2.30$  (min: 0; max: 10). The median of total score of this scale was  $55.06 \pm 16.06$  (min: 6; max: 100). BSPD total scores of nurses/midwives, high-school graduates, those who declare their incomes and expenses as equal and health professionals with negative opinions about schizophrenia patients were statistically higher ( $p < 0.05$ ). When we evaluated the sub-scales, dangerousness, desperation-impaired interpersonal relations, and abashment scores were high in nurses/midwives, high-school graduates; only abashment scores were high in the subjects aged 20-24 and expenses as equal and health professionals ( $p < 0.05$ ).

**Conclusion:** Nurses/midwives, high-school graduates, subjects aged 20-24, and health professionals with equal expenses and incomes have negative opinions about the psychiatric diseases. Based on these results, it is recommended that mental disorders and ethical approaches had to be included in the on-the-job programs, and trainings should be planned.

**Keywords:** health professional, psychiatric diseases, beliefs, stigmata

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### [PP-231] *Mood disorders*

## The relationship between anger, level of impulsivity and self-destruction in atypical depression

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**Objective:** Common feature of bulimia nervosa, binge eating and atypical depression is a change in body weight, appetite and eating habits. In bulimia, increase in impulsivity and aggression has been reported. In a self-destructive act, impulsivity is associated with aggressive behavior. In individuals feeling comfort in eating, a genetic predisposition towards impulsivity and reward sensitivity with resultant tendency to depression has been reported. We aimed to investigate whether impulsivity or anger in atypical depression is different from depressive disorder without atypical characteristics.

**Method:** Literate women who met diagnostic SCID-I criteria of major depressive disorder and aged over 18 years were included in the study. Excluding diagnosis of depressive disorder and binge eating, patients with other mental disease and depressive individuals with psychotic characteristics were not included in the study. 60 patients included in the study, 30 of which were atypical depression and 30 depression cases without atypical characteristics. Barratt Impulsivity Scale (BIS-11), Eating Attitude Test (EAT), Multidimensional Anger Inventory, Hamilton Depression Scale (HAM-D) and sociodemographic data forms were given to the patients. For the comparison of categorical variables chi-square test and for numerical variables Mann Whitney U test were used.

**Results:** Frequency of binge eating was 46.7% and 10% in depressive patients with or without atypical features, respectively, with a statistically significant difference between both groups ( $p = 0.002$ ). In patients with atypical depression, frequency of self-destruction ( $p = 0.023$ ) and 'self-directed anger' ( $p = 0.002$ ) was significantly higher. In the regression analysis, we detected that higher rates of 'self-directed anger' ( $p = 0.050$ ) and 'anger directed at others' ( $p = 0.033$ ) contributed to the increases in Eating Attitude Scale scores. When binge eaters were eliminated from comparator groups, rates of self-destruction were found to be higher in atypical depression ( $p = 0.008$ ) and 'self-directed anger' ( $p = 0.012$ ) was seen in significantly higher number of patients. Besides, total Barrat scores were higher in atypical depression ( $p = 0.037$ ).

**Conclusion:** In our study, higher rates of 'self-directed anger' and impulsivity in atypical depression comply with the results of the studies performed in patients with eating disorders. In the regression analysis, anger was a variable predicting eating attitude, which is compatible with similar results of other studies. Higher rates of impulsivity and anger in atypical depression and their association with eating attitudes indicate that they had common characteristics shared also by eating disorders.

**Keywords:** atypical depression, anger, impulsivity, self-destruction

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**[PP-232] Anxiety disorders****Mean platelet volume in panic disorder**

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**Objective:** The mean platelet volume (MPV), the accurate measure of platelet size, has been considered a marker and determinant of platelet function. Larger platelets have more granules, aggregate more rapidly with collagen, have higher thromboxane A2 levels and express more glycoprotein Ib and IIb/IIIa receptors than smaller platelets. Accumulating data has shown that elevated MPV is associated with acute myocardial infarction (AMI), and MPV can be a potentially useful prognostic biomarker in patients with cardiovascular disease. The aim of present study is to investigate MPV with PD and healthy subjects. It was hypothesized that with panic disorder (PD) MPV levels have elevated, compared to healthy controls. To our knowledge, this is the first study of investigating the levels of MPV in PD.

**Methods:** Thirty-seven drug-free subjects, aged 18-60, who were diagnosed as having panic disorder according to the DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> edition) criteria were included in this study. Forty-five mentally and physically healthy subjects that had similar socio-demographic characteristics were included in the study as a control group. Height, weight, platelet count and MPV were measured and recorded for each subject.

**Results:** No significant difference was found in the female/male ratio, age, BMI between PD group and control group respect ( $p=0.914$ ,  $p=0.791$ ,  $p=0.968$ ). The MPV was found to be significantly increased in PD group compared to control group ( $9.2\pm 0.8$  vs.  $8.8\pm 0.9$  fL;  $p=0.016$ ). There was no significant difference in PLT and BMI between groups (both  $p$  value  $>0.05$ ).

**Conclusions:** To the best of our knowledge, this is the first study investigating the levels of MPV and PLT in PD. MPV is considered to be an indicator of platelet activation, and to be important in the pathophysiology of coronary heart disease (CHD). The findings of present study indicate that PD might have increased levels of MPV in the absence of related factors, such as elevated blood pressure or HT, hypercholesterolemia and obesity.

**Keywords:** panic disorder, coronary heart disease, mean platelet volume, myocardial infarction

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**[PP-233] Psychopharmacology****Restless legs syndrome induced by a single dose of quetiapine: a case report**Fahri Celebi<sup>1</sup>, Ahmet Zihni Soyata<sup>2</sup>, Lutfi Ilhan Yargic<sup>2</sup>

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Restless legs syndrome (RLS) is a common disorder with a prevalence ranging from 2% to 15% in general adult population. Restless legs syndrome is a common side effect of antidepressant medications but other psychotropic agents can also cause RLS. There are sixteen RLS case reports with quetiapine. In this paper, we aim to share a RLS case after low dose quetiapine administration and present a review of RLS cases associated with antipsychotics.

A 39-year-old married female. She was referred to our clinic for depressive symptoms and hospitalized for suicidal ideation. After she was given 100 mg quetiapine for insomnia at the first night, she reported severe paresthesia, pain, restlessness and urge to move her legs. She was diagnosed as having RLS. All symptoms disappeared forty minutes after 0.25 mg pramipexole administration. The following night, she was given 100 mg quetiapine and all RLS symptoms appeared with same severity responding to pramipexole again. Her blood test results including urea and ferritin were in the normal range.

RLS is associated with hypodopaminergic activity in the brain. Therapeutic efficacy of dopaminergic agents also supports this hypothesis. Although quetiapine is known for its low antidopaminergic activity, it was associated with some RLS cases previously. In this patient, RLS was diagnosed after a single low dose of quetiapine without a past and family history of RLS. In conclusion, clinicians must be cautious about RLS, while using quetiapine.

**Keywords:** adverse effects, pramipexole, restless legs syndrome, quetiapine

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S231**

**[PP-234] Psychopharmacology****Psychiatric profiles of children and teenagers after renal transplantation and related factors**Ayse Kutlu<sup>1</sup>, Nida Dincel<sup>2</sup>, Mukaddes Duygu Ozcanli<sup>1</sup>, Kadriye Ozdemir<sup>2</sup>, Ulku Akyol Ardic<sup>3</sup>, Sevgi Mir<sup>2</sup><sup>1</sup>Dr. Behcet Uz Children Disease and Surgery Training and Research Hospital, Department of Psychiatry Clinic, Izmir-Turkey<sup>2</sup>Ege University, Faculty of Medicine, Department of Pediatric Nephrology, Izmir-Turkey<sup>3</sup>Denizli State Hospital, Department of Psychiatry Clinic, Denizli-Turkey

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**Objective:** Renal transplantation is the rescue treatment for End Stage Renal Diseases in all ages. It's well known that; various factors such as difficulties in daily life arising from chronic renal disease, complications, waiting for a donor and the need for social support cause multiple psychiatric problems with the majority of anxiety and depression, in these patients. The recent studies reported the persistence of anxiety and depression in 25-40% of cases after renal transplantation. We aimed to evaluate the psychiatric profiles of children and teenagers after renal transplantation and detect the variables in this preliminary study.

**Methods:** The study was consisted of 22 children and teenagers. All patients and parents were acknowledged about the study and only the volunteers were included. Patients having rejected renal graft were excluded from the study. All patients were asked to fill out the socio demographic form, family assessment device (FAD), state-trait anxiety inventory II (STAI-II) and the symptom check list-90-R (Scl90-R). The demographic and clinical data including the donor type, the waiting time for donor, data about immunosuppressive treatment were recorded from the charts of patients. All data were analyzed on SPSS 20.0 statistical program. Correlation coefficients were used to analyze the relationship between standard definitive tests and multiple variables.

**Results:** A statistically significant increase in the Scl 90 obsession score was found in children of families that are in very low socio economic status. Although the finding of the more immunosuppressive drugs used, the increased scores of FAD, STAI-II and Scl 90-R were found; the only statistically significant relation was seen between the role score of FAD and obsession score of Scl 90. There was statistically difference between depression and anxiety scores of Scl-90 belonged to cases having living related donor. However, in all cases role, attention and behavioral control score of FAD were worse. STAI-II scale score was found moderately high in all cases. There was not any significant correlation between drug usage time, donor type and the other multiple variables. A moderate and high correlation was found between STAI-II and all scores of Scl90 except for anger.

**Conclusion:** There are few studies in the literature, concerning the Psychiatric Profiles of renal-transplanted children and teenagers and the factors effective on these, especially the importance of family assessment. In this study, we want to emphasize the worse results found in all cases scored for role, attention and behavioral control scale of FAD. Therefore, we vigorously suggest considering the cases in relation with their families during both pre and posting transplant period and following up for Psychiatric problems with the care of their developmental course, even in the post-transplant long-term.

**Keywords:** psychiatric profiles, family assessment device, renal transplantation

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**[PP-235] Attention deficit-hyperactivity disorder****What is the effect of atomoxetine on epilepsy in a boy with attention deficit-hyperactivity disorder?**Nermin Yucel<sup>1</sup>, Atakan Yucel<sup>2</sup><sup>1</sup>Ataturk University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Erzurum-Turkey<sup>2</sup>Ataturk University, Faculty of Medicine, Department of Psychiatry, Erzurum-Turkey

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Attention deficit-hyperactivity disorder (ADHD) is a prevalent neuropsychiatric disorder that occurs in childhood and ongoing in adulthood. Atomoxetine is a potent, specific, norepinephrine reuptake inhibitor that has no other affinity on any other neuronal reuptake pumps used in the treatment of ADHD, alternatively. High risks in terms of epileptic seizures have been observed in patients with ADHD. Here, we present the effect of atomoxetine on epilepsy in a boy with ADHD.

A 10-year-old boy was admitted to our outpatient clinic with complaints of negligence, short temper, inattention and academic failure

in the school. In his psychiatric examination, he was conscious, oriented and cooperated with a fluent speech. He had concentration problems, hyperactivity and impulsivity. There was no hallucination and delusion. His IQ testing, physical examination and laboratory results were in normal range. His condition was compatible with ADHD combined type according to DSM-V. He also had history of epilepsy for 4 years. The valproic acid 750 mg/day has been used for 3 years. His last seizure had been 2 month ago thus levetiracetam 600 mg/day was added his treatment. There was no history of psychiatric treatment. Atomoxetine, 25 mg/day, was initiated; and the dose was titrated up to 40 mg/day. The patient was invited to medical examination monthly. In the first month of follow-up period, the symptoms of attention deficiency decreased and school achievement improved. Furthermore, seizure was not observed in the subsequent year after the treatment of Atomoxetine. Follow up of patient is ongoing and he tolerated the medication well.

Comorbidity of epilepsy is a condition that requires attention in terms of treatment. The threshold of seizures should be paid attention by the physicians. In the previous studies, the coexistence of ADHD and epilepsy was emphasized. In another study, evidence that increased risk of seizures is related with stimulants was demonstrated. Although there are the limited information about the treatment of atomoxetine in ADHD accompanied with epilepsy, based on our case, atomoxetine may be a safe treatment option in ADHD accompanied with epileptic comorbidity. However, this treatment option should be supported with further and well-attended multicenter studies.

**Keywords:** attention deficit hyperactivity disorder, atomoxetine, epilepsy

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### [PP-236] *Psychopharmacology*

## Paliperidone use in probable risperidone-related liver toxicity: a case report

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In the light of the recent literature, liver toxicity due to risperidone, which is a commonly used serotonin (5-HT<sub>3</sub>) and dopamine (D<sub>2</sub>) antagonist drug in the treatment of schizophrenia spectrum disorders, is a rare condition. Being the active metabolite of risperidone, paliperidone-9 hydroxy risperidone-, is majorly eliminated by renal excretion and paliperidone's route of metabolism and elimination is different from that for risperidone. This report describes clinical outcomes of paliperidone use and improvement of liver function abnormality in a male patient whose liver function abnormality can only be described with the use of risperidone.

E.C., a male patient without a previous history of any psychiatric illness, was admitted to the hospital due to auditory hallucinations, paranoid delusions, psychomotor discomfort and disturbed functioning for the last two weeks. His blood and urine laboratory tests, computed cranial tomography revealed no organic abnormalities. He was started on pharmacotherapy with the diagnosis of schizophrenia and on the 24<sup>th</sup> day of his admittance, he was discharged on risperidone 4mg poqad and biperidene 2 mg poqad. A month later, on follow up, elevation of the liver enzymes were detected (AST/SGOT=133 Unit/Liter (5-40 U/L), ALT/SGPT=344 U/L (5-40 U/L) Total bilirubin=0.7 mg/dl (0.2-1.2 mg/dl), ALP=71 U/L 35-125 U/L, LDH=377 U/L (200-450 U/L), APTT=26.988 sec). The patient had no complaints regarding gastrointestinal system and his serological markers for viral hepatitis and antinuclear antigens were negative, his abdominal ultrasound was normal. Risperidone treatment discontinued and he was started on paliperidone 6 mg poqad. During his two-week follow-ups, his liver enzymes gradually recovered (AST: 24 U/L, ALT: 34 U/L) and the levels remained normal after one year of paliperidone treatment.

In clinical studies, neuropsychiatric medications account for 16 per cent of all drugs causing liver dysfunction. Different mechanisms of hepatotoxicity in psychiatric patients include alcoholism, substance abuse, and multidrug use. Paliperidone is the active metabolite of risperidone and cytochrome P450 (CYP3A4, CYP 2D6) enzyme system plays an important role in its metabolism. The majority of paliperidone is eliminated through kidney contrary to risperidone. Although the exact mechanism is not clear, elevated liver enzymes due to risperidone use might be associated with cytochrome enzyme group. When this is taken into account, switching to paliperidone might be a good choice in the case of risperidone induced liver enzyme abnormalities.

**Keywords:** risperidone, paliperidone, liver toxicity

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**[PP-237] Mood disorders****Sarcopenia among bipolar disorder patients**Gokay Alpak<sup>1</sup>, Zeynel Abidin Ozturk<sup>2</sup>, Ahmet Unal<sup>1</sup>, Esen Savas<sup>2</sup>, Fatih Tastan<sup>1</sup>, Feridun Bulbul<sup>1</sup>, Haluk A. Savas<sup>1</sup><sup>1</sup>Gaziantep University, Faculty of Medicine, Department of Psychiatry, Gaziantep-Turkey<sup>2</sup>Gaziantep University, Faculty of Medicine, Department of Internal Medicine, Gaziantep-Turkey

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**Objective:** Sarcopenia (SP) is a syndrome defined as the generalized and progressive loss of muscle mass and strength that may cause fall, fractures, disability, and death. Pre-SP is defined as the loss of the muscle mass, but SP additionally requiring the loss of muscle strength and/or performance. If three components (mass, strength, performance) of SP coexist, the condition called as severe SP. Endocrine causes, neurodegenerative diseases, nutritional disorders, cachexia, physical inactivity, and senility are the possible etiologic factors in SP. Oxidative stress may be a possible etiologic factor in SP as well. SP is a comorbid syndrome that seen in chronic illnesses. If these two are considered together, one may also think that SP might be seen in bipolar disorder (BD) too since it is a chronic disorder and associated with oxidative stress. In recent years senile depressive male patients showed that they had increased prevalence of SP. BD patients' time that passed with illness is mostly in depression. We aimed to investigate SP prevalence in BD patients.

**Methods:** We recruited 100 consecutive BD patients that are registered in Mood Disorders Unit of Gaziantep University. According to the study criteria, six patients were excluded. As a result, the study data was constituted from 94 patients. The blood tests were taken from patients to exclude the possible confounding factor related with SP. Socio-demographic variable form was filled. Every patient had physical mass, strength, and performance tests in order to diagnose SP, based on the criteria of European Consensus.

**Results:** Mean age of the patients was 37.13±10.77 years (18-68). Among the participants 58 (61.7% were female, and 36 (38.3%) were male. Pre-SP was 10.6% (n=10), SP was 6.4% (n=6), and severe SP was 2.1% (n=2). SP diagnosed patients had statistically significantly more depressive and total number of episodes than no-SP patients (0.025, 0.016 respectively). Although it was marginally significant, another difference has been observed that SP patients had more mean number of episodes per year (p=0.058).

**Conclusions:** This is the first study that investigated SP in BD patients. SP was diagnosed more frequent than normal population in BD patients. BD was defined as a chronic and degenerative disorder. The degeneration was shown in white and gray matter in the brain. The results of the study may add a new aspect of degeneration that seen in BD is muscles.

**Keywords:** sarcopenia, bipolar disorder

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**[PP-238] Others****Trichotillomania onset during pregnancy: a case report**

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Trichotillomania can involve any area in the body; however, the most common areas are the scalp, followed by the eyebrows and eyelashes. The seriousness of the pulling behavior is perceived over time, and the disease exhibits a chronic course. Here we discuss a patient with trichotillomania onset pregnancy case.

KD is 19-year-old women, married. The patient was admitted to the juvenile outpatient clinic accompanied by her parents with the complaints of anxiety and pulling out eyebrow that lasted for 2 weeks. She was 7 weeks pregnant, and the complaints of the patient started with nausea 2 weeks prior to admission.

The patient suffered from nausea due to pregnancy that began 2 weeks before the current admission, and the patient was admitted to the emergency service three times. The patient then started pulling out eyebrows due to the stress caused by nausea. She felt relief from the pulling behavior. The patient reported that she engaged pulling behavior only to avoid the sense of nausea. She pulled out her eyebrows almost every day intermittently throughout the day. At the first visit, the patient looked older than her real age. Her style of dress was consistent with her socioeconomic status. The self-care was moderate, and eye contact with the interviewer was partially diminished. The patient was conscious and fully oriented. He spontaneous and voluntary attention, concentration, memory and perception were within

normal limits. The patient had normal judgment and insight. The flow of thought was slow. The patient was in a depressed mood and she had dysphoric affect. Administered to the patient in the WAIS-R Test detected normal intelligence level. After initial assessment, the patient was diagnosed with trichotillomania according to the diagnostic criteria of DSM-IV. We started the treatment with behavioral therapy.

The hair-pulling behavior that began during pregnancy was discussed in the current case report. The current case supports this notion due to the difficulty of controlling the urge for hair pulling and relief from stress with the pulling behavior. Trichotillomania classified to obsessive-compulsive and related disorders in DSM-V. Many studies have suggested menstruation and pregnancy to be associated with the onset and exacerbation of psychiatric symptoms. Although studies on hair-pulling behavior during pregnancy demonstrated that pregnancy might cause an increase in the pulling behavior, no significant correlation was reported between pregnancy and the onset of hair-pulling behavior. The case report, unlike the literature, presents a patient with trichotillomania that started during pregnancy although patient's past history was not remarkable for such a condition.

**Keywords:** Obsessive compulsive disorder, pregnancy, trichotillomania

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### [PP-239] *Schizophrenia and other psychotic disorders*

## Psychosis as the first manifestation of Wilson's disease

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Wilson's disease (WD) is an autosomal recessive genetic disorder in which copper accumulates in tissues; that manifests as neurological or psychiatric symptoms and liver disease. Symptoms usually appear between the ages of 6 and 20 years, but cases in much older people have been described. Wilson's disease occurs in 1 to 4 per 100,000 people. The first manifestations are hepatic (40% of the cases), neurological (35%) or psychiatric (10%). The frequent psychiatric manifestations reported are personality and mood changes, depression, phobias, cognitive impairment, psychosis, anxiety, compulsive and impulsive behavior. This present case reports a patient who was admitted to our inpatient clinic with psychosis as the first manifestation of Wilson's disease.

A 25-year-old male, without previous psychiatric history, presented with one-month- history of psychiatric symptoms. In the patient's mental state examination paranoid, persecutory delusion, auditory, visual hallucinations were detected. He was diagnosed with first episode of acute psychosis. The patient had no past personal or family history of either medical or psychiatric disorder. Psychical and neurological examination was normal. To eliminate possible organic causes of this psychiatric statement, laboratory testing and Magnetic resonance imaging (MRI) of the brain were performed. Laboratory tests were normal. MRI revealed hyper intensity in basal ganglia in the T2 setting. MRI also demonstrated Wilson's disease's characteristic "face of the giant panda" pattern. An ophthalmologic examination revealed the presence of Kayser-Fleisher rings. Based on the patient's MRI results, neurological consultation and the presence of Kayser-Fleisher rings, the patient was diagnosed as Wilson's disease.

In this case report we would like to emphasize that, even the patients who present with pure psychiatric symptoms underlying any medical disease should be considered and the necessary testing should be performed including MRI of the brain.

**Keywords:** psychosis, Wilson's disease

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**[PP-240] Dementia****Developing dementia as a result of HSV encephalitis**

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Several neurological or psychiatric disorders are caused by common viruses. Herpes simplex virus type 1 (HSV1) has been proposed as a possible etiologic pathway in Dementia, Depressive Disorder, Psychosis and Schizophrenia. Encephalitis is a rare but serious complication of herpes viruses. The symptoms associated with HSV are thought to be variable, although it often begins with a clearly defined constellation of symptoms of sudden onset such as headache, vomiting, fever, and altered sensorium. In this paper, the phenomenon of dementia that develops after the herpes encephalitis will be discussed.

The 49 year-old male patient was brought to the emergency service due to the clouding of consciousness, high fever and disorganized behavior. In LP realized to the patient, in BOS, 300 cells were observed; it was determined that the protein increased in the BOS biochemistry. Acyclovir 3\*750 mg, seftriakson 2\*2 gr treatment was started for the patient. Upon the observance of the epileptic discharges in the EEG taken, the carbamazepine 800mg/day was started. In MR imaging of the patient, the appearance compliant with the herpes encephalitis was determined.(Involvement areas in the bilateral temporal lobe front sections, bilateral amygdala, hippocampal and hemispheric complexes) In mental state examination, there were insufficiency in the person, time and place orientation, purposeless behaviors, sleep disorder, hyperactivity, disorganized speech being not appropriate to the question, insufficiency in the behavior planning and disorganized-inappropriate behaviors. Haloperidol 5mg 2\*1 was started for the patient; in the follow-ups due to the EPS development, it was decreased as 2\*0.5. Due to the fact that the patient's EPS sensitivity depending on the squeal in CNS was high, quetiapine 400 mg risperidon 2 mg was started; even though there were decreases in his mobility in his follow-ups, the weakness in the cooperation and orientation was continuing.

Herpes simplex virus encephalitis (HSVE)) typically affect anterior temporal lobe structures. On reactivation of HSV1, the particular apoE variant of the host might affect the number of cells infected by the virus, or the number of viruses released—thus determining the extent of damage. As a result, an increasing number of patients now recover from the disease but are left with neurological squeal ranging from severe dementia with markedly disturbed behavior to mild impairment of memory and speech. In acute Herpes encephalitis, which persists latently thereafter in the peripheral nervous system- usually in the trigeminal Ganglia and after viral activation occurs acute necrotizing hemorrhagic involvement in temporal and frontal lobes in CNS.

**Keywords:** dementia, HSV infection

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**[PP-241] Forensic psychiatry****Incest between sister and brother: a case report**

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A 12-years old boy accompanied by a nurse working in social rehabilitation facility and police force was referred to Child Psychiatry Forensic Unit, of the medical School of Erciyes University, for psychiatric assessment. It was learned that the patient, his sister (19-years old) and one of their relatives (45-years old) had gone to a place approximately 2 months ago where the sister had acted as she was inserting a cucumber and eggplant to patient's anus in accordance to instructions given by their relative and had sucked patient's penis, and that the relative had watched the patient and patient's sister. It was also found that similar events had repeated for two or three times within few days after first event and that these events were recorded by their relative using a camera. It was found that another person had learned about these events and informed the police force. In psychiatric assessment of the child, adjustment disorder was detected and medical therapy was initiated. The patient is still attending control examinations.

It is rather difficult to recognize incest with vague symptoms after event and psychiatric symptoms may be important for detection of incest. Pediatricians should be careful in the routine examination of child in risk groups. Family practitioner, child psychiatrists,

pediatricians and teachers if child is going to a school, should be one who first recognized potential incest. Thus, periodical certificate programs should be mandatory for primary care clinicians, healthcare providers and teachers. The number of child protection units will increase in parallel to the number of healthcare providers, trained about child abuse. This will guide for more appropriate approach to child abuse cases.

**Keywords:** abuse, child, incest

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### [PP-242] Others

## Successful treatment of a male pedophile with risperidone and cognitive-behavioral therapy

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Pedophilia is a psychiatric disorder of a person older than 16 years old that is characterized by sexually arousing fantasies, sexual urges, or behaviors involving sexual activity with a pre-pubescent child (aged 13 years or younger). These fantasies are acted out and cause marked distress or interpersonal difficulties. Pedophilia is a common and often overlooked syndrome that risks the child victim's well-being and further psychosocial development and adaptive functioning. N.B. was a 46-year-old, single, and unemployed primary school graduate male patient. A week before his admission to our clinic, the patient was arrested after performing a verbal abuse towards 10 year old male child. The child's family had withdrawn their complaint about him upon negotiations with elder brother of the patient and the patient was released. In addition, the patient has been accused through ongoing lawsuits about the sexual abuses he was thought to have made in the past. Because of the sexual abuses towards male children, the patient was taken to the psychiatry service with the prediagnosis of pedophilia after the polyclinic application. N.B. stated that he had been raped at the age of 16. Following this incident, he also had a history of being abused by the sexual abuser many times through engaging in activities like watching porn films and being forced to have oral and anal sex against his own will. The person abusing N.B. had also taught him how to perform sexual harassment by seducing children. In the wake of this incident, the patient had often performed sexual harassments towards male children. He said he used to watch those children in the playgrounds for a while, and then he used to approach a child if there were no adults around, made friends with him and played with him for a while. He used to harass those children about whom he was convinced that they would never tell their families what he did to them. N.B. stated that he has never forced children to do anything against their will and that he performed no physical violence to any of them. He expressed he used to be interested in male children, that he never had any sexual desire or interest in females of any age or adult males and that he had no sexual experience.

Multifactorial mechanisms are currently considered responsible for pedophilia especially genetic factors, the individual's own personal experience of being a victim of sexual abuse and neurobiological factors. Psychotherapeutic and pharmaceutical treatment options will be discussed. Medical treatment and cognitive-behavioral therapy (CBT) are the methods of choice in the treatment of pedophilia. In this article, our objective is to present options for the treatment of pedophilia by performing the follow-up of the pedophilic case and reviewing the biopsychosocial attributes of this case through the CBT-based interviews in addition to the risperidone treatment.

**Keywords:** Cognitive-behavioral therapy, pedophilia, risperidone, treatment

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**[PP-243] Stress related conditions****A rare presentation of psychogenic facial palsy**Arif Demirdas<sup>1</sup>, Cafer Cagri Korucu<sup>1</sup>, Giray Aynali<sup>2</sup>, Kadir Demirci<sup>1</sup>, Inci Meltem Atay<sup>1</sup>, Abdullah Akpınar<sup>1</sup>, Seden Demirci<sup>3</sup><sup>1</sup>Suleyman Demirel University, Faculty of Medicine, Department of Psychiatry, Isparta-Turkey<sup>2</sup>Suleyman Demirel University, Faculty of Medicine, Department of Otolaryngology, Isparta-Turkey<sup>3</sup>Suleyman Demirel University, Faculty of Medicine, Department of Neurology, Isparta-Turkey

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Conversion disorder is a condition, which the symptom and deficits affect the motor and/or sensorial functions. It usually mimics another organic disease but evaluated as a psychological factor- related condition on having stressors or conflicts before the disease onset. The conversion symptoms do not correspond to known anatomic ways and physiological mechanisms; instead, it is connected to how the patient conceptualizes the condition.

In this case, presentation, we aimed to discuss an atypical psychogenic facial palsy case, which does not meet the classical peripheral or central facial nerve paralysis in the light of literature. A 25-year-old female presented with 4 weeks history of the loss of facial expression and the disfigurement. She did not have any diseases in her medical history, but she had taken many medications from different neurology clinics for facial palsy that did not shown recovery. The clinical examination revealed that loss of motor function at rest and whilst smiling in lower half left side of her face (infraorbital) and contralateral upper half (supraorbital). The laboratory and radiological examinations (CBC, MRI, Parotid gland USG, Stapes reflex and EMG) revealed that there was no organic pathology in the Otolaryngology clinic. Therefore, the patient consulted to the Psychiatry clinic regarding psychogenic facial palsy. She was prescribed escitalopram 10 mg and risperidone 1 mg daily. During her first control visit at 3 weeks, she reported an asymptomatic period of approximately 2 weeks. Clinical examination revealed that facial symmetry at rest and whilst smiling and complete recovery. In follow-up psychiatric interviews showed that she has family stress factors and husband and wife problems. The medication and interviews were continued for up to 6 months. Due to cessation of active psychiatric complaints and recurrence in atypical facial paralysis symptoms, medical treatment and psychiatric interviews were stopped. In this case, although symptoms mimicking the neurological symptoms dominated the situation, no organic etiology was detected. The patients with conversion disorder usually apply to non-psychiatric clinics. In addition, when a patient presents with facial palsy without laboratory and electro-physiological events, a psychogenic facial palsy should be born in mind with respect to differential diagnosis.

**Keywords:** conversion, facial palsy**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S238****[PP-244] Schizophrenia and other psychotic disorders****Neuroleptic malignant syndrome without rigidity: a case report**

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The neuroleptic malignant syndrome (NMS) is a rare, but life-threatening, unpredictable and idiosyncratic reaction that has been associated with antipsychotic use. NMS is characterized by hyperthermia, muscle rigidity, altered mental status, an elevated creatine kinase (CK) level and autonomic instability. Criteria of Diagnostic and Statistical Manual of Mental Disorders fourth edition text revision (DSM IV-TR) for diagnosing NMS are severe muscle rigidity and elevated temperature associated with the use of neuroleptic medication as well as 2 or more of these; diaphoresis, dysphagia, tremor, incontinence changes in level of consciousness, mutism, tachycardia, elevated or labile blood pressure, leukocytosis and laboratory evidence of muscle injury. In Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM-5), symptoms are similar with DSM IV-TR but there are no criteria for NMS. The initial treatment of NMS involves discontinuing antipsychotic medications, reducing fever and maintaining hydration. In this case report, a NMS without rigidity is discussed.

A 49 years old male who was admitted to the outpatient clinic for sleeplessness, loss of appetite, behavioral change, has been suffering from being doubtful and from forgetfulness for approximately two months, was hospitalized for diagnosis and treatment. Routine

laboratory results on the first day of admission revealed normal findings. The patient was medicated with zuclopenthixol intramuscular (im) 50 mg, chlorpromazine 75 mg im., haloperidol 15 mg im., clonazepam 2 mg tablet (tb), olanzapine 20 mg tb in 24 hours because of agitation. The patient had fever (39°C), confusion, sweating, variable systolic blood pressure (80-160 mmHg), change of consciousness in his third day of admission. There was no sign of rigidity. Biochemical parameters were found to be elevated (WBC: 12000, AST: 993, CK:38247). Possible neurological and infectious conditions were ruled out. The patient was diagnosed as having NMS. The patient was followed up in the intensive care unit. After 8 days, fever and blood tests returned to normal.

In Turkey, there is not any case report about NMS without rigidity. For this reason, this case is remarkable. The other point is, if this major symptom were absent, the clinician may mistakenly diagnose an exacerbation of a primary psychiatric disorder or delirium secondary to neurological, infectious or other medical conditions, so that diagnosis may be delayed. In this case, report, we emphasized to the possibility of NMS without rigidity. DSM-5 also supports this case.

**Keywords:** antipsychotic drugs, neuroleptic malignant syndrome, rigidity

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### [PP-245] Autism

## Medication patterns in patients with pervasive developmental disorders: changes over an eight-year period

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**Objective:** Psychotropic medication pattern studies in children and adolescents with Pervasive Developmental Disorders (PDD) are mostly done using surveys to investigate the influences of different regional, sociodemographic and disease related variables. The aim of this study is to investigate time related differences in medication patterns in patients with PDD in the same clinic over an eight-year period.

**Method:** Data were analyzed from two studies that employed the same methodology and questionnaire. The first study had recruited patients (n=97) with a diagnosis of PDD evaluated in the year 2004-2005 at Hacettepe University Child and Adolescent Psychiatry clinic and the second study had recruited patients (n=112) with the same diagnosis evaluated at the same clinic in the year 2012-2013.

**Results:** Among children and adolescents with a diagnosis of PDD, the use of any psychotropic increased from 41.2% in 2004 to 56.3% in 2012 (p: 0.03). There was a very large significant increase in serotonin reuptake inhibitors and methylphenidate utilization in this eight year period (p: 0.03, p: 0.02), with no significant increase also occurring for first and second generation antipsychotics. Patient and demographic variables across studies were also examined and older age and presence of hyperactivity were found to be the major correlates of psychotropic medication use.

**Conclusion:** The hypothesis that the use of psychotropic medications would increase in this period of eight years due to the expanding literature and studies on pharmacotherapy in PDD was revealed to be valid. Knowledge about medication patterns may help clinicians expect and get prepared for future needs.

**Keywords:** pervasive developmental disorders, medication, pharmacotherapy

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S239**

**[PP-246] Schizophrenia and other psychotic disorders****Differential diagnosis of very early onset schizophrenia with bipolar disorder and clozapine as a treatment: case report**Ugur Tekin<sup>1</sup>, Orhan Kocaman<sup>2</sup>, Senay Celenay<sup>1</sup><sup>1</sup>Ege University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Izmir-Turkey<sup>2</sup>Suleyman Demirel University Department of Child and Adolescent Psychiatry, Isparta-Turkey

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Very early onset schizophrenia (VEOS) is a rare neurodevelopmental disorder with a poor prognosis that is characterized with loss of cognitive and social skills. Diagnostic criteria used for schizophrenia in adults are also used for the diagnosis of VEOS. However, clinical manifestations in children may occur in different ways therefore, physicians may have difficulties in treatment planning and differential diagnosis with other psychiatric disorders. Before patients are diagnosed with VEOS, they are usually diagnosed with bipolar disorder, epilepsy, mental retardation, ADHD, anxiety disorders or Obsessive compulsive disorder. As a result, most patients are diagnosed late. In this article, the clinic features of a case of VEOS with several prior diagnoses and treatments are discussed along with the challenges of differential diagnosis and treatment algorithms.

The patient is a 15-year-old female, attending 10<sup>th</sup> grade in a special class. She speaks to herself and laughs, inflicting harm on herself, has fear and suspicions, and eats raw fish or meat. Starting with her infancy, she suffered neurodevelopmental deficiencies. At age of six, she started seeing an imaginary friend, who led her to an attempted suicide. During her schooling years, the patient, who had cognitive and social deficiencies, manifested moods such as extreme cheer and hyperactivity. Since then, she has been treated based on diagnoses such as mild mental retardation, bipolar disorder and ADHD. In her family history, the father has alcohol addiction, a sibling with autism spectrum disorder, and two uncles with psychotic disorder. This case was followed at other hospitals until age ten, at which time she started with our outpatient clinic with a diagnosis of bipolar disorder. Due to lack of improvement in her symptoms, she was accepted as an inpatient, and was later diagnosed with VEOS. In her treatment, due to insufficient response to risperidone and aripiprazole, clozapine was introduced. Shortly after the start this treatment, her positive and negative symptoms improved. When she achieved a level suitable for outpatient follow-up, she was discharged with partial remission.

Despite clues such as premorbid features and lack of functionality, the diagnosis was finalized thanks to the positive and negative symptoms, disorganized speech and behavior that surfaced during the observation period. A successful treatment followed this accurate diagnosis.

For the early diagnosis and treatment of VEOS, it is important to recognize the prodromal symptoms. Evaluation of the positive psychotic symptoms is more difficult at younger ages. It is very common that psychotic-like and real psychotic symptoms are confused, and so, the patients are diagnosed with others disorders instead of schizophrenia, and subsequent incorrect treatments are planned. Therefore, for early diagnosis and treatment, there is a need for studies aiming the recognition and interpretation of the psychotic disorders during infancy.

**Keywords:** very early onset schizophrenia, clozapine, differential diagnosis

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S240**

**[PP-247] Autism****Role of genetics in the etiology of autism: twin autistics**Nilfer Sahin<sup>1</sup>, Hatice Altun<sup>2</sup><sup>1</sup>Mugla University Training and Research Hospital, Department of Child and Adolescent Psychiatry, Mugla-Turkey<sup>2</sup>Kahramanmaraş Sutcu Imam University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Kahramanmaraş-Turkey

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Autism spectrum disorders (ASDs) is characterized by impairment in social interaction, abnormalities in language development, restricted interest and/or repetitive behaviors. The etiology and pathogenesis of autism are not fully elucidated. It has been thought that environmental, immunologic, genetic, prenatal, early postnatal and biochemical events play role in the etiology. Its concordance is reported as 64% in monozygotic twins and 9% in dizygotic twins. In this case report, we will discuss 2 distinct dizygotic twins diagnosed

as autism.

**Case 1:** Twins aged 3 years and 5 months were referred to our outpatient clinic. The girl was suffering from failure to speak. In the history obtained from parents, it was found that she didn't respond to her name; that she didn't establish eye contact; that she interested herself; that she continuously watched music channels; that she had no emotional sharing; that she whirled around; that she watched spinning washing machine for prolonged periods; and that she displayed repetitive movements such as hand flapping, when she was excited or happy. In her examination, it was found that she did not establish communication; that she did not response to her name; and that she displayed stereotypical movements as hand flapping. The patient was diagnosed autism. The boy was suffering from similar symptoms but his communication was better when compared to his sister. In his examination, it was seen that his communication was limited but better than his sister was. He was diagnosed as atypical autism. Special education was recommended to both cases.

**Case 2:** Twins aged 8 years and 6 months were referred to our outpatient clinic. The boy was suffering from self-harming, uneasiness, and irritability. In his psychiatric examination, it was seen that he had agitation; that he had no eye contact, stereotypies of jumping and hand flapping. The girl was suffering from unappeasable crying and harming friends. In her physical examination, it was found that she was agitated and had limited eye contact. When developmental and premorbid history was questioned, it was found out that twins had referred to a pediatrician when they were 3 years old. The boy was diagnosed as autism while the girl was diagnosed as atypical autism. In both cases, 1 mg/kg aripiprazole was initiated. Aripiprazole doses were escalated to 4 mg/kg in the boy and 2 mg/kg in the girl.

**Discussion:** Until today, it was failed to identify a single, major gene responsible from autism in the linkage and correlation studies. This indicates that autism is a complex, genetic disease, displaying heterogeneity. It was found that risk for autism is 30 to 150-folds higher in the siblings of autistic patients when compared to siblings of healthy individuals. It has been suggested that the risk is even higher in monozygotic and dizygotic twins. Our cases also supported this information. The distinct weights of autism in dizygotic twins in our cases demonstrate that there were different factors influencing clinical presentation of autism in addition to genetic mechanisms.

**Keywords:** autism, etiology, genetic

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#### [PP-248] Others

### A catatonic depression case; remitted depression and recurrent catatonia: a case report

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In the current edition of Diagnostic and Statistical Manual of Mental Disorders published by the American Psychiatric Association (DSM-5) catatonia is not recognized as a separate disorder, but is associated with psychiatric conditions such as schizophrenia (catatonic type), bipolar disorder, post-traumatic stress disorder, depression and other mental disorders, as well as drug abuse or overdose (or both). It may also be seen in many medical disorders including infections (such as encephalitis), autoimmune disorders, focal neurologic lesions (including strokes), metabolic disturbances, alcohol withdrawal and abrupt or overly rapid benzodiazepine withdrawal. Lorazepam and electroconvulsive therapy have been well established as the first-line choices for treating catatonia, and a related treatment algorithm has been suggested. However, the real mechanism of catatonia was still unknown. Although the diagnosis of catatonia remains dependent upon the recognition of cardinal motor and behavioral signs and symptoms, a thorough psychiatric and medical evaluation and history is necessary to identify and treat the underlying cause.

In our report, a 75-year-old male has had symptoms, which were lack of appetite, alogia, anhedonia, decreased self-care for two months and urinary incontinence for a week. After medical assessment, it had been said that there was no organic illness and he had been referred to psychiatry. In his psychiatric examination, self-care was decreased, psychomotor activity was decreased, he was alogia, only his eye movements were observed communicative. Affect and mood were depressed. After citalopram and lorazepam treatment was started, clinical improvement achieved. However, catatonia was recurred three weeks after discontinuation of lorazepam. He has had symptoms appetite, alogia, anhedonia, decreased self-care again. Catatonia was then relieved with two days lorazepam administration; and there were no complaints regarding depression. With this report, we will discuss the concept of catatonia accompanied by example of cases.

**Keywords:** catatonia, depression, lorazepam

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S241**

**[PP-249] Schizophrenia and other psychotic disorders****Herpes encephalitis presenting as delirium**Emine Merve Akdag<sup>1</sup>, Hilmi Akdag<sup>2</sup>, Baise Tikir<sup>1</sup>, Makbule Cigdem Aydemir<sup>1</sup>, Erol Goka<sup>1</sup><sup>1</sup>Ankara Numune Education & Research Hospital, Department of Psychiatry, Ankara-Turkey<sup>2</sup>Ankara Numune Education & Research Hospital, Department of Emergency Medicine, Ankara-Turkey

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Encephalitis is an inflammation of the brain. Most often, it is caused by several types of viruses especially the herpes viruses. People with the disease mostly have flu-like symptoms, such as fever, sore throat, cough, and malaise. People with severe encephalitis usually have some change in consciousness, ranging from mild confusion to coma. Herpes viruses selectively impact the frontal and temporal lobes. In this case, we present a patient admitted with the clinical picture of delirium and diagnosed as herpes simplex encephalitis.

A 58-year-old female patient was admitted to our hospital psychiatric clinic with insomnia, feeling discomfort, decreased appetite, feeling of fear for no reason, always using the same words, speaking meaninglessly, pausing and strolling aimlessly. The symptoms that occurred after psychosocial stress were started two days ago. In mental examination, her orientation was partially complete, but the cooperation was limited. Her amount of speech was decreased and the reaction time was prolonged in the conversation. The concentration and the attention of the patient had been decreased. We suspected over her diagnose because of not having any psychiatric disorder before and her atypical clinical presentation. We referred the patient to our emergency department for differential diagnosis to check if, there is another medical condition. In the emergency department, she had been examined again. She had fever and her leukocyte count was increased. Computerized tomography scan of the brain (without contrast) was unremarkable for mass or bleed. The cranial MRI showed left temporal lobe enhancement in the amygdala and insular cortex, which was consistent with herpes encephalitis. Lumbar puncture was performed. The results were confirmed our diagnosis. After these findings, antiviral medication with intravenous acyclovir had been started immediately. The patient hospitalized in infectious diseases and clinical microbiology service with the diagnosis of herpes encephalitis. PCR testing of the spinal fluid confirmed the presence of Herpes simplex virus type 1. She had no fever after two weeks. Her intravenous medication had been completed to three weeks. She was discharged with noneurologic sequel and psychiatric symptoms. She returned her healthy living.

Delirium is a syndrome that presents as severe confusion, disorientation, cognitive deficits and altered sleep-wake cycle, developing with relatively rapid onset and fluctuating in intensity. Delirium itself is not a disease, but rather a clinical syndrome, which results from an underlying disease. Many precipitating and predisposing factors can trigger delirium. Identification of underlying causes and risk factors is very essential for early diagnosis and treatment. We aimed to emphasize that further investigations are very important for the patients admitted with atypical fluctuating cognitive symptoms. Morbidity may be prevented by early recognition.

**Keywords:** delirium, encephalitis**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S242****[PP-250] Psychopharmacology****Varenicline induced mania: a case report and literature review**Huseyin Keles<sup>1</sup>, Abdurrahim Bakirhan<sup>2</sup>, Ismail Ozver<sup>1</sup>, Erol Goka<sup>2</sup><sup>1</sup>Istanbul Forensic Medicine Institute, Istanbul-Turkey<sup>2</sup>Ankara Numune Education and Research Hospital, Department of Psychiatry, Ankara-Turkey

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People with severe mental illnesses, schizophrenia and bipolar disorder, have high prevalence of tobacco use. Table 1 shows related prevalence figures. The newest smoking cessation aid is varenicline, which was approved by the FDA in 2006. Varenicline has a novel mechanism of action, which reduces the urge to smoke tobacco and in theory limits, the positive reinforcement associated with smoking. In February 2008, a Public Health Advisory statement was issued addressing serious neuropsychiatric symptoms including changes in behavior, agitation, depressed mood, suicidal ideation, and attempted and/or completed suicide associated with the use of varenicline. The majority of published clinical trials of varenicline for smoking cessation excluded patients with an active mental illness; thus, the efficacy and safety of varenicline in a psychiatric population are relatively unknown. Although there is potential risk for psychiatric ADEs,

much evidence of risk is based on information contained in case reports, which are not equivocal to that obtained from prospective controlled studies and, therefore, lack of quantitative and qualitative data leaving the frequency of this risk unknown. A 40 years old female patient, who had been diagnosed as mixed anxiety and depressive disorder, was initiated 0.5 mg/day Varenicline initiated and increased to 1 mg/day after two weeks for her smoking cessation at the 4<sup>th</sup> month of 75 mg/day venlafaxine treatment without any psychiatric adverse reaction.. At the end of the third week of varenicline co-medication, symptoms that have been ongoing for a week such as racing thoughts, increased speed of speech, increased psychomotor activity and decreased sleep appeared. Her clinician stopped varenicline but continued venlafaxine. In the second day of varenicline discontinuation, some delirious and psychotic symptoms like disorganized and self-destructive behaviors, deterioration in her orientation, persecutor and reference delusions appeared. She was admitted to the psychiatric emergency department and a statement indicated that she had psychotic agitation and significant irritability. She had auditory and visual hallucination, her sight was poor, and her judgment was deteriorated.

Laboratory data (through complete blood count, blood electrolytes, liver function tests, urinalysis and torrid function tests) were all within normal range. Her 5-panel urine drug screen was positive for benzodiazepines –because of lorazepam administration-, but negative for any other drugs. The patient was admitted to the adult psychiatric unit and immediately administered 2.5 mg lorazepam expited tb p.o. and venlafaxine was discontinued.

After 3 days with lorazepam treatment, her psychotic symptoms disappeared but manic symptoms continued. 5mg/ day haloperidol divided in to two doses administered and at the 6<sup>th</sup> day of haloperidol treatment, her speech was in normal rate tone and latency. Her psychomotor activity and sleep was normal, and her thought processes were logical and linear. Her affect was normal.

Venlafaxine is a potent antidepressant, which has a risk for inducing mania. Varenicline has also serious psychiatric adverse effects. Clinicians should be cautious about varenicline co-medication in patients with previous mental illness.

**Keywords:** varenicline, adverse effects

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### [PP-251] *Sleep disorders*

## Narcolepsy with attention problems and depressive symptoms: case report

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Narcolepsy is a chronic hypersomnia characterized by excessive daytime sleepiness and manifestations of disrupted rapid eye movement sleep stage. Not all symptoms are present in all patients and these may vary and in frequency and intensity over time. Although the specific causes of narcolepsy remain unknown, it appears that there are both environmental and genetic factors contributing to the development of this disease. Narcolepsy can begin at any age, although the majority of the people diagnosed with narcolepsy begin to show symptoms between the ages of 10 and 25 yr. Younger populations report that excessive daytime sleepiness was the first symptom to appear. Prevalence estimates have been reported to be between 168 and 799 per 100,000 in most studies.

A 12-years old schoolgirl (grade 7) was presented to our outpatient clinic with complaints of "daytime sleepiness, inattention and fatigue". According to history obtained from the patient and her mother, it was found out that her complaints began 3 years ago where she felt asleep at home after school and failed to awake despite all efforts of family who broke the door to enter home. Her mother stated that complaints became more severe since then. The patient stated that she felt sleepiness and tiredness throughout daytime even she slept all night and she was falling asleep while eating, walking and standing. Recently, sleep episodes began to occur 2-3 times per day. She felt asleep following the first one or two lessons in the school. Thus, she has experienced difficulty to follow lessons. There was decreased academic success when compared to previous academic level. The patient's friends were sending up her because of this condition. Thus, her relationship with friends was disrupted and she had increased timidity. She stated that she was intensively thinking her disease and she was curious when her disease will over and how disease will affect her future. She was assessed by a psychiatrist 2 years ago and modafinil therapy was initiated. Although the therapy was effective at short-term, symptoms were recurred subsequently. One year ago, she received fluoxetine therapy for 3 months with a diagnosis of depression but no beneficial effect was observed. OROS-MPH therapy was initiated by consideration of narcolepsy. There was marked improvement in daytime sleepiness, fatigue, inattention, and depressive symptoms and the patient is still attending follow-up visits.

The background level of sleepiness can also have significant impact on daytime functioning, impairing concentration, work and school performance, and general quality of life. Excessive daytime sleepiness is treated with psychostimulants. Emotional and behavioral problems may require antidepressant treatment and supportive psychotherapy. As generally seen in children, hypersomnia episodes

were present in our case. Because of sleepiness, the patient had inattention and was incapable to follow her lessons; thus, she had reduced academic success. Her relationship with friends was impaired. In addition, depressive symptoms related to her disease were added. No additional therapy was prescribed as it was considered that attention disorders and depressive symptoms were secondary to narcolepsy.

**Keywords:** methylphenidate, narcolepsy, sleepiness

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### [PP-252] *Mood disorders*

## Thromboembolism under escitalopram treatment

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Management of geriatric depression represents a significant medical challenge. Since they have a favorable side effect profile, selective serotonin reuptake inhibitors (SSRIs) are widely used for treatment of depression in elderly. Despite many cases reported to have increased bleeding tendency caused by SSRIs, there has been only one report about their relation with thrombosis. It has been suggested that the time-wise relation of SSRI use and platelet function might be bidirectional. In this report, we would like to describe a case of deep venous thromboembolism, which progress to pulmonary thromboembolism in a patient with major depression with psychotic features that might be associated with a rare side effect of escitalopram.

A 64-year-old, woman with loss of appetite, difficulty in sleeping, diminishing herself care skills, having the fear of experiencing stroke attack and refusal of taking medicine was brought to Ankara Ataturk Training and Research Hospital Psychiatry Clinic by her relatives and she was hospitalized. With the diagnosis of major depression with psychotic features, escitalopram 5mg/day and haloperidol 1 mg/day treatment was started and escitalopram dosage was increased to 10 mg/day progressively. Afterwards, patient had an experience of pain and swelling on her left leg on the 9<sup>th</sup> day of the treatment, was diagnosed as venous thromboembolism. Since the clinical symptoms of the patient proceeded, the treatment reordered as escitalopram 15 mg/day and haloperidol 3.5 mg/day. In her extrapyramidal system examination upper extremity rigidity obtained and haloperidol treatment was discontinued. On the 21<sup>st</sup> day of the treatment, somnolence, decrement in oxygen saturation level, difficulty in respiration, rising of D-dimer level were observed and with the diagnosis pulmonary thromboembolism, the patient was transferred to the intensive care unit of chest diseases department for further treatment. That there are time wise relation of initiation of escitalopram treatment and appearance of VTE in the absence of other major risk factors such as smoking, venous insufficiency, varicosity, malignancy, previous history of venous thrombosis urged us to think that escitalopram could be the possible reason by increasing serotonin levels in early phase of the treatment causing tendency to thrombosis.

In conclusion, it is important to evaluate the risk factors for venous and pulmonary thromboembolism in geriatric depression patients. SSRIs should be considered as a risk factor for thromboembolism in the acute phase of treatment, although further preclinical researches and clinical observation about association between SSRI use and thromboembolism, are required.

**Keywords:** escitalopram, major depression, thromboembolism

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### [PP-253] *Psychotherapy*

## Psychogenic vomiting treated with psychotherapy: case report

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An 8-year-old schoolboy (grade 3) was referred to our outpatient clinic with "frequent vomiting". In his history, it was found out that he was vomiting when he ate much or his mother insisted to eat or he felt a hard object in his mouth during eating or parents asked to

do something. Eight months ago, number of vomiting episodes was increased, when he learned that his mother received therapy for pregnancy and he began to want sleeping with mother. He was vomiting when his demands were not fulfilled; thus, his parents were trying to meet his demands. He could have vomiting during travel by coach. He was so much concerned about his physical appearance, because his friends were sending up him, as he was weak and flapped-ear. The patient had no concern regarding weight gain and he was experiencing distress about vomiting. The patient was assessed at general pediatrics outpatient clinic first where evaluations directing organic causes were performed. No organic disorder or complication was detected. Thus, the patient was referred to us by the consideration that vomiting episodes could have a psychological etiology. The patient underwent psychoeducation with a diagnosis of psychogenic vomiting. Damages and complications related to vomiting were discussed in the therapy by using Socratic questioning technique. During therapies, information about time he vomited was obtained and the patient and parents were informed about measures that should be taken and behavioral tasks were given. The patient left follow-up visits by his own decision, as all symptoms were relieved after 2 sessions of therapy. By telephone interview, it was confirmed that his wellbeing was persisting.

Firstly, organic disorders and complications secondary to vomiting should have to be excluded in cases presented with vomiting. Then, eating disorders including anorexia nervosa, bulimia nervosa and rumination disorder and neurological disorders such as migraine should have to be excluded. In our case, evaluations directing organic reasons were performed first and no organic disorder or a complication was detected. As concerns regarding weight gain was lacking and the patient experienced distress about vomiting and family relationships were good, we moved away from the diagnosis of other eating disorders. Usually, vomiting episodes secondary to depression and anxiety disorder can be observed in patients with psychogenic vomiting. However, there was no diagnosis of depression or anxiety disorder fulfilling DSM criteria in our patient. Psychogenic vomiting with onset at younger age, which cause challenge to patient and his/her parent, is a disorder that can be rapidly resolved by psychotherapy when precise reason is established and reasons established is not severe.

**Keywords:** psychogenic vomiting, psychotherapy

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#### [PP-254] Others

### Female attempted suicide patients with low HDL levels are at higher risk of suicide re-attempt within the subsequent year: a clinical cohort study

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**Objective:** Our primary aim was to clarify the blood lipid differences [Total serum cholesterol (TC), High-density lipoprotein (HDL), Low-density lipoprotein (LDL) and Triglyceride (TG)] between patients, who had attempted suicide and controls. Our secondary aim was to determine whether we could use the patients' initial lipid profiles to predict suicide re-attempt within the subsequent year.

**Methods:** A total of 225 participants (110 attempted suicide patients and 115 normal controls) were recruited, with no differences in body mass index (BMI), age, and gender. Blood samples were collected from all participants for serum lipid profiles and assayed in an auto-analyzer. During a four-year follow-up, we divided the future suicide attempter group into suicide attempters in the subsequent year (SSY) and suicide attempters after the subsequent year (SASY).

**Results:** The TC, LDL, and TG levels were significantly lower in the suicidal group than in the control group. HDL was significantly higher in the suicidal group than in the control group. Low TG (<70 mg/dL) (OR, 12.9; CI, 5.4 to 30.6) and low LDL/HDL (<1.8) (OR, 4.2; CI, 1.8 to 9.4) were significantly associated with a current suicide attempt. HDL levels in the SSY (41.5±4.5 mg/dL) were lower than in the non-suicide attempters group (NSA) (50.9±10.3 mg/dL) and SASY (58.7±12.8 mg/dL) (d.f.=2, F=5.2, p=0.007). An increased suicide attempt within the SSY in the low HDL group was demonstrated (Log Rank (Mantel-Cox)  $\chi^2=6.68$ ; p=0.01).

**Conclusion:** Our study demonstrates that serum HDL level might be a potential candidate predictor for the future risk of suicidality among patients, who are admitted to the emergency department due to a suicide attempt.

**Keywords:** cholesterol, HDL, suicide re-attempts, triglyceride, Women

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**[PP-255] Mood disorders****Transmagnetic stimulation in treatment of peripartum depression-three case series**

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Transmagnetic stimulation (TMS) is effectively used in the treatment of peripartum depression. It is obvious that it is a safer treatment option particularly in pregnancy and breast feeding period. Our aim is to highlight TMS efficiency with three cases. These three patients were all diagnosed as "Depressive Disorder". The patients received 50 stimuli each consists of 20 pulses (total 1000 pulses) onto the dorsolateral prefrontal cortex with the power level of 80%, and frequency of 20 Hz. After the treatment, the symptoms including anhedonia, suicidal thoughts were improved. As a conclusion, these results suggest that TMS should be used in peripartum depression. Further studies are needed in this era.

**Keywords:** transmagnetic stimulation, peripartum, depression

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**[PP-256] Neuroscience: Neuroimaging - genetics - bioindicators****Genetic factors in etiology of autism spectrum disorder and early onset schizophrenia: two sibling cases**

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Even if reasons of autism spectrum disorders are not clear, there are many factors playing role in the autistic spectrum disorders, it is known that genetic factors have special importance. In recent years, genetic research of ASD has significantly increased.

Like ASD, genetic factors have played a significant role in the etiology of schizophrenia spectrum disorder; environmental factors influence emergence of symptoms. Chromosomes 2, 7, 15, 16 and 22 are the most studied chromosomes to understand common genetic etiologies of these two disorders. Some genes on these chromosomes, such as NRXN1, CNTNAP2, APBA2, DOC2A, PRODH, PDZK1, DISC1 are relatively important than others. In these case reports, we aim to draw attention to the importance of genetics in the etiology of ASD and schizophrenia.

**Case 1:** A 14-year-old patient was brought to our child and adolescent psychiatry clinic for complaints of withdrawal and shyness. According to a medical history obtained from his mother; unwillingness to talk and to be involved with his friends, introversion and stuttering have been seen, when he was 9 years old. These complaints were increasingly worsened, as did his friendships and school lessons. During the examination, child said he did not want to go to school because, he was afraid that if he said something, his friends would tease with him. On the other hand, he did not want to leave the house. His communication with his family was getting worse. According to his first mental status examination, overall appearance was appropriate for his age. The patient was answered the questions without making eye contact. In addition, while he was talking, he looked down. When he stuttered, he got angry with himself and hit his own head with his hand. The patient had no problem with orientation, memory, caution and perception. His thought content and flow were normal. His answers were consistent with his psychosocial development. There was no specific feature in his past.

**Family History:** His father has a congenital deafness; his sister has an ASD and his half-brother from his father's previous marriage is schizophrenia. First, the patient was diagnosed with social phobia; also in the differential diagnosis, he was thought to have pre-psychotic process and prescribed sertraline 25 mg/d. During follow up examination when suspiciousness, visual and auditory hallucination as psychotic symptoms were observed, our diagnosis was changed as early onset schizophrenia and we discontinued Sertraline and Risperidone 1 mg/d was began. After the treatment, visual and auditory hallucinations and suspiciousness had disappeared. The negative symptoms continued. Medication and follow up of the patient is going on.

In the past, it was thought that early onset schizophrenia and ASD were related syndromes even though today it is accepted that they are

separate disorders, Also research support common genetic basis of these disorders particularly related with parental heredity. We want to draw attention to genetic foundation of these disorders. The genetic research of this family of illnesses is going on.

**Keywords:** autism spectrum disorder, schizophrenia, genetic etiology

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### [PP-257] Psychopharmacology

## Psychotropic drug use in a child and adolescent inpatient psychiatry clinic

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**Objective:** The recent studies show that psychotropic drug use in in-patient psychiatric treatments of child and adolescents has been increasing. In our country, the literature regarding the psychotropic drug use of in-patient treatment settings is very limited. The aim of this study was to evaluate the psychopharmacologic interventions in our in-patient unit, which is one of the few inpatient child and adolescent clinics in Turkey.

**Method:** The patients' records whose psychiatric treatments had been conducted between September 2011 and September 2012 in Manisa Mental Health Hospital Child and Adolescent Mental Health Service In-Patient Unit were investigated. The medication that had been given was reported according to the groups (antipsychotic, antidepressants, etc), of active pharmaceutical substance and polypharmacy alternatives.

**Results:** 212 patients were recruited in the study. 201 patients (94.8%) that were taken into study had been given psychotropic agent. Antipsychotics were the most preferred drugs (84.9%) in the treatment. According to the frequency of the drug usage, the other most common ones were antidepressants, anti-anxiety and mood stabilizers in turn. On the other hand, in 152 patients (76.9%), at least two psychotropic agents were used.

**Conclusion:** Results were discussed in relation to the literature regarding psychiatric drug use in child and adolescent age groups.

**Keywords:** inpatient unit, child, adolescent, polypharmacy

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### [PP-258] Psychopharmacology

## Ibuprofen induced extrapyramidal side effects: a case report

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Non-steroidal anti-inflammatory drugs(NSAIDs) are very commonly prescribed and include a diverse group of medications like aspirin, indomethacin, naproxen, ibuprofen, ketoprofen, sulindac, diclofenac and many others used, in the treatment of pain syndrome. With this broad range of use, more knowledge is necessary on the risk of serious side effects in various categories of users of NSAID. Gastrointestinal, hepatic and renal side effects are the most common adverse reactions. In addition, NSAIDs frequently cause adverse effects on the central nervous system, include, for instance, confusion and ataxia with indomethacin however extrapyramidal reactions are reported rarely. Ibuprofen is the most common NSAID which is used for children, has shown to cause several side effects including extrapyramidal symptoms such as involuntary muscle spasm of face and neck. A 12-year-old girl applied to our hospital with oculogyric crisis, complaining of retrocollis with upward deviation of her eyes that seems to be acute dystonic reaction after using a single dose of ibuprofen for headache. There were no personal and familial histories. It was understood that the patient had been admitted to emergency service with the same complaints 16 hours ago

and there were no important findings in physical and laboratory examinations. After IV biperidene injection, extrapyramidal symptoms disappeared.

**Keywords:** child, extrapyramidal side effect, ibuprofen

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**[PP-259] Mood disorders**

## Transcranial magnetic stimulation in the treatment of depression with a comorbid diagnosis of Obsessive compulsive disorder

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Moderate success has been achieved with transcranial magnetic stimulation (TMS) in treating depression and the U.S. Food and Drug Administration has approved for therapeutic use. TMS was also proven effective in treatment of Obsessive compulsive disorder as well. In our case, a 38-year-old male patient with the diagnosis of depressive disorder and Obsessive compulsive disorder underwent 30 sessions of high-frequency TMS (80% of motor threshold; 1000 stimuli/day for 30 days) on the right dorsolateral prefrontal region. The treatment course was assessed with Maudsley questionnaire and Hamilton depression scale. After the sessions, significant improvement was reported both in depressive and obsessive-compulsive symptoms. In conclusion, TMS is not a routine clinical practice. It seems to be a new option in the treatment of depression and Obsessive compulsive disorder. Further studies with large sample sizes are necessary.

**Keywords:** transcranial magnetic stimulation, depression, Obsessive compulsive disorder

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**[PP-260] Eating disorders**

## An anorexia nervosa case presented with a complaint of glass eating

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Anorexia nervosa (AN) is characterized by excessive weight loss resulting in body weight below healthy norms, refusal to reach appropriate weight during ongoing growth process, intensive fear of gaining weight or being obese despite being underweight, and distorted self-perception in terms of body image and body-shape. Lifetime prevalence of anorexia nervosa is 1%. It begins between the ages of 12 to 18. Anorexia nervosa is associated with numerous major medical complications secondary to starvation. In this case report, we will discuss an anorexia case presented with a complaint of glass eating.

A 15-year-old schoolgirl (grade 9) was referred to our outpatient clinic for consultation by pediatrics department, as she ate glass to avoid eating food. The patient was referred to pediatrics outpatient clinic with a complaint of glass eating. Laboratory evaluations revealed that there was no abnormal finding other than decreased vitamin B12 level. ECG was found to be normal. A foreign body image considered as glass was observed on the abdominal radiography. The patient was referred to child psychiatry outpatient clinic, as she cited that she ate glass to be filled during examination. In the interview with the patient and her parents, it was found out that she started a diet with thought of being overweight 3 months ago; that she had weight loss of 20 kilograms at this period; that she refused to eat despite all efforts of the parents; that she continued to consider herself as overweight and began to eat glass for being filled; that she used anti-diabetic drugs of her father for the same purpose; that she had menstrual irregularity over 2 months; and that she had complaints of malaise, unwillingness and insomnia. In the psychiatric examination, she appeared exhausted and weak. She was dysphoric. The patient cited that she felt overweight and she was thinking that she had no abnormality. It was found that there was disrupted body-perception and no insight. Body weight, height, and BMI were 36 kg, 165 cm and 13.22, respectively. The patient was diagnosed as anorexia nervosa

and major depressive disorder and fluoxetine (20 mg/day) and olanzapine (5 mg/day) were initiated to the patient. In the follow-up, it was seen that there was improvement in body-perception and depressive mood and that she began to gain weight.

Patients with anorexia nervosa can make calorie calculations and develop excessive fear against some nutrients by fear of weight gain. Patients can perform excessive exercise. In addition, there may be drug abuse including laxatives, diuretics, those suppressing appetite, thyroid hormone preparations for the purpose of weigh lost. Similarly, there may be abuse of anti-diabetic agents as seen in our case. In addition, our patient preferred glass eating, a rarely encountered method, for weight loss. Rapid weight loss cause many disorder in human body; in addition, methods used to lose weight can also result in severe problems. Thus, clinicians should be careful when assessing cases with anorexia nervosa.

**Keywords:** abuse, anorexia, complications

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### [PP-261] *Attention deficit hyperactivity disorder*

## Parenting styles in children with Attention deficit hyperactivity disorder

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**Objective:** The aim of this study was to investigate mothering in a sample of 58 children with ADHD, and 30 without ADHD and relation between ADHD symptoms, child's characteristics, ADHD subtype, comorbidity and parenting styles.

**Methods:** All ADHD and comorbid psychiatric diagnoses were assessed by semi-structured standardized interviews. Children reported on the Parenting Style Inventory and their mothers reported on The Parental Attitude Research Instrument about mother's parenting style. Conners' Teacher and Parent Rating Scales were used to assess ADHD symptom severity.

**Results:** The results showed that ADHD group obtained less affection/care and more control from the mothers than those without ADHD. Child's hyperactivity and oppositional defiant behavior symptoms were significantly correlated with decreased maternal affection/care and increased maternal controls; child's conduct problems were significantly correlated with maternal overprotection.

**Conclusion:** Our findings suggested that childhood ADHD diagnosis was associated with impaired maternal process.

**Keywords:** attention deficit hyperactivity disorder, parenting

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### [PP-262] *Psychosomatic medicine - liaison psychiatry*

## Evaluating the health and sleep quality of children diagnosed with Duchene muscular dystrophy and the anxiety level of their mothers: a case control study

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**Objective:** Duchenne muscular dystrophy (DMD) is the most common form of muscular dystrophy in childhood and affects 1:3500 live male births. DMD is caused by mutations (typically deletions) in the dystrophin gene on the X chromosome. Since the gene was cloned in 1986, many strategies for treatment have been proposed and tested in animal models, as well as human subjects. Duchenne muscular dystrophy (DMD) leads to progressive muscle weakness of legs and arms, and respiratory and cardiac failure. Most patients become wheelchair-bound and dependent on others for their daily activities during the second decade of life. Thus, children diagnosed with DMD

may be able to reach the fourth decade of life, which is a significant improvement over the historical DMD life expectancy. In this study, we aimed to compare health and sleep quality of children diagnosed with DMD and healthy children; also, we examined the anxiety level of cases and controls' mothers.

**Method:** Fifteen children diagnosed as having DMD and 22 healthy controls were recruited in the study. All case and controls were male. Sociodemographic data form was used to determine the social status of children. Pediatric health-related quality of life (HRQOL) was used for determining the health quality of children, which was filled in by both parents and children. The Pittsburgh Sleep Quality Index (PSQI) is a self-rated questionnaire which was used to investigate sleep quality of children. We rated the anxiety levels of mothers with The State-Trait Anxiety Inventory (STAI) - state anxiety and trait anxiety forms.

**Results:** There was no significant difference between the ages of case and control groups ( $p=0.295$ ). Significant difference was not found between anxiety levels of cases' and controls' mothers in STAI state anxiety and trait anxiety forms ( $p=0.630$ ,  $p=0.395$  respectively). Significant difference was found in HRQOL parent and child forms between cases and controls ( $p=0.02$  and  $p=0.01$ ). Difference between sleep quality of cases and controls was significant ( $p=0.031$ ).

**Conclusion:** The main finding of our study is that patients with DMD have more difficulties in sleeping and their quality of lives is lower than healthy controls. Sleep is crucial for children and adolescents' learning, memory processes and school performance. Research shows that poor sleep, increased sleep fragmentation, late bedtimes and early awakenings seriously affected learning capacity, school performance, and neurobehavioral functioning. Children diagnosed as having DMD may have also sleeping problems so these problems also can affect the quality of life in children. Both children of case group and their parents reported a worse HRQOL on physical functioning, which can be expected considering the progressive nature of their disease. They also reported a worse HRQOL on social functioning and emotional functioning as compared to age-related healthy individuals. Difficulties in motor functioning can affect the emotional, social functioning and may be sleep quality of children.

Mothers' anxiety levels were same with healthy controls' mothers' anxiety levels. This may relate to better coping abilities in mother, whose children diagnosed as DMD adapting themselves to this process.

**Keywords:** Duchenne muscular dystrophy, health quality, sleep quality

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### [PP-263] Psychopharmacology

## A case of thrombocytopenia and anemia due to use of valproic acid

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Valproic acid is a mood stabilizer used in bipolar disorder. As a result of its use, nausea, vomiting, diarrhea, constipation and elevated liver enzymes can be seen. Development of thrombocytopenia is more probable than leucopenia, anemia and pancytopenia, which are rare hematological side effects.

A 58-year-old male patient feeling stronger had increased money spending, paranoid and persecutory delusions, decreased sleep, increased psychomotor activity and aggressiveness for one month. He had a cerebrovascular accident 8 years ago and had aggression and quietness. His blood tests, cranial CT and MR were normal and he was hospitalized as mania. He was given valproic acid 1000 mg and risperidone 2 mg per day. As his motility, increased speech and agitation continued, the risperidone dose was increased to 4 mg/day. In the first week of hospitalization, blood VPA was 60 so VPA was increased to 1500 mg/day. Due to development of Parkinsonism and audiovisual delusions, risperidone was discontinued and olanzapine 5 mg/day was started. His repeated cranial MR was again normal. As his aggressiveness increased, olanzapine dose was increased to 20 mg gradually. In the second week of treatment thrombocytopenia (platelets: 68000) was seen and acetylsalicylic acid and VPA were discontinued and treatment with 20 mg per day olanzapine was continued. VPA level with its use of 1500 mg/day was 104.2. In the third week together with thrombocytopenia, hemoglobin level decreased to 13.2 g/dl. In the 4<sup>th</sup> and 5<sup>th</sup> weeks of treatment motility, speech and agitation decreased and thrombocyte level increased but tendency of decrease in hemoglobin level (12 g/dl) continued. There were no other reasons for etiology of anemia. In the 7<sup>th</sup> week, hematological levels and clinical signs and symptoms were normal so patient was discharged. In the 3<sup>rd</sup> month follow up, hematological levels were normal.

There was a negative correlation between age of the patient and dosage of valproic acid but there was no relation between duration of treatment and thrombocyte level. Especially patients over 60 years hematological side effects increases 2-3 times. In psychiatric patients,

hematological side effects due to valproic acid use were evaluated in some studies. VPA level over 80 microg/ml or use of 1000mg/day was shown to be an important risk factor. In our case, age of 58 years and use of VPA in 1500 mg/day were important in development of thrombocytopenia, which were mostly reported as temporary. Thrombocytopenia returned to normal levels during clinical follow up after discontinuation of VPA. At the same time in 3<sup>rd</sup> week of treatment hemoglobin level decreased to 13.2 g/dl. In the 4<sup>th</sup> and 5<sup>th</sup> weeks of clinical follow up, hemoglobin level decreased to 12.0 g/dl which returned to normal later. In our case, side effects related to anemia disappeared after the discontinuation of valproic acid. In this case, we tried to emphasize the importance of follow up of hematological parameters in the use of valproic acid in middle agers or elderly patients.

**Keywords:** valproic Acid, trombocytopenia, anemia, bipolar disorder

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### [PP-264] *Mood disorders*

## First episode mania in an elderly patient

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Late onset psychiatric disorders are often associated with organic factors, either medical or neurological. First manic episode in old age is rare. We hereby report an elderly patient with first manic episode, who was investigated in detail, but no organic factors were found.

A 81-year-old male patient with a history notable for hypertension was presented with complaints of logorrhea, irritability, insomnia (3 hours per day), sleep needs decrease, increase in sexual desire, excessive eating, giving financial support for unrecognized people, excessive spending money during the last fifteen days. He was hospitalized with the initial diagnosis of mania. His vital signs were unremarkable and neurologic examination was normal. He could not adapt to the mini-mental test. Routine blood biochemistry tests were normal. Considering the organic etiology, cranial MRI and EEG was performed for differential diagnosis. Senile cerebral atrophy on MRI was detected and diffuse irregular ground EEG activities consisting of fast rhythm were revealed. According to the history (taken from his family) and the investigations, dementia syndrome was excluded. Patient's complaints were evaluated as manic episode. He had had an attack of depression in her fifties. Based on the findings of all these investigations, the patient was diagnosed as having the manic episode of bipolar disorder. Valproic acid (500 mg/day) was started. After 10 days, the dose of valproic acid was increased to 1000 mg. After 3 weeks, sleep duration and excess of speech returned to normal was observed.

Our case highlights the fact that primary psychiatric illnesses could occur at late age. New onset mania in older adults is commonly attributed to a secondary cause. Therefore, in elderly cases of mania and hypomania, organic causes should be carefully reviewed.

**Keywords:** mania, bipolar disorder, late onset

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### [PP-265] *Schizophrenia and other psychotic disorders*

## Treatment-resistant shared psychotic disorder (Folie a Deux)- mother and son: case report

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Shared psychotic disorder (folie à deux) is characterized by the development of delusions in another person in the framework of close relationship with the case that has psychotic disorder where clear delusions are dominant. This study will discuss primary a case diagnosed as having schizophrenia and his mother, who shares his delusions.

Primary CASE: Our case is a single male patient, aged 44, a teacher and unmarried and unable to work for 7 years. While the patient was living with his mother and father, his father passed away 8 years ago. He was thinking that his phone was wiretapped and followed. He

shared these with his mother. After a while, his mother started to share the same thoughts with him. The patient started not going to job. They started to live on streets and they were constantly wandering about. They wandered about in streets for 8 years and slept at mosques' gardens or in passage at night. During the psychiatric examination, the patient looked a bit older than his age, his self-care was decreased and was eager to speak and tell the incidents. Associations accelerated. He said that chip was inserted in him and he was thus being followed. Hallucination was not detected. He had no insight. Reasoning was partially sufficient. Cognitive functions were natural. Risperidone 4mg/day and biperidene 5mg/day treatment was launched. It was increased over time and adjusted as 8mg/day. Olanzapine 10 mg/day was added to the treatment of the patient who complained of sleep deprivation and 8 sessions ECT were performed but no change occurred in the patient's delusion. Clozapine treatment was launched and was increased to 400 mg/day. Since no regression occurred in the complaints, amisulpride treatment was added and increased to 800 mg/day. After the fact that the desired improvement was not seen, valproic acid 1000mg/day was added to the treatment. Partial improvement was observed in patient's delusions at the end of two months after his hospitalization.

Secondary case: Our case is a female, aged 70, primary school graduate and has 2 children. She is the mother of the primary case. She has never had any psychiatric complaints. She says that his son has been installed a chip and thus, the organization has been following them. Affection is limited, self-care is medium and she shows her age. She is willing to interview. She has no hallucination. She has paranoid persecutory delusion in thought. Her cognitive functions are sufficient. Reasoning is impaired and she has no insight. 10 mg olanzapine treatment was launched for the patient. After sufficient response was not taken, the dose was increased to 20 mg/day. Partial recovery was observed after approximately one month. In 97% of the cases, the disorder develops between two members of nuclear family. It is frequent in family types, where autonomy of family members is restricted and their personal borders are not definite. Similarly, our primary case is unmarried and lives with his parents. Delusion inheritance of the secondary case did not disappear immediately and partial recovery could be achieved with the treatment in both cases.

**Keywords:** shared psychosis, folie a deux, treatment

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### [PP-266] *Psychotherapy*

## Treatment of a vaginismus case with cognitive behavioral therapy

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In vaginismus, there is literature about that normal vaginal delivery is not possible and it is an indication for caesarean section. Vaginismus is the most common female sexual dysfunction. In the behavioral model of vaginismus, vaginal response against to sexual stimuli represents a conditioned fear response

A 20 years old, high school graduate, housewife woman. Her husband is a 22 years old, high school graduate. She met his wife 5 years ago. After 1,5 year of engagement, they married. They had a 6-month's old baby. Patient was complaining about inability to sexual intercourse with his wife. During their first application, their foreplay time was nearly 15 minutes. Sexual intercourse attempts decreased to once a week. After assessment, she was diagnosed as vaginismus. There was no additional axis 1 diagnosis. Unlike the other vaginismus patients, this case has been pregnant without sexual intercourse and can do normal delivery. The couple was evaluated for cognitive behavioral therapy. Glombok-Rust Sexual Satisfaction Scale (GRSSS) score was recorded as 38, avoidance score 2, vaginismus score 16. Arizona Scale score was 15. We planned eight CBT sessions. The GRSSS decreased to 26, avoidance score to 1, vaginismus score to 11. Arizona Scale score was decreased to 11 at the end of the 8-week treatment.

CBT is an effective choice in the treatment of vaginismus. At the end of 8 sessions, the couple reported that the symptoms of vaginismus were eliminated and full intromission was feasible. The interesting point about this case is that, although symptoms of vaginismus have been persistent, she became pregnant and delivered her child vaginally. Contrary to the current literature, this case suggested that normal delivery could also be possible in some women with vaginismus. The current case also serves as a good example that disproves the myths suggesting that vaginismus can be cured after childbirth.

**Keywords:** cognitive behavioral therapy, vaginismus

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**[PP-267] Psychopharmacology****Clozapine-induced seizures and treatment: a case report**

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A 2-year-old male patient with a five-year history of schizophrenia was brought to our clinic for delusions of reference and persecution, hostile attitudes and social isolation. Within five years, he had received various neuroleptics including risperidone, olanzapine. One year before a treatment with clozapine was commenced and the dosage was increased to 300 mg daily. When patient was brought to our clinic, he was on clozapine treatment 300 mg daily and we titrated up the clozapine treatment to 600 mg daily for six weeks after he was brought us. Patient developed tonic-clonic seizures when dosage was increased to 600 mg daily. After seizure, we reduced clozapine dosage to 400 mg daily. After we decreased the dosage of clozapine our patient clinic symptoms got worsen and we re-titrated the clozapine dosage to 600 mg daily, six weeks after the seizure to maintain the therapeutic effect of clozapine. We recorded EEG one day after the seizure, EEG result was 'normal', and we did not add any anticonvulsant treatment because of his first seizure. After six weeks, second seizure occurred. EEG result was revealing a mild to moderate degree of common ground activity disorder and we added 1000 mg/daily valproic acid.

**Keywords:** clozapine, schizophrenia, seizure

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**[PP-268] Schizophrenia and other psychotic disorders****The comparison of decision-making behavior between patients with schizophrenia and healthy controls**

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**Objective:** In this study, it is aimed to compare schizophrenic patients and healthy controls about decision-making behavior and to assess the relationship of decision making between severity of the disease and impairment in social functioning. The impairment in decision-making effects or not the disease severity and social functioning is aimed to assess.

**Method:** Fifty one patients, who were followed up by Erenkoy Mental Health Research and Training Hospital psychotic disorders outpatient clinic, signed informed consent form and healthy controls who declared that had not have any psychiatric and medical disorders, signed informed consent form were accepted to the study. The patient and healthy groups were accompanied with age, gender and exclusion criteria. The study was started March 2012. Data collecting forms were completed with face-to-face interviews. Thereafter, Personal and Social Performance Scale (PSP), Positive and Negative Syndrome Scale (PANSS), and IOWA Gambling Task (IGT), Color Trails Test (CTT), Wisconsin Card Sorting Test (WCST), Frontal Assessment Battery (FAB) were administered to the patient group and the scores were assessed. IGT, CTT, WCST, FAB were administered to control group and scores were assessed.

**Results:** It was found that decision-making was impaired in schizophrenic patient group when compared to healthy group. Except than IGT-1 score, other IGT scores (IGT-2, IGT-3, IGT-4, IGT-5, IGT net total) in schizophrenic patients were statistically lower than the control group. No statistical difference was detected between groups in IGT-1 score. Statistically meaningful reverse relation was found between IGT-2 (pre-hunch) sub- scale score and PANSS negative syndrome subscale scores, when the relation between IGT subscale and net total scores and PANSS scores were assessed. There was a relation between IGT-5 (conceptual knowledge) subscale and PSP subscale.

**Conclusion:** It was found that decision-making was impaired in the parts that "pre-hunch, hunch and conceptual knowledge" in schizophrenic group when compared with healthy group. Reverse relation was detected in decision-making progress between "pre-hunch" and negative symptoms in schizophrenic patients.

**Keywords:** decision making, IOWA gambling test, schizophrenia

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**[PP-269] Psychopharmacology****Hair loss due to methylphenidate use: a case report**Oznur Bilac<sup>1</sup>, Cemal Bilac<sup>2</sup><sup>1</sup>Manisa Mental Health Hospital, Department of Child and Adolescent Psychiatry, Manisa-Turkey<sup>2</sup>Celal Bayar University Faculty of Medicine, Department of Dermatology, Manisa-Turkey

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Hair loss (alopecia) is a common problem in childhood and the underlying pathophysiology and manifestations are various. Diagnosis and treatment are based on clinical assessment, evaluation of coexisting psychosocial factors and exclusion of other underlying disorders. Hair loss can occur as a side effect of a medical treatment such as chemotherapeutic drugs, anti-thyroid drugs, anticoagulants, triparanol, lithium and the antiepileptics or the analogues of vitamin A. Hair loss is an uncommon side effect of psychotropic agents. For these reasons, the real prevalence of hair loss due to psychotropic drugs is not obvious. Diagnosing drug-induced hair loss is difficult. The only way to establish causality is to discontinue the use of medication followed by close observation of hair renovation and recurrence of hair loss upon restarting the same drug. In this report, we discuss a 12-year-old boy, who developed hair loss under methylphenidate treatment with no underlying medical disease and family history of alopecia. During the follow up period, methylphenidate was discontinued and hair loss resolved within one month. In this presentation, we want to emphasize that methylphenidate could cause hair loss and this side effect should be noted in clinical practice.

**Keywords:** methylphenidate, hair loss, side effect**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S254****[PP-270] Neuroscience: Neuroimaging - genetics - bio indicators****Effect of maternal depression to brain-derived neurotrophic factor levels in fetal cord blood**Erdem Onder Sonmez<sup>1</sup>, Faruk Uguz<sup>1</sup>, Mine Sahingoz<sup>1</sup>, Gulsum Sonmez<sup>2</sup>, Emre Yilmaz<sup>1</sup>, Nazmiye Kaya<sup>1</sup>, Kazim Gezginc<sup>3</sup>, Zeynel Gokmen<sup>2</sup><sup>1</sup>Konya Necmettin Erbakan University, Faculty of Medicine, Department of Psychiatry, Konya-Turkey<sup>2</sup>Konya Research and Training Hospital, Department of Pediatrics, Konya-Turkey<sup>3</sup>Necmettin Erbakan University, Meram Faculty of Medicine, Department of Obstetrics and Gynecology, Konya-Turkey

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**Objectives:** In the present study, we aimed to assess the association between cord blood Brain-Derived Neurotrophic Factor (BDNF) concentration and maternal depression during pregnancy.

**Method:** Forty-eight pregnant women admitted for elective caesarean section to The Konya Research and Training Hospital and Konya Necmettin Erbakan University Meram Medical Faculty, department of Obstetrics and Gynecology between October 2011 and August 2012 were enrolled into the study. The study group comprised 23 women diagnosed with depression during pregnancy and the control group included 25 pregnant women, who did not experience depression during pregnancy. The groups were well matched with regard to age, employment and income status, history of abortion, gender of children and the anesthesia technique used during surgery.

**Results:** Cord blood BDNF concentration was significantly lower in babies, whom was born to mothers with depression as compared with those in the control group. Additionally, the duration of pregnancy was significantly shorter in the group of mothers who had depression and birth weight was significantly less in babies whom was born to mothers with depression.

**Conclusion:** Given the fact that BDNF plays a major role in neurodevelopment, one may assert that a decrease in BDNF concentration during pregnancy may disturb fetal neurodevelopment (Nieto et al. 2013). The diagnosis and treatment of maternal depression during pregnancy is essential for normal fetal neurodevelopment.

**Keywords:** brain-derived neurotrophic factor, pregnancy, depression, umbilical cord**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S254**

**[PP-271] Addictions****The sociodemographic and alcohol-substance usage characteristics of patients, applied to alcohol and drug addiction treatment center of an education and research hospital**

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**Objective:** The aim of the study was to investigate the sociodemographic and alcohol-substance usage characteristics of patients, who were applied to the Alcohol and Drug Addiction Treatment Center (AMATEM) of Ankara Numune Education and Research Hospital.

**Method:** In this study, the alcohol and substance users, who applied to Alcohol and Drug Addiction Treatment Center (AMATEM) between 1 January and 15 January 2013, have been interviewed. In addition, a semi-structured questionnaire has been used.

**Results:** Of 302 patients, 283 were male and 19 were female. According to the choice of drugs, 14.6% were alcohol users, 53.3% were heroin users, 5.6% were cannabis users, 3.6% were users of other drugs (cocaine, ecstasy, volatile) and 22.8% were mixed-drug users. This study revealed that there was a great deal of drug and alcohol users in the family of the drug and alcohol users (30.5%). The study showed that 21.5% of the patients were having legal problems before starting to use alcohol-substance and 36.4% of the patients were having legal problems after starting to use alcohol-substance. It was found that 24.4% of the heroin users was IV (intravenous) users. The 55.8% of IV users have used the needle of other IV drug users. It has also been observed that 9.5% of them never sterilized the needle they used. The 58.9% of patients have not read any book and 31.8% have not read newspaper. The study showed that the cannabis users were making some activities like reading book-newspaper, going to cafe with friends, travelling to other cities more often than the other groups of users. Moreover, the study showed that 19.9% of the patients have not sustained education, 47% have lost job and 22.5% had an accident because of alcohol-drug usage.

**Conclusion:** It was noticeable that there was a great deal of drug and alcohol users in the family of patients. It has been noticed that the social status of cannabis users were protected better than the other groups of users. The great deal of IV users, have used the needle of other users and have sterilized the needle with an incorrect method, so it is noticeable that IV substance users were under a high risk of infectious diseases. As a result, of the use of alcohol and/or substance, they were losing their jobs and it showed that the families of alcohol and substance users were being victims. The results of this study show that; the alcohol and substance abuse negatively affects many areas of life like social life, family and community relationships, job and education. Besides, alcohol and substance abuse causes increased illegal activities and disrupts the social peace. The alcohol and substance abuse is being a great problem day to day, so a multidisciplinary approach for treatment, which contains editing the social life, family and community relationships, the education and work life along with pharmacological treatment, should be developed

**Keywords:** alcohol, substance users, sociodemographic characteristics

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**[PP-272] Specific learning disorder****Clinical and sociodemographic features of children and adolescents with specific learning disorder**

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**Objective:** We examined retrospectively the data collected in Ankara Pediatric & Pediatric Hematology Oncology Training and Research Hospital Child Psychiatry Department from May 2012 to May 2013 to detect and evaluate of child or adolescent with specific learning disorder (SLD).

**Method:** All data recorded over a-year period in Child Psychiatry Department were reviewed. Data of children (under 12-year-old group) or adolescents (12-year-old and above group) diagnosed with SLD according to the DSM-IV-TR criteria were analyzed. Clinical and sociodemographic features of them were entered SPSS 17.0 software. To make an analysis of a relation between IQ scores and SLD

subtypes One-way ANOVA test and any association between SLD subtypes and sex or age groups Univariate variance analysis were used.  $p < 0.05$  was accepted as the threshold for statistical significance.

**Results:** We found the record of total 716 children or adolescents within the total 25.013 admission over in a year-period (2.9%). In sampling, 65.4% (n=468) of them were boys and 87.2% of them were under 12-year-old group. Mean age of patients was  $8.9 \pm 1.7$  years of age (6 to 14 years). Boys/girls ratio was 1.8:1 and children/adolescents ratio was 6.8:1. SLD subtypes distribution was the following: 71.6% (n=513) of all patients had "reading disorder", 12.4% of all (n=89) had "disorder of written expression", 5% of all (n=36) had "mathematics disorder" and 10.9% of all (n=78) had "learning disorder not otherwise specified". 58.5% (n=419) of them had no any comorbid psychiatric disorders whilst 16.1% (n=115) of children or adolescents had borderline intellectual functioning (full-scale IQ scores: 70-79), 14.4% (n=103) of all had attention deficit hyperactivity disorder (ADHD), and 5% (n=36) of all had any of anxiety disorders. Neither verbal IQ scores nor performance IQ scores obtained from Weschler Intelligence Scale for Children-Revised (WISC-R) were not significantly different between four subtypes of SLD ( $F=2.401$ ,  $p=0.067$  for verbal IQ;  $F=1.604$ ,  $p=0.187$  for performance IQ, respectively). Also any relation were not found between subtypes of SLD and sex ( $F=2.151$ ,  $p=0.093$  for verbal IQ, and  $F=0.426$ ,  $p=0.734$  for performance IQ) or age groups ( $F=1.945$ ,  $p=0.144$  for verbal IQ; and  $F=0.251$ ,  $p=0.778$  for performance IQ) in terms of each IQ scores distribution as well.

**Conclusion:** In conclusion, the number of boys with SLD was almost twice as high as the number of girls. Moreover, SLD seen in an age group under 12 was nearly 7 times higher than observed in adolescents. Any type of SLD did not show any significant difference in verbal or performance IQ scores terms. It might be inferred from this result that the patterns of verbal or performance scores of WISC-R are not specific for any learning disorder subtypes. In literature, a similar result with this has been reported before by Anguilli and Siegel. Further research would make clear the relation between cognitive measurements by using a number of intelligence scales and specific learning disorder.

**Keywords:** child, adolescent, specific learning disorder, WISC-R

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### [PP-273] Tic disorders

## Successful treatment of Tourette's syndrome impeding surgical intervention: a case report

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Tourette syndrome (TS) is a complex neuropsychiatric disorder with onset at childhood and unclear etiology. It is characterized by multiple motor and vocal tics that are present for more than one year. However, presence of motor and vocal tics at the same is not mandatory. Coprolalia (exclamation of obscene words) has been reported in 36-60% of the patients with TS. In this case report, we will discuss a case with Tourette's syndrome impeding surgical intervention.

A 15-year old schoolgirl (grade 10) was presented to our outpatient clinic for consultation, as nevus excision scheduled by plastic surgery department but the surgery was cancelled due to her tics. In the history taken from the patient and her mother, it was learned that the patient had been suffering from jumping or exclamation of obscene words for over 2 years when someone touched or when she felt that one would touch to her back; that she had failed to control these behaviors; and that she had experienced problems in the school with impaired relationship with her friends. The patient who applied to plastic surgery outpatient clinic with complaints of nevi, and nevus excision was scheduled for a surgical intervention. However, the patient was referred to child psychiatry outpatient clinic, as excision of nevi at her back and abdominal skin was impossible under local anesthesia because of her tics. Orientation, memory and attention examinations were normal. No perception disorder was detected in the patient with normal content of thought. She was diagnosed as Tourette's syndrome and 0.5 mg/day risperidone was initiated which then escalated to 1 mg/day. On the control visit after a month, it was found that she had no jumping or use of obscene words in case of touching to back, but she was still uncomfortable. It was found that nevi at abdominal region were excised without any problem at plastic surgery department but excision of nevi at the back was delayed. Risperidone dose was escalated to 1.5 mg/day because incomplete recovery of complaints. On the next control visit, it was seen that there was complete recovery in her complaints. It was also found out that nevus excision at back region under local anesthesia was scheduled by plastic surgery.

Studies demonstrated that there was a negative social perception against children and adolescents with vocal or motor tics and that chronic tic disorders markedly decrease quality of life. Tic disorders persisted in adult life can be associated with severe symptoms

including motor tics that involve painful or self-harming episodes (hitting or biting) or coprolalia and copropraxia that can cause social stigma. In our case, tics did not only cause social challenges but it also impaired quality of life with an extent that impedes a medical intervention. This case indicated that recognition and control of tics in the management of TS is of importance regarding quality of life.

**Keywords:** Tourette syndrome, quality of life, risperidone

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**[PP-274] Schizophrenia and other psychotic disorders**

**Obsessive compulsive disorder emerging in the final trimester of pregnancy: a case report**

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Pregnancy and postpartum period are periods when psychiatric disorders emerge or exacerbate. These periods are effective in the emergence or the course of OCD. It is reported that OCD is frequent in the third trimester of pregnancy and its characteristics during pregnancy and postpartum are similar. This study will discuss an OCD case starting at 31<sup>st</sup> week of pregnancy.

The woman, aged 32, is married and works as a nurse and has a child aged 4. The patient who sees a blood spot in her uniform washes her uniform immediately after arriving at home, wipes everywhere at home and takes a bath. Then, she starts to worry that diseases such as Hepatitis B, Hepatitis C and AIDS will be transmitted to her from the patients and the vicinity. She reports that hand washing during 36<sup>th</sup> week of her pregnancy were 50-60 times a day. She runs away from street cats with the fear of contracting rabies. She cannot touch her child, fearing that germ may be transmitted to her child. She sits at a corner at home almost in crinkled position and does not want to get out of bed. She started not to go outside with the fear that germ might be transmitted. She was referred to a psychiatrist with the recommendation of gynecology specialist. Sertraline started to be given to the patient 20 days ago and the dose was increased to 75 mg/day and when sleep withdrawal caused problem 10 days ago, 2.5 mg/day olanzapine was added. It was observed during the examination of her mood that her mood and affection were anxious. It drew attention that she considered a spot on the armchair upholstery to be a blood spot and was afraid and she could not concentrate on the interview and focused on checking the environment. Thoughts that she cannot bear with this situation were dominant in her thought content. She did not have suicide thoughts. Her Y-BOCS score was 30. The patient, who continued pharmacological treatment and had a difficult week because of her obsessions, delivered her baby with caesarean at 37<sup>th</sup> week. She discontinued her medication, at her own will, since she wanted to breastfeed the infant. Since she experienced an intolerable anxiety 5 days later, she stopped breastfeeding and started to take her medication. When the patient was seen again 2 months after the delivery, 200 mg/day sertraline and 1mg/day risperidone treatment had been gradually started by another doctor. The patient was breastfeeding and was relieved. Her Y-BOCS score was 15. She could take good care of her baby. Her sleep was good. Her anxiety was highly decreased. Hand washing and baths prominently decreased. Her obsessions related to transmittance were partially ongoing. Women should be scanned for OCD in pregnancy and postpartum period. OCD diagnosis should be made in these periods as soon as possible, correct family and patient psychoeducation should be provided, and psychopharmacological treatment and/or psychotherapy should be applied on time.

**Keywords:** pregnancy, Obsessive compulsive disorder, trimester

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**[PP-275] Others****Neuropsychological assessment children and adolescents with acute carbon monoxide poisoning**

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**Introduction:** Carbon monoxide (CO) poisoning results in delayed neuropsychological sequel (DNS) in some patients after recovery of acute symptoms. DNS symptoms change from slight impairment in attention, memory and visuospatial skills to severe neuropsychiatric disorders. The aim of this study is to assess the frequency and clinical features of DNS in patients with CO poisoning.

**Method:** In this study, retrospective patient charts were reviewed who applied to hyperbaric oxygen therapy (HBO) due to CO poisoning. Parent-report of children's depression inventory (PR-CDI), child-report children's depression inventory (CR-CDI), state-trait anxiety inventory for children (STAIC), digit span subtest of Wechsler intelligence scale for children-revised (WISC-R), child behavior checklist, raven standard progressive matrices test (RSPM), verbal and non-verbal cancellation tests were applied. Two interviews were conducted, first initially; the second one is one month later. Differences were compared between neuropsychiatric symptoms and symptoms levels of inventories, checklist and tests, which were applied initially and at first month. In addition, impact of COHb levels, duration of exposure to CO, total duration between beginning of poisoning and starting to HBO treatment, experience of syncope and number of HBO session on neuropsychological assessment scales were examined. SPSS, version 15.0 was used for the statistical analysis. Mann-Whitney U test was used for comparison of differences between groups. The correlation between variables was analyzed with the Pearson correlation test. P values less than .05 were considered significant.

**Results:** In this study data of 27 patients were assessed. Their ages ranged from 6 to 18 years, with a mean of 11.8±2.7 years. Only one patient had DNS symptoms including tinnitus and headache. It was revealed that COHb levels did not have effect on neuropsychological assessment scales, but experience of syncope had effect on anxiety symptom levels. Also behavioral problems worsened as number of HBO session increase, prolonged time before HBO session have negative effects on attention.

**Conclusions:** It is revealed that duration of exposure to CO, total duration between beginning of poisoning and starting to HBO treatment and number of HBO session had negative effects on psychiatric symptoms, attention and behavioral problems.

**Keywords:** CO poisoning, neuropsychology, sequel, depression, anxiety

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**[PP-276] Psychopharmacology****Bipolar disorder cyclicity and psoriasis: a case presentation**

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Psoriasis is a chronic, persistent, T-cell mediated inflammatory skin disease of multifactorial etiology. Stress and psychosocial factors have prominent role in both onset and exacerbations of the disease. A 52 years old married, primary school graduate female patient was admitted to our outpatient clinic by a relative with complaints of lack of will and interest, depressive mood, fatigue, lack of energy, excessive sleeping, loss of appetite and feeling worthless. She has suffered from Bipolar disorder I for 30 years and psoriasis for 20 years in her medical history. She had pruritus, excoriated psoriatic plaques in mainly extensor sites of extremities, scalp and the whole body. Her husband described five manic and 8-9 depressive episodes. Her treatment was regulated with the diagnosis of depressive episode (fluoxetine 20 mg/day, valproic acid 1000 mg/day and quetiapine XR 400 mg/day). The patient and her husband refused to use the drugs recommended by dermatologist with the reason that drugs exacerbate her psychiatric condition. The patient admitted to our clinic with

hypomanic symptoms 20 days after the first visit. However, the skin lesions had recovered dramatically without taking any medication for it. Fluoxetine treatment was stopped. Valproic acid dose was increased to 1500 mg and quetiapine XR dose to 600 mg. She was called for control after 15 days. In control visit, her psychiatric symptoms were in remission. No augmentation or worsening was observed in skin lesions. We conclude that treating underlying psychiatric condition would improve the patient's dermatologic disease and enhance medication compliance. The cooperation of dermatologist and psychiatrist would increase the treatment success of diseases.

**Keywords:** psoriasis, bipolar disorder

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[PP-277] *Psychosomatic medicine - liaison psychiatry*

## A factitious disorder case applied to hospital with psychotic symptoms and manifested itself with hallucinations

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Factitious disorder can be defined as producing symptoms of physical or mental illness in a voluntary or involuntary way, playing sick role and providing emotional satisfaction through the characteristics mentioned above. Patients mostly lead to surgical interventions and hospitalization because of unveiling these symptoms as factitious, aggravating or diverting them. The prevalence of factitious disorder is precisely unknown and case reports and case series are substantial since the nature of the disorder inhibits the traditional epidemiological studies. In the so-called study, a case, which was directed to Child and Adolescent Psychiatry Service with psychotic disorder pre-diagnosis; had approximately 20 weeks hospitalization and diagnosed with factitious disorder during this period will be discussed.

In the history of a 17-year-old high school student case, it was recorded that the patient had complaints for nearly 5 years such as seeing creatures, hearing noises and smelling odors that nobody experienced. Moreover, there were other complaints that so-called creatures and people could harm her and she could think about other people's dialogues about herself in the last 2 years period. As a result of some behaviors that have been seen for the last two months such as harming herself added to this table; she was directed to our service by a child psychiatrist upon a consideration that she could need an inpatient treatment. It was also discovered in the follow-up that several antipsychotic drugs were tried for her treatment; however, there was no regular use. Antipsychotic treatment of the patient was discontinued in the sixth week as she met the factitious disorder criteria according to DSM 5, which had been actualized by 20-week hospitalization therapy period at Child and Adolescent Psychiatry Inpatient Service and because there were no defined or supplemented psychotic symptoms observed. In the proceeding period, the patient was reinitiated lower dose antipsychotic treatment in the 18<sup>th</sup> week as there were impulse control issues. Probable causes of patient's displaying factitious disorder during the hospitalization period were studied. While the patient's partial awareness increased associated with underlying causes of her psychotic symptoms at the end of the hospitalization period, it was observed that pseudo hallucination and pseudo delusions continued.

The issues such as the period of diagnosis with factitious disorder, individual or familial characteristics leading to factitious disorder, possible incorrect and/or inappropriate medication alternatives of the patient who applied to us with psychotic symptoms were dealt with related literature involved.

**Keywords:** factitious disorder, psychotic symptoms

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**[PP-278] Schizophrenia and other psychotic disorders****Electroconvulsive therapy and clozapine in with early onset schizophrenia**Hilal Aydemir<sup>1</sup>, Sevgi Bayram<sup>2</sup>, Mustafa Basturk<sup>2</sup>, Didem Behice Oztop<sup>1</sup><sup>1</sup>Erciyes University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Kayseri-Turkey<sup>2</sup>Erciyes University, Faculty of Medicine, Department of Psychiatry, Kayseri-Turkey

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Early onset of schizophrenia spectrum disorders (SSDs), with onset of psychotic symptoms before age 18, is a severe form of the disorder that presents with more social disability and poor outcome. In general, the pharmacological treatment, as in adult onset schizophrenia, consists of antipsychotics. We use a rare treatment in child and adolescent that Clozapine and Electroconvulsive therapy.

A 17-year-old male patient is our case. When he was 15 years old, first symptoms of social withdrawal and impaired cognitive performance in domains such as attention, concentration, memory and planning were observed. He also experienced incoherent speech, flight of ideas, thought blocking, flat affect, bizarre behavior. He was consistently diagnosed as having schizophrenia and begun antipsychotic treatment. However, he did not have benefit with thus; he was referred to our clinic by parents. The presenting complaints included phobias, doubts, hearing voices and laughing at him. In his medical history, it was found out that the patient did not want to go out of home within prior 3 months; that he had poorer self-care and did not want to take bath; that he had not any communication with anybody and he was thinking that they would harm. He was hitting to people around without any reason. In the mental state evaluation, the patient was conscious, oriented but had difficulties in cooperation. He had limited affection and he described auditory deficit. He had prolonged reaction times, blocks and impaired ability of abstract thought. EEG and MR imaging were obtained to exclude organic reasons. Both evaluations were settled as normal. He has used aripiprazole, paliperidone and olanzapine. The patient, who had persisting delusions and hallucinations without response to three distinct antipsychotic drugs, was diagnosed as refractory schizophrenia. Thus, Clozapine was initiated to the patient, but no regression was observed in symptoms despite increasing dose up to 300 mg/day. ECT was scheduled to the patient and Clozapine dose was increased to 400 mg/day. After 11 sessions of ECT, reaction time was shortened and blocks were decreased. A partial decline was found in delusions and hallucinations with increasing communication with other people.

In adolescents, clozapine has been shown to be superior to other second-generation antipsychotics (SGAs) for treating psychotic disorders. It has also been associated with a decrease in violent behavior in this population. Moreover, both a decrease in the number of hospitalization and a greater ability to live in less restricted environments have been described, when childhood-onset schizophrenia was treated with clozapine. Regarding safety, clozapine may cause adverse effects similar to other antipsychotics. Other potential adverse effects include seizures and agranulocytosis. These factors complicate the use of the drug while making it a second-line treatment for SSDs in both adolescents and adults. Clozapine was initiated to our patient, but no regression was observed in symptoms and we decided to ECT. Electroconvulsive therapy is an effective treatment for resistant schizophrenia in adults. There are several reports showing that ECT was a safe and effective treatment for some adolescents with SSDs. ECT augmentation needs further validation in child and adolescent Psychiatry. The combination of clozapine and ECT has been reported to be superior to either treatment alone. It should be considered for the treatment resistant schizophrenic patients.

**Keywords:** clozapine, electroconvulsive therapy, schizophrenia**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S260****[PP-279] Psychopharmacology****Huntington Disease, psychosis and clozapine treatment: a case report**

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Huntington's disease (HD) is a progressive, inherited, debilitating disease with onset between 30 and 50 years of age. The disease has a slow progress and affects patient's ability to think, talk and move by degeneration of the cells in the basal ganglia. Huntington's disease is characterized by chorea, but some other movement disorders including dystonia and bradykinesia also occur. Patient may also present with psychiatric symptoms such as depression, apathy, anxiety, and psychosis. Prevalence of psychiatric symptoms ranges from 35% -

75%. Suicide rates among patients with HD are 4–6 times higher than the general population. Psychosis occurs in HD with a frequency of 6% to 25%. The most common type of psychosis in HD patients is the paranoid form. Patients with an early-onset HD have a greater risk of developing psychosis. Most studies have shown beneficial effects of typical and atypical antipsychotics in HD accompanied with psychosis. The important part of the treatment is that both neurologic and psychiatric features of the patient's presentation had to be considered, when choosing the medication. In the present article, we concentrated on pharmacotherapy for psychotic symptoms in the management of Huntington's disease.

A 49-year-old man with Huntington's disease of 7 years' duration was presented with agitation, aggression, paranoid ideation and persecutory delusions that had begun 8 months ago. He had been treated with 15 mg/day olanzapine in an ambulatory care clinic. Due to the unsatisfactory control of the psychiatric symptoms, the dose of olanzapine had been reduced and stopped gradually. Risperidone had been added on the treatment and gradually raised to 2 mg daily. This change had not been effective in the psychotic symptoms; however, there had been an improvement in aggressive behaviors. He presented with a psychosis accompanied by aggressive behavior leading to admission to the locked ward of our hospital. Clozapine was ordered to the patient and the dose was gradually titrated from 25 mg/day to 300 mg/day. Based on the persistent psychosis with paranoid ideation, amisulpride was added to the treatment. His delusions improved slightly, and further add-on treatment with amisulpride (800mg daily) brought a further beneficial effect on psychotic symptoms. The patient's aggressive behaviors reduced and eventually got better; then he was discharged from the hospital. Seen in our ambulatory care clinic that the patient had some psychotic symptoms (jealousy delusions) persisting. The results of recent researches on the role of clozapine in the treatment of Huntington's disease (HD) and other movement disorders is not clear enough. The effect of clozapine on chorea and functional disability is studied more commonly. The atypical neuroleptic clozapine has an extremely low incidence of extrapyramidal side effects and is thought to be favorable in the treatment of chorea. Most clinical trials have shown also a resolution or improvement with clozapine in psychotic symptoms accompanying Huntington's disease (HD). This case shows that atypical antipsychotics such as clozapine may be used to control psychotic symptoms in Huntington's disease but not always are efficacious enough.

**Keywords:** Huntington's disease, psychosis, clozapine, treatment

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### [PP-280] Addictions and related disorders

## Emotional dysregulation in substance use disorders; a study in adolescents

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**Objective:** Psychiatric comorbidity and impaired emotional functioning have been previously reported in adult substance abusers and adult attention-deficit /hyperactivity disorder (ADHD) but have been less well documented in adolescents. Thus, we investigated mental health problems and emotion regulation abilities in adolescents with substance use disorders.

**Methods:** 16 drug addicts (DA) and 16 healthy controls completed a battery of self-reports that is used for measuring depression (Beck Depression Inventory), anxiety (STAI-T, STAI-S, Beck Anxiety Scale), impulsivity (Barratt Impulsiveness Scale), emotional regulation ability (The Difficulties in Emotion Regulation Scale (DERS)), ADHD characteristics (Turgay Attention Deficit Hyperactivity Disorders Scale (which reported by family) and addiction severity (operator form of Addiction Index Profile- for adolescents (bapi-e)).

**Results:** Mean age of abusers was 16,06 and age of onset of substance was 13. Current axis I disorders among participants are depression (n=9, 56%), conduct disorder (n=5, 29.4%) and ADHD (n=3, %18.8). Average score of bapi-e was 5.42 which shows high addiction severity. Most common substances used by abusers were respectively cannabis and volatile substances. Average total DERS score was 104 in substance users although 82,3 in control group, mean subscale scores in order of substance users and healthy control group were; goals:17.5-14.8, strategy:22.31-17.1, non-acceptance:12.37-10.68, impulse:17.93-14.8, clarity:13.81- 10, awareness:18.62-15.68.

**Conclusion:** In substance users' total DERS score and subscale scores about strategies, impulsivity, awareness were significantly higher than those of age and gender matched healthy control group. These results suggesting increased emotional dysregulation in substance abuse disorder are consistent with findings in research of adult emotional regulation in substance abuse disorders.

**Keywords:** adolescence, substance use disorders, emotional dysregulation

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S261**

**[PP-281] Conduct disorders****Predictors of hospitalization for conduct disorder in adolescents seen in emergency room**Caner Mutlu<sup>1</sup>, Melike Ozdemir<sup>1</sup>, Ozgur Yorubik<sup>2</sup>, Ali Guven Kilicoglu<sup>1</sup><sup>1</sup>Bakirkoy Prof. Dr. Mazhar Osman Research and Training Hospital, Department of Child and Adolescent Psychiatry, Istanbul-Turkey<sup>2</sup>Uskudar University, Faculty of Health Science, Division of Child and Adolescent Psychiatry, Department of Child Development, Istanbul-Turkey

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**Objectives:** Although conduct disorder is one of the most common diagnoses in youths admitted to psychiatric emergency service, little is known about predictors of those, who need hospitalization. In this 6-month retrospective study, we aimed to identify predictors of hospitalization for conduct disorder (CD) in adolescents seen in emergency room of a mental health hospital.

**Method:** Adolescents with CD were evaluated by age, gender, school status, family structure, presenting symptoms (aggression, suicidal ideation, suicide attempt, self-harm behavior), duration of presenting symptoms, comorbid psychiatric diagnoses, history of emergency service or outpatient clinic application, previous psychiatric inpatient treatment and family history of mental disorders, according to first admission to emergency room during the study period.

**Results:** Mean age was  $15.69 \pm 1.26$  (12-17) years and 61.8% (n=89) were female. Of the total of 144 patients, 50 (34.7%) were hospitalized. After controlling for the age, gender, school status, family structure, presenting symptoms (aggression, suicidal ideation, suicide attempt, self-harm behavior), duration of presenting symptoms, having a comorbid psychiatric disorder, history of emergency service or outpatient clinic application, previous psychiatric inpatient treatment and family history of mental disorders, we found that suicidal ideation (B:2.110; 95% confidence interval [95% CI], 2.690-25.315;  $p < 0.0001$ ), having a comorbid psychiatric disorder (B:1.623; 95% CI, 1.986-12.944;  $p = 0.001$ ) and having family history of a mental disorder (B:1.314; 95% CI, 1.433-9.668;  $p = 0.007$ ) were the independent predictors of hospital admissions for CD in adolescents seen in emergency room.

**Conclusions:** Our findings indicate that clinicians in emergency settings should be aware of the prediction of hospitalization in adolescents with CD who have suicidal ideation, a comorbid psychiatric disorder and family history of a mental disorder.

**Keywords:** conduct disorder, hospitalization, emergency

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S262**

**[PP-282] Schizophrenia and other psychotic disorders****Schizophrenia-like psychotic symptoms in a patient with confirmed Huntington's disease: a case report**

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Huntington's disease is an incurable, adult-onset, autosomal dominant inherited disorder associated with cell loss within a specific subset of neurons in the basal ganglia and cortex. Characteristic features of HD include involuntary movements, dementia and behavioral changes such as depression, episodic bouts of mania, psychosis, obsessive-compulsive symptoms, sexual and sleep disorders and changes in personality. The aim of this case report is to discuss diagnostic and therapeutic challenges in a patient with a mutation in the gene responsible for the development of Huntington's disease (HD), who presented schizophrenia-like psychotic symptoms.

A 53-year-old, married, secondary school graduate, unemployed, male with genetically-confirmed HD for 12 years was hospitalized to our psychiatry service because of aggression, self-mutilation, avolition, dysphoric mood, insomnia, disorganized speech and jealousy delusions about his wife. He had movement disorder for nearly 20 years and his psychotic and affective symptoms were occurred 7 years ago, but for one month within this period, all symptoms were increased and difficulty in swallowing had developed. He had already used quetiapine, aripiprazole and benzodiazepine but these treatments enhanced choreic movements in our patient. After the hospitalization we organized his treatment as olanzapine 20 mg/day IM, clonazepam 3 mg/day. Especially his psychotic symptoms declined but because of swallowing problem persisted and he was transferred to neurology service.

Patients with HD can exhibit various psychopathological symptoms. Before the diagnosis of HD, patients may also apply to us with

psychiatric symptoms. Therefore, we consider that, it was important know the different types of psychiatric aspects of the illness for the diagnosis and treatment.

**Keywords:** Huntington's disease, psychosis, psychiatric symptoms, diagnosis, treatment

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**[PP-283] Anxiety disorders**

## Association between breath holding spells and insecure attachment pattern in young children: four case reports

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**Objective:** Breath holding spell (BHS) is a paroxysmal, non-epileptic disorder, which affects 0.1-4.6% of young children. Iron deficiency anemia is one of the causes of BHS. Studies have shown that mothers of children with BHS have more life stresses than those of the mothers of typically grown children. There are only a few studies, which evaluate the mother-child attachment pattern and associated psychopathology in children with BHS. We aimed to investigate the relationship between BHS and mother-child attachment pattern in young children.

**Method:** 11 children diagnosed with BHS in the Pediatric Neurology clinic were reevaluated in the Child Psychiatry clinic. Blood sample were taken for hemogram, serum calcium, glucose and ferritin levels. Their EEG, EKG and ECHO tests were made. Strange Situation Test (SST) was administered to identify the mother-child attachment pattern. In addition, mothers completed Maternal Attachment Inventory (MAI), Maternal Separation Anxiety Inventory (MSAI) and Child Behavior Checklist for ages 2-3 (CBCL).

**Results:** Psychiatric assessments and psychometric tests revealed that 4/11 children had insecure (anxious/ambivalent) attachment style. Case 1, Case 2 and Case 3 were boys while case 4 was a girl and their ages were 4, 2, 2.5 and 2 years, respectively. They were all diagnosed as cyanotic BHS. Laboratory test results were normal for case 3 while all the values were normal for case 1, 2 and 4 except for a slightly low Hemoglobin and serum Fe<sup>++</sup> values, which implicated slight anemia. EEG, EKG and ECHO test results of all the cases were normal. The caretakers were mother and grandmother for case 3 while the only caretaker for others was the mother. Anxious-ambivalent attachment score from MAI (20.5) which was found to be higher than all the other attachment scores showed that all the mothers had anxious-insecure attachment. In accordance with these findings, MSAI total scores of the cases were much higher than cut-off value. Anxiety-depression scores of CBCL were higher than Samsun means in all of the patients (8, 9, and 10, respectively) and they indicated anxiety in a clinical level.

**Conclusion:** Previous studies reported a significant maturational delay in the brain myelination of BHS patients compared to control subjects. In addition, myelination defects were also shown in child and adult anxiety disorder cases. A possible myelination problem can cause both anxiety and BHS. Higher anxiety that occurs because of a trauma is previously claimed to be an important determiner of breath holding time. The results suggest that the treatment of anxiety could be beneficial for BHS. The association between BHS, maternal anxiety and anxious-ambivalent attachment style of the toddler should be researched in further randomized-controlled studies.

**Keywords:** breath holding spell, attachment, anxiety

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S263**

**[PP-284] Schizophrenia and other psychotic disorders****Expression of the homeobox protein Otx2 in the human brain**Cuneyt Tegin<sup>1</sup>, Harry Pantazopoulos<sup>1</sup>, Sabina Berretta<sup>2</sup><sup>1</sup>Translational Neuroscience Laboratory McLean Hospital, MA-USA<sup>2</sup>Harvard Medical School, Department of Psychiatry, MA-USA

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The calcium-binding proteins parvalbumin (PVB)-immunoreactive (-IR) neurons have been shown to be unsheathed by perineuronal nets (PNN). It is shown that PVB is expressed in large subpopulations of amygdala interneurons. The number of Parvalbumin-positive interneurons and parvalbumin mRNA expression were reduced in schizophrenic patients' hippocampus. Perineuronal nets are extracellular matrix structures that enwrap many neurons in the brain. They regulate the postnatal experience-dependent maturation of brain circuits and maintain their functional integrity in the mature brain by stabilizing their synaptic architecture. The densities of PNNs were decreased by 70%–76% in layers 3 and 5 of the PFC in schizophrenia, compared with the normal control subjects. Orthodenticle homeobox 2 (Otx2) homeoprotein is synthesized and secreted globally from the choroid plexus. After eye opening, Otx2 homeoprotein is transferred into the primary visual cortex, thus triggering PV cell maturation<sup>3</sup>. Because of the relationship of OTX2 expression to development and maintenance of PVB neurons and PNNs, it is a good candidate to analyze in SZ and BP brain tissue. Because little is known about its expression in adult human brain, we characterized its expression in two brain regions where PNNs are known to be affected in SZ, the amygdala and PFCx, in adult human subject. OTX2 is broadly expressed in neurons in several regions within the adult human brain. OTX2 mRNA is virtually undetectable in neural parenchyma, but expressed at high levels in the choroid plexus. The choroid plexus, through its synthesis and secretion of OTX2, may play a key role in affecting adult neuronal functions and regulating plasticity in human. Ongoing investigations are testing the hypothesis that altered OTX2 expression in schizophrenia may occur in association with perineuronal nets and parvalbumin neuron abnormalities.

**Keywords:** orthodenticle homeobox 2 (Otx2) home protein, parvalbumin, perineuronal nets**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S264****[PP-285] Psychopharmacology****Modafinil associated mania: a case report**

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Modafinil is known as vigilance promoting drug used in hypersomnia, and an additive drug for major depression and bipolar depression's residual symptoms. Modafinil is especially good at fatigue and awakens. This case represents manic episode after modafinil usage in a patient with bipolar disorder, but on remission with valproate treatment.

A 19 years old male patient that studies for college entrance exams lives with his family. He has got the diagnosis of bipolar disorder, two years ago and his treatment has been valproate 750 mg/day and olanzapine 10 mg/day for the last 8 months. He is on remission. He had three manic episodes until today, and he had no depressive or mixed episodes. Because he could not study concentrated and hypersomnia in daylight, modafinil 100 mg per day treatment is started. After only one dose, in the third day there is insomnia, in the fourth day, there is hyperactivity, nervousness, increased speech, grandiosity, aggressiveness to the family. Patient's family applied to Psychiatric Hospitalization with manic episode without psychotic symptoms. Haloperidol 20 mg/day, biperidene 5 mg/day, valproate 1000 mg/day and olanzapine 10 mg /day treatment is started. Admitting valproate blood level is 58. In family history, there is an epileptic cousin, and two psychosis diagnosed cousins. In his biochemical tests, there is a slightly elevated uric acid level but nothing else is other than normal. In the sixth day of hospitalization, upon family's request, the patient discharged with serum valproate level of 65. Risperidone 2 mg/day, valproate 1000 mg/day and olanzapine 10 mg/day is prescribed. A week later, during the outpatient clinic control, it shows that the patient doesn't take his risperidone, and he doesn't want to take any medicine. His affect is euthymic, sleeps well, speech speed normal, aggressive behavior resolved. His follow-ups are continuing.

In literature, modafinil is used as additive drug for resistant major depression, bipolar depression episodes. In this case, modafinil was

added to treatment because of hypersomnia and distraction. In a research with bipolar disorder patients who took psychostimulant for ADHD or depression, psycho-stimulant related mania/hypomania ratio is 40%. By the way with no comorbid first axis diagnosis' related to psychostimulants are more often than it. In this case, there is no other first axis diagnosis too. In a research with bipolar disorder patients, who is on remission with hypersomnia, it was shown that modafinil was efficacious on patients with not manifested depressions. The paper says that modafinil was more tolerable and less episodic than the other stimulants. In literature, there are researches that advice modafinil as an additive treatment in bipolar disorder's depressive episodes, but also it can cause manic shifts too. There are case reports, which describes psychosis, manic shifts induced by modafinil too. In this case, it is remarkable that, even with valproate treatment, on a remission bipolar disorder patient, modafinil can induce manic shift. This case report wants to get attention to modafinil treatment follow-ups, especially for manic shifts.

**Keywords:** modafinil, mania, shift

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### [PP-286] *Cultural psychiatry*

## Stigmatization and related factors among the healthy relatives of psychiatric patients

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**Objective:** Knowing the level of stigmatization, knowledge and beliefs among the relatives of psychiatric patients towards mental disorders are important for treatment compliance and prognosis. This study aimed to determine stigmatization level, knowledge and beliefs towards mental disorders among the relatives of patients with mental disorders. The preliminary findings will be discussed.

**Method:** The sample of the study consisted of first-degree relatives of psychiatric patients, who accepted to participate in the study (n=56) Subjects were evaluated by sociodemographic form and Beliefs towards Mental Illness Scale. Preliminary Research data were evaluated statistically and computed with SPSS using One Way Variance Analysis (ANOVA) and Student's t-test.

**Results:** In the preliminary findings, Beliefs Towards Mental Illness Scale mean score was found to be significantly related to education level of the subject (F: 3.534, p:0.032), and the subjects' information about the diagnosis of the patient (t:2.084, p:0.03).

**Conclusion:** Our preliminary results suggest that both general education level and psychoeducation about the mental illness is a protective factor from stigmatization. Efforts aimed at reducing stigmatization of mentally ill people should focus on the family education.

**Keywords:** psychiatric disorder, psychoeducation, relatives, stigmatization

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### [PP-287] *Others*

## Sertraline treatment of a child with restless leg syndrome

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Restless leg syndrome (RLS) is a neurologic, sensory and motor disorder mainly characterized by an irresistible urge to move the legs generally at night. Although it is more common in older ages, a growing body of research have shown that it is also prevalent in childhood. RLS is strongly related with psychiatric disorders and this may cause confusions in diagnosis and treatment processes. In this poster, we'll present an adolescent case who was diagnosed as having RLS and whose symptoms were fully recovered after receiving sertraline treatment.

The case was an 13 year old boy whose initial complaints were an urge to move his legs especially at night and pain on his legs. He was diagnosed as restless leg syndrome in the child neurology department but consulted to child and adolescent psychiatry due to resistance

to various treatments. The case was found to have comorbid major depression in psychiatric evaluation. The patient received fluoxetine treatment first but there was not an improvement in his symptoms. Secondly he was given sertraline 50 mg/day single morning dose. After four weeks of treatment both restless leg syndrome symptoms and depressive symptoms fully recovered.

**Keywords:** sertraline, restless leg syndrome, psychiatric disorders

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**[PP-288] Psychopharmacology**

## Evaluation of haloperidol decanoate treatment in a case series of schizophrenia: an 8-month experience

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The mainstay of treatment for schizophrenia is the antipsychotic group of drugs. Usually oral forms are preferred but problems with treatment adherence are common. Depot antipsychotics provide a reliable drug delivery to patients, whose adherence with oral medication is suboptimal. Haloperidol decanoate (HD) is one of the depot drugs available in clinical practice. The monthly-administered depot formulation of haloperidol has several clinical and practical advantages over oral haloperidol: better compliance and a more predictable absorption, more controlled plasma concentrations, fewer extrapyramidal side effects. The major side effect of antipsychotic therapy, including HD, is the production of extrapyramidal symptoms. The incidence and intensity of symptoms may be less with HD than other antipsychotic drugs, especially when the dose is not too high. The concomitant use of anti-parkinsonian drugs also tends to be less with the depot preparation.

**Cases.** Nine hospitalized chronic psychotic patients were treated with HD using two different dosage schedules for loading-dose, which were calculated from the previously prescribed daily oral dose of haloperidol multiplied by a factor 20. HD given in divided doses of 100 mg 4 times in every 5 days in 5 patients and 200 mg 2 times in every 7 days in four patients until the full amount was administered in first month. This HD dosing pattern was repeated during the second month, but at a lower dose (25% less) to compensate for drug accumulation. Anti-parkinsonian therapy prescribed during the first month of loading-dose. Extrapyramidal side effects were reported in two patients. The other seven patients were successfully withdrawn from anti-parkinsonian therapy without experiencing an enhancement of extrapyramidal side effects at the end of loading-dose. Usage of two different dosage schedules did not effect on side-effect profile. There were no significant haematological or biochemical changes. No local or systemic side effects were observed during the trial. Patients, 6 of 9 were unstable with risperidone and zuclopenthixol long-acting injectable preparations in previous medications, were well stabilized on their optimal dose schedule. Stabilization or slight improvement was observed for symptoms of psychosis. Six of 9 patients continued treatment with HD 200 mg monthly with any extrapyramidal side effect and with any anti-parkinsonian therapy prescription.

Treatment guidelines for schizophrenia recommend that clinicians strongly consider depot medication for patients who may be non-compliance to antipsychotic treatment regimens. Non-compliance to antipsychotic treatment in schizophrenic patients leads to relapse and re-hospitalization. HD offers a useful alternative in the treatment of psychoses to orally administered haloperidol or to other depot antipsychotic drugs.

**Keywords:** antipsychotic, depot formulation, haloperidol decanoate, schizophrenia

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**[PP-289] Attention deficit-hyperactivity disorder****Atomoxetine-induced dose-dependent bruxism in a child patient**

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Bruxism is characterized by grinding or clenching of the teeth, which results in characteristic grinding sounds, abnormal tooth wear and jaw and muscle pain. It can be classified as primary/idiopathic or secondary/iatrogenic bruxism, which is associated with medication or medical diseases. Atomoxetine is the first non-stimulant medication for the treatment of Attention deficit hyperactivity disorder. It is a generally safe and well-tolerated drug. Most common adverse reactions include nausea, vomiting, fatigue, decreased appetite, abdominal pain, and somnolence. We report a case of dose-dependent bruxism induced by atomoxetine, which was observed in a child with Attention deficit hyperactivity disorder and adjustment disorder with anxiety. Atomoxetine treatment has been started at a dose of 18 mg/day and then increased up to 60 mg/day. A month later, the frequency and severity of these complaints were increased. Nevertheless, atomoxetine dose was tapered down to 40 mg/day and was continued in this way. At the meeting held a month after the disappearance of bruxism, there was no decline in improvement of ADHD symptoms.

**Keywords:** atomoxetine, bruxism, child, dose-dependent.

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**[PP-290] Forensic psychiatry****A case of Munchausen syndrome by proxy with a content of sexual abuse exposure**

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Munchausen by Proxy (MBP) (Factitious disorder by Proxy) is a special kind of child abuse. A family member or especially a caregiver creates or fabricates illness in a child. One of the suggested reason for this syndrome is the "caregiver unconsciously undertakes the role of patient", another reason is the "fulfillment felt by the caregiver of giving care to someone who is in hospital". The purpose of this study is to discuss MBP with a content of "exposure to sexual abuse".

A 13-year-old male patient was brought to our child psychiatry clinic by his mother with a complaint of being exposed to sexual abuse. The first admission was in 2007. The mother stated that the custody of the child was given to the father after the parents got divorced and that she was taking her son for a month during summer time. The mother stated that in the summer of 2007, when she took her son to live with her, her son mounted on her in a way that his penis could get in her mouth, he squeezed her head with his legs and tried to put his penis in her mouth, he told her to "take it and suck it", he made moves similar to adults' sexual intercourse by mounting on her in a way that his penis was on her genitals and wanted her to play with his penis after he peed. The mother came to our Child Psychiatry Clinic again in 2013. She said that her son was taken away from school and beaten up, he was abused by being kissed from his lips, his underwear was torn and she thought that he was being abused. In different interviews, it was observed that the mother's statements were inconsistent and in the following hours of the interview, she was observed to show emotions, which were inconsistent with her mood while telling the events. The patient was not found to have psychiatric symptoms or findings that could result from sexual abuse and MBP diagnosis was considered. Later, the mother was referred to adult psychiatry and social observation was planned.

If the parent's psychopathology is a mental illness like MBP that exposes the child to a neglect or abuse, it should be considered that the child is in a serious mental risk. As the age of the abused child increases, it has been reported that the child actively begins to participate in this deception of the parent. This situation may cause ignoring the diagnosis. Such a situation was observed in our case. However, factors such as the mother's showing no emotional weight and her indifferent appearance caused us to consider MBP diagnosis. With this presentation, we wanted to emphasize the need to consider the possibility of MBP in patients who are brought with allegations of being exposed to sexual abuse.

**Keywords:** sexual abuse, Munchausen by proxy, factitious disorder

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S267**

**[PP-291] Mood disorders****Bietti crystalline retinal dystrophy with bipolar disorder: a case report**Merih Altintas<sup>1</sup>, Sumeyye Kurtulus Calli<sup>1</sup>, Umit Calli<sup>2</sup>, Sermin Kesebir<sup>1</sup><sup>1</sup>Erenkoy Mental Health and Neurology Training and Research Hospital, Department of Psychiatric and Neurological Disorders, Istanbul-Turkey<sup>2</sup>Dr. Lutfi Kirdar Research and Training Hospital, Department of Ophthalmology, Istanbul-Turkey

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Bipolar disorder is seen comorbid with many disorders such as diabetes mellitus, thyroid disorders and Usher syndrome. Some research results and known mechanisms show bidirectional connections between affective disorder and some somatic disorders. Bietti dystrophy is an autosomal recessively inherited rare dystrophy, mostly seen at 20-40 age and decreasing visual acuity, night blindness and narrowing visual field symptoms are seen. The aim of this article is to present a case of Bipolar disorder comorbid with Bietti crystalline retinal dystrophy. Researches show that the CYP4V2 gene considered responsible for Bietti crystalline retinal dystrophy exists in human heart, brain, placenta, lung and liver and this gene transcript an active protein in fatty acid metabolism. It's been shown that Bietti crystalline retinal dystrophy is an abnormal fatty acid metabolism disorder and the protein coded with CYP4V2 is a fatty acid hydroxylase enzyme. Our patient was a 26-year-old, primary school graduate, married male and living with his wife and daughter. He has been working as a cleaner since 8 years. Since last one month, suspiciousness, thoughts of follow up, infidelity, visual hallucinations, increase in the amount of speech and homicidal behaviors has been observed. He was interned. His visual problems were firstly started at secondary school years and by this reason, he had to leave the school. He was diagnosed as having Bietti crystalline retinal dystrophy, when he was 13 years old. He could not be in the army because of visual loss and he became more introverted and withdrawn. During this process, he had never been consulted to a psychiatrist, have no psychiatric family history. His uncle was diagnosed retinitis pigmentosa.

His mood was dysphoric, his speech was accelerated, psychomotor activity increased. Jealous, persecutory and reference delusions were defined. Memory functions were normal, spontaneous attention was normal. His impulse control was decreased. He had no insight.

According to DSM 5 diagnostic criteria, he was diagnosed with Bipolar Affective Disorder. Treatment of parenteral haloperidol 20 mg/day, biperidene 5 mg/day and oral olanzapine 10 mg/day was administered. After clinical observation, parenteral treatment was stopped and treatment of risperidone 4 mg/day, Olanzapine 10 mg/day and valproic acid 1000 mg/day was started. At 15<sup>th</sup> day of the treatment, oral risperidone treatment was changed with 4 mg/day due to increase in severity of jealousy delusions. During his clinical progress, his laboratory results were between normal ranges and electroencephalography and diffusion magnetic imaging results were reported normal.

By presenting this case, we try to attract attention on the probable association between bipolar affective disorder and rarely seen Bietti's crystalline retinal dystrophy.

**Keywords:** Bietti's crystalline retinal dystrophy, bipolar disorder, retinal dystrophy

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S268**

**[PP-292] Psychopharmacology****Risperidone-induced penile erection in a prepubertal child: a case report**

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Attention deficit hyperactivity disorder (ADHD) is a heterogeneous behavioral syndrome resulting with significant functional impairment and characterized by the core symptoms of hyperactivity, impulsivity and inattention. Conduct disorder (CD) consists of a repetitive and persistent pattern of behaviors in which the basic rights of others and major age-appropriate societal norms or rules are violated. Risperidone, a benzisoxazole derivative, binds with high affinity to 5-HT<sub>2</sub>, dopamine D<sub>2</sub>, and α<sub>1</sub>-adrenergic receptors. This treatment has been shown to be safe and effective for both conduct disorder and comorbid ADHD in children. In this case report, a 4-year-old male who developed penile erections after using risperidone is discussed.

A 4-year-old male patient was diagnosed as CD and ADHD in another clinic and risperidone was started with an initial dose of 0.5 mg/day, with increments of 0.5 mg every seven days until 3 mg/daily (mean maximum dosage of 0.2 mg/kg/day), when a therapeutic response

was reached. After five months, the daily dose was lowered to 1.5 mg/daily because of satisfactory clinical response. Two weeks after the dosage change, the patient started to suffer from penile erection episodes. These episodes were 5-6 erection episodes frequently in the daytime, lasting about five minutes and were not painful. The patient was not taking another medical agent other than risperidone. No other related medical condition, which will cause penile erection, was detected. After detailed examination, penile erections were thought to be related with risperidone. With the discontinuation of the drug, symptoms of penile erections disappeared and the child fully recovered from the adverse effect.

DSM-V defines ADHD with three subtypes: a combined subtype in which all three-core signs are present in the last six months; a predominantly inattentive subtype in which only inattention is present in the last six months and a predominantly hyperactive-impulsive subtype in which only hyperactivity and impulsiveness are present in the last six months. In the DSM-5, CD is defined based on the presence of three of 15 criteria that should have been present in the last 12 months, and of which one must have been present in the past 6 months.

Risperidone has been shown to be safe and effective for both conduct disorder and comorbid ADHD in children. Risperidone is associated with hyperprolactinemia, sexual dysfunction and priapism. The mechanism of the prolonged erection is thought to be with alpha-1 adrenergic blockage. Most of the literature about this adverse effect is from adult population and the data from pediatric population is very limited. The pediatric cases are frequently on poly-pharmacy. In our case, he was on mono-pharmacy and interestingly in the improvement stage of the treatment.

To our knowledge, this is the smallest pediatric patient in literature with penile erection due to risperidone treatment, especially while the daily dosage was lowered. Therefore, although risperidone is reported to be safe and effective in the pediatric group, clinicians should be careful about this undesirable adverse effect in every stage of the treatment.

**Keywords:** risperidone, penile erection, attention deficit hyperactivity disorder, conduct disorder

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### [PP-293] Others

## Missed appointments in a hundred consecutive psychiatric patients

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**Objective:** Non-compliance to treatment and missing control appointments is common especially in psychiatric outpatient clinics. In studies, non-compliance rates in psychiatric disorders vary widely depending on the patient population. Studies about treatment compliance had been conducted mostly in patients, who had a particular psychiatric disorder or use particular psychotropic drugs. Studies evaluating treatment compliance of patients, who had different psychiatric diagnoses or treated with different drugs seems to be scarce.

**Methods:** We aimed to evaluate the rates of compliance to recommended drugs and attendance to the next appointment of 100 consecutive patients, who applied to a psychiatric outpatient clinic of Gaziantep University Medical Faculty Hospital for the first time and diagnosed with a disorder and the reasons of non-attendance and factors associated with non-compliance.

**Results:** We grouped our patient sample in to two; Group I was named as "attendees" and included 52 patients; Group II was named as "non-attendees" and consisted of 48 patients. Mean value of the days patients did not use their medication was found to be  $7.75 \pm 8.973$ . All patients were evaluated according to Morisky Medication Adherence Questionnaire; 31 patients were defined as low, 42 patients as moderate and 27 patients as high compliant to therapy. In bivariate logistic regression analysis, the patient who lives outside the city (aOR: 5.410, 95% CI: 1.751, 16.718), presence of referral (aOR: 4.03, 95% CI: 1.136, 1.195), diagnosis of bipolar disorder (aOR: 0.085, 95% CI: 0.008, 935), and missed medication for more than 3 days (aOR: 5.924, 95% CI: 2.257, 15.552) were found to be the variables that might predict the missed appointments. With these variables, we correctly predicted the presence of treatment compliance problem as 75% and absence of treatment compliance problem as 76.9% with an overall as 76%.

**Conclusions:** Missed first appointment rates were reported as between 36-50%. Therefore, in the early times of a psychiatric treatment, it is important to evaluate the patient in terms of treatment compliance by having the knowledge of which factors may increase the non-compliance and reconsider our approach to the patient in order to ensure a more effective relationship that will help us to brace the patient into the course of treatment. However, the results about these factors are inconsistent and not clear. Most of the socio-demographic variables were found to be insufficient in order to estimate non-compliance in high rates. In concordance with the literature, we also found that most of the variables were not statistically significantly different between attendees and non-attendees except two

as mentioned in results. In addition, it was reported that initial appointments and early times of a treatment period when the adherence between the psychiatrist and the patient was not built sufficiently increases the non-compliance. In our study, patients were meeting the psychiatrist for the first time; this can be accounted for the high non-compliance rate. Reducing the non-compliance rates, the therapeutic relationship seems to be important and focus on recognizing the factors and changing our attitudes towards those patients.

**Keywords:** non-compliance, outpatient clinic, missed appointments

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### [PP-294] *Psychopharmacology*

## Persistent genital arousal with comorbid restless legs syndrome and urinary problems: two cases

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Persistent genital arousal syndrome (PGAD) is a rarely reported syndrome, which is presented with spontaneous, persistent genital arousal, with or without orgasm. In this paper, we discuss the etiology and treatment of two PGAD cases, which both have Restless Legs Syndrome and urinary problems.

Case 1. A 33-year-old single female was diagnosed as having OCD and major depressive disorder at age of eighteen and had used clomipramine for a while. After cessation of this drug, her PGAD complaints started. PGAD improved with escitalopram and never relapsed. However, she was hospitalized due to a manic episode with mixed features. She also had urinary incontinence and restless legs syndrome. Both conditions could not be explained with an organic etiology. Urinary complaints disappeared after valproic acid and olanzapine treatment.

Case 2. A 28-year-old married female has got a complaint about having persistent sexual arousal. She had experienced genital arousals continuously for several years without response to aripiprazole, valproic acid and sertraline. Frequency of episodes increases in the evenings and some arousals resulted in sleep disruptions. She also had Restless Legs Syndrome and urinary problems such as urgency and hypersensitivity. She was diagnosed with PGAD and bipolar II disorder with borderline personality features.

Patients were both middle-aged and from conservative socio-cultural environment. Both were educated in religion. No triggering situations for genital arousal were reported. Both share borderline personality features. Case 1 was induced with antidepressant cessation, while the symptoms of the Case 2 started spontaneously. Both patients had restless legs syndrome and urinary problems, which were associated with PGAD in a study. Case 1 was hospitalized due to a manic episode with mixed features, while Case 2 admitted with genital arousal and had bipolar II disorder. Case 2 was sexually active. No decrease of sexual desire was present in both patients. Parental attitudes in their family were conservative in religious and sexual matters. Sexual conservatism was also a predictor of PGAD in a recent study. Genital complaints of Case 1 responded to escitalopram, whereas Case 2 did not benefit from any treatment. Five PGAD cases have been reported from Turkey so far. Misdiagnosis of OCD was present due to religious bath rituals in three of them. Neuropsychiatric assessments of other two cases were normal. In conclusion, these report supports the hypothesis of restless genitalia syndrome and both cases share conservative attitudes and bipolar disorder comorbidity with borderline features.

**Keywords:** bipolar disorder, persistent genital arousal disorder, restless legs syndrome

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S270**

**[PP-295] Addictions****The evaluation of the relations between marriage compliance and temperament – character features in alcohol addicts and their spouses**Basak Sahin<sup>1</sup>, Esra Etyemez<sup>3</sup>, Zehra Arıkan<sup>2</sup>, Hulya Ertekin<sup>1</sup><sup>1</sup>Canakkale State Hospital, Canakkale-Turkey<sup>2</sup>Gazi University, Faculty of Medicine, Department of Psychiatry, Ankara-Turkey<sup>3</sup>Sirnak State Hospital, Sirnak-Turkey

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**Objective:** In this study, it is aimed to evaluate the relations between marriage compliance and temperament – character features in alcohol addicts and their spouses by comparing this group to the controls.

**Method:** 49 alcohol addict men and 48 healthy men have been recruited with their spouses; their evaluation has been made by using Temperament and Character Inventory (TCI), and spouse marriage compliance scale.

**Results:** Alcohol addicts and their wives had worse marriage compliance, when compared with the controls. According to the results of TCI, novelty search subscale was significantly higher in alcohol addicts, whereas reward addiction subscale was significantly higher in the wives of alcohol addicts.

**Conclusion:** These results are important to understand the reasons why the marriage goes on, despite low marriage compliance and satisfaction. In order to be able to generalize these results, similar studies with larger sample sizes are needed.

**Keywords:** alcohol addiction, marriage compliance, temperament and character

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S271****[PP-296] Neuroscience: Neuroimaging - genetics - bioindicators****An investigation on the diagnoses of the psychiatric patients with B12 deficiency of a psychiatry inpatient clinic**

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**Objective:** The vitamin B12 plays a role as a cofactor for synthesis of neurotransmitters such as dopamine, serotonin. Therefore, deficiency of vitamin B12 can cause psychiatric symptoms by effecting affect, perception, behaviors and sleep cycle. In this study, we aimed to evaluate the sociodemographic properties, blood hemoglobin values and psychiatric diagnoses of patients with B12 deficiency in inpatient psychiatry clinic of Necmettin Erbakan University Faculty of Medicine between 01.07.2012 -01.07.2013.

**Method:** The medical records including sociodemographic properties, blood hemoglobin values and psychiatric diagnoses of patients with B12 deficiency in the inpatient clinic were screened retrospectively. Blood B12 levels of the cases are analyzed by coulter counter (Beckman dx1800), and by chemiluminescence method. In this method, the reference range of B12 is 127-505 pg/ml. SPSS 18.0 software for Windows was used for statistical analysis. Descriptive statistics were used for the evaluation of data.

**Results:** In this study, medical records of 508 patients were screened. 71 (14%) of 508 patients had B12 levels lower than 127 pg/ml. 44 (62%) males and 27 (38%) females (71 patients, in total) with B12 deficiency were gathered. The mean age of the all participants was 38.55±14.46 years. The mean age of females was 36.41±13.69, and the mean age of males was 39.86±14.91. The most common psychiatric diagnoses were manic episode of bipolar disorder (28.2%), depressive episode of bipolar disorder (8.5%), major depression (23.9%), paranoid schizophrenia (18.1%) and anxiety disorders (9.9%). Less frequent diagnoses were conversion disorder (4.2%), Obsessive compulsive disorder (4.2%), schizoaffective disorder (2.8%), dysthymia (1.4%), anorexia nervosa (1.4%), lithium intoxication (1.4%), delusional disorder (1.4%) and dementia (1.4%). 11 (15.5%) of 71 patients had hemoglobin values lower than 12.1 g/dl.

**Conclusion:** In the literature, there are several case reports and a small study about B12 deficiency in psychiatric disorders. Affective disorders especially depression, psychotic disorders and dementia were found to be related to B12 deficiency in studies and case reports. In this study, diagnoses of affective disorders and psychotic disorders were more common than the other diagnoses. Although, it was

rarely reported, psychiatric disorders may be the first manifestation of B12 deficiency. Double blind, randomized, controlled studies must be done about the role of vitamin B12 in the pathogenesis of psychiatric disorders.

**Keywords:** B12 deficiency, psychiatric disorders, hemoglobin values

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S271-S2**

### [PP-297] *Psychotherapy*

## The preliminary results of the Farket group therapy program based on mindfulness-based cognitive therapies in Turkish population

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**Objectives:** The Farket is a group therapy program for depression and anxiety cases in remission or semi-remission period based on mindfulness-based cognitive therapies. The aim of the program is to develop patients' coping skills with stress, anxiety, depression and ruminative thinking style; and improving the mindfulness skills (Teasdale et al, 2000; Evans et al, 2007). The main skills of Mindfulness therapy are paying attention to the present moment, non-judgmental observation, cognitive decentering, acceptance and experience. These skills prevent the formation of cognitive distortion and they ease the working of schemas in the therapeutic process. Rather than the content of thoughts, this approach focuses on the process of thoughts. In addition, this program also aims to improve the life quality of participants to have a meaningful life. The Farket program is the first mindfulness-based cognitive group therapy program in Turkey; and this research shows the preliminary results of the effectiveness and accessibility of the program in Turkish population.

**Method:** The pilot applications of the Farket program lasts 3,4 or 6 weeks, and are applied in an university hospital psychiatry clinic setting. There are 8-10 participants in each program. It uses mindfulness skills, techniques and CBT models to explain the relationship between emotions, thoughts and behaviors. During the program, it also includes daily homework exercises. To measure the effectiveness of the program, before and after the all sessions, Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI) and Mindfulness Awareness Attention Scale (MAAS) were applied.

**Results:** Of 38 patients who started to the program, 24 of them completed at least 4 sessions of the program. Results were reported on the 19 female and 5 male participants. According to the results of the study, there were statistically significant reductions in the levels of BDI from baseline to the end of groups therapy sessions (BDI-Before  $m=16.10$ ,  $sd=9.36$ ; BDI-After  $m=9.04$ ,  $sd=6.62$ ). In addition, MAAS scores were also significantly improved after finishing the program (MAAS-Before  $m=5.97$ ,  $sd=14.09$ ; MAAS-After  $m=61.08$ ,  $sd=12.07$ ). On the other hand, the participants did not show significantly reduced anxiety levels (BAI) after finishing the program. The numbers of the attended sessions in the program does not have an impact on the results of BDI, BAI and MAAS levels. In addition, there were not statistically significant differences between females 'and males' BDI, BAI and MAAS scores. Using psychiatric medicine and being under psychotherapeutic treatment also do not have a significant effect on the changes of psychological well-being and mindfulness attention awareness skills levels.

**Conclusion:** After the preliminary results, it is seen that this approach was useful for people with depressive ruminative thinking style or depression in remission or semi-remission period. In Turkish population, it helps to improve the skills of coping with stress and depressive ruminative thinking. The lack of significant difference in the levels of anxiety may be open to a number of possible explanations. To investigate and enhance the improvement in the anxiety levels, more programs should be applied in Turkish population.

**Keywords:** anxiety, depression, mindfulness, mindfulness-based cognitive therapies

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**[PP-298] Psychopharmacology****Obsessive-compulsive symptoms induced by an atypical antipsychotic and recovered with another atypical antipsychotic**

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Atypical antipsychotics in the treatment of Obsessive compulsive disorder (OCD) can be used to strengthen. However, reports are available about obsessive-compulsive (OC) symptoms arise with antipsychotics. In this case report, we present a patient whose OC symptoms have been arisen from risperidone treatment. Schizophrenia was recovered, when discontinuation of risperidone and treatment of aripiprazole. Thirty years old female with schizophrenia history for 6 years was brought to the emergency department presented with swearing, irritability, suspiciousness, and restlessness complaints. Patient has been on 400 mg/day clozapine treatment for the last 4 years. 2 months ago, clozapine therapy discontinued due to the development of leukopenia and for 2 months intramuscular injection of flupenthixol 20 mg/2 weeks was applied. A week ago, swearing, resentment, skepticism began. Therefore, a week early injection of flupenthixol was applied. After injection was applied, restlessness added to the existing table. In her mental status examination, she did not make eye contact and her affect was inappropriate. Her mood was irritable. Her associations were scattered. She described persecutory and referential delusion. She was lacking insight and abstract thinking. Akathisia was observed. Patient was charged for inpatient treatment and risperidone 2 mg/d, biperidene, 4 mg/day, lorazepam 7.5 mg/day was started. 2 weeks after the risperidone was increased to 4 mg/day, compulsions present with repetitious expressions like "say yes", "it would not happen, isn't it?", "say it would not happen" "say sincerely" were began. Yale-Brown Obsessive-compulsive Scale (Y-BOCS) score was 39, subscale for compulsion was 20. PANSS positive subscale score was 17, negative subscale score was 26. So risperidone treatment was discontinued and aripiprazole 20 mg/day was added, increased to 30 mg/day. Two weeks later, the PANSS positive subscale score was 12, negative subscale score was 26. It was thought that the patient has benefit from treatment. Two weeks later, at discharge the Y-BOCS total score ratings was 0, PANSS positive subscale score was 7, negative subscale score was 26.

It is considered on the 5HT<sub>2A</sub> receptor antagonist effect through the emergence of OC symptoms or exacerbation; D<sub>2</sub> blockade is thought positive effects in augmentation the treatment of OCD. A possible about the onset of OC symptoms, is the high rate of antagonism 5HT<sub>2</sub>/D<sub>2</sub>. Although OC symptoms were induced by clozapine as mentioned incase reports, clozapine use in our patient did not lead to OC symptoms in this four-year period. Compulsions had begun after administration of risperidone 4mg/day. OC symptoms induced by risperidone —but not clozapine — are inconsistent with the hypothesis suggesting that atypical antipsychotics might lead to OC symptoms through high rate of antagonism on 5HT<sub>2</sub>/D<sub>2</sub>. Because antagonism rate of clozapine on 5HT<sub>2</sub>/D<sub>2</sub> is higher than that of risperidone. Aripiprazole, a partial agonist of dopamine, is different from other antipsychotics, which have 5HT<sub>2</sub>/D<sub>2</sub> antagonism. This may explain the improvement of OC symptoms in our patients.

**Keywords:** obsessive-compulsive symptoms, atypical antipsychotic, schizophrenia**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S273****[PP-299] Psychosomatic medicine - liaison psychiatry****The evaluation of the psychiatric disorders developed after central nervous system infection: case report**Ugur Tekin<sup>1</sup>, Serpil Eremis<sup>1</sup>, Aysegul Iloglu<sup>1</sup>, Melek Bulut<sup>1</sup>, Orhan Kocaman<sup>2</sup><sup>1</sup>Ege University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Izmir-Turkey<sup>2</sup>Suleyman Demirel University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Isparta-Turkey

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Encephalitis, one of the central nervous system infections, can coexist with neurological findings such as resistant generalized or complex partial epileptic seizures that develop over a few days or weeks. It can also coexist with psychiatric findings such as memory impairment, various types of affective disorders or behavioral disorders. Memory impairment: recent anterograde and retrograde amnesia; affective

disorders: depression, anxiety, emotional liability and personality changes as well as hallucinations and paranoid delusions are common psychiatric symptoms.

B.A. is a 12-year-old male, a 6<sup>th</sup> grade student. No special characteristic has been identified in the patient's prenatal, natal and postnatal periods. The patient's infancy and childhood development story is identified as normal.

In June 2011, when he was 10 years old, he was taken to the hospital one night due to contraction and foaming mouth. He was taken to EUMF Neurology Department for seizure control and etiology study. The epilepsy is identified to be sequel of viral meningoencephalitis. After observing that GTK seizures occur up to 15 times a day, midazolam infusion was initiated. The seizures came to a halt, and the patient's treatment proceeded with valproate and carbamazepine. In that period, risperidone treatment was also implemented due to agitation. The seizures were thus under control, and the patient was discharged and taken under polyclinic follow-up.

When a psychiatric evaluation is carried out after a comparison of the patient's condition before and after June 2011 based on the information received from the patient himself and his family, changes that seriously affect functionality have been observed in the patient. Based on the present findings, the patient has been diagnosed as having major depression and mental retardation. The treatment has been initiated, and it has been considered that it would be appropriate to evaluate him for hyperactivity disorder according to the response he would give to the treatment. For treatment sertraline 75 mg/day and diazepam 5 mg/day have been prescribed, and the patient's depressive complaints and suicidal thoughts have gradually disappeared during the monitoring period. His irritability and emotional state fluctuations have also been reduced. The patient had been on levetiracetam 1000 mg/day, carbamazepine 800 mg/day, valproate 1000 mg/day. Insertion of a VNS (Vagal Nerve Stimulator) and a detailed psychiatric re-examination afterwards have been planned.

The literature suggests that neuropsychiatric symptoms such as ataxia, epileptic seizures, impairment in cognitive functions, behavioral and compliance problems were observed in children diagnosed with Encephalitis.

In parallel with the literature, our patient has had significant problems that disrupted his academic success and social compliance after the disorder, even though he had no cognitive or behavioral problems prior to the disorder, based on the detailed story and information received from the family, school scales and the patient's academic and behavioral records kept at school. In the context of this case, the importance of neuropsychiatric evaluation after central nervous system infections is manifested once again.

**Keywords:** encephalitis, neuropsychiatric sequel

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### [PP-300] *Mood disorders*

## CNR1 gene polymorphisms on bipolar disorder patients

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**Objective:** Endocannabinoid system is involved in regulation of emotion, stress, memory, and cognition. Dysfunctions of this system may lead to various psychiatric disorders such as schizophrenia, bipolar disorder, anxiety disorders, and depression. Mutations on the cannabinoid-1 receptor (CNR1) gene that codes for cannabinoid 1 (CB1) receptors are associated with several psychiatric disorders. CB1 are highly expressed in olfactory receptor system, hippocampal formation, the basal ganglion, cerebellum and neocortex in the brain. The main cannabinoid receptor is CB1 and by the activation of them leads an inhibition on neuronal depolarization; diminish in the production of action potential, and releasing of excitatory and inhibitory neurotransmitters. Thus causes a decrease in impulse propagation. Receptor agonists for CB1 act like antidepressants by the activation of 5-HT neurotransmission. On the other hand, antagonism of CB1 receptors may lead depression like clinical pictures in some patients. Cannabinoid usage may lead to the early onset of BD, and sometimes induce BD in susceptible individuals. Taken all together, we aimed to make research on the possible association between the CNR1 gene polymorphisms and BD.

**Methods:** A total of 96 patients and 58 healthy controls were registered in the current case-control study. Blood samples of study participants were collected into sterile tubes and processed to obtain genomic DNA. To obtain genomic DNA, proteinase K digestion and salt-chloroform method was utilized. Polymerase Chain Reaction and Amplification of DNA samples were achieved in AB Thermal Cycler (ABI Inc. CA, USA). Amplified PCR products were verified by running through 2% agarose gel and visualized using ethidium bromide stain. Restriction Fragment Length Polymorphism analysis were analyzed digesting the PCR products with HpyCH4III and BseGI enzymes for the rs6454674 and rs806368 restriction sites, respectively (Table 1). Single-Strand Conformation Polymorphism (SSCP) analyses were

performed.

**Results:** The comparison of the patients and control groups according to the three polymorphisms has not shown any significant difference (Rs6454674 T/G;  $p>0.05$ , Rs806368 T/C;  $p>0.05$ , Rs1049353 A/G;  $p>0.05$ ). When patients were compared with the presence of past suicide attempts, the scores that shows the severity of the illness, total number of episodes, duration of the illness, and mutated allele for each polymorphisms we did not find any significant difference.

**Conclusions:** To the best of our knowledge, it is the first study that investigated the possible association of three CNR1 gene polymorphisms in BD alone. In recent years, BD and major depressive patients were enrolled in a study that found the parallel results with the present study and no relationship between BD and CNR1 rs1049353 A/G polymorphism and alleles. Although results of both studies reveal that there was no relationship between CNR1 and BD, there is a need for further and large sample sized studies on this issue.

**Keywords:** CNR1 gene, polymorphism, bipolar disorder

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### [PP-301] Psychopharmacology

## Improvement in negative symptoms in schizophrenia patients taking clozapine after paliperidone augmentation: a case series

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**Introduction:** Partial response or resistance to treatment is seen in 20-30% of schizophrenic patients after treatment with adequate dose and time of typical and atypical antipsychotic drugs. In treatment resistant schizophrenic patients clozapine is still the best treatment choice but 40-70% of treatment resistant patients still don't respond to treatment after adequate dose of clozapine. In these patients augmentation with a second drug is usually preferred.

Herein we present 5 cases of treatment resistant schizophrenia who were using clozapine and paliperidone augmentation produced improvements in positive and/or negative symptoms of schizophrenia. Table 1 shows each patients' age, gender, education level, age of diagnosis, comorbid diseases, previous treatment (s), indication for augmentation, dosage of paliperidone, follow up duration, side effects after augmentation, and pre- and post-treatment Positive and Negative Syndrome Scale (PANSS), Scale for the Assessment of Negative Symptoms (SANS) and Clinical Global Impression Scale (CGI) values.

**Discussion:** There have been many previous studies including various drugs to augment clozapine in treatment resistant schizophrenic patients. Among them studies about risperidone gave both positive and negative results. Paliperidone is an active metabolite of risperidone and studies have shown improvements in personal and social functioning with paliperidone in schizophrenic patients. Although risperidone and paliperidone have many similar pharmacological properties they have some different actions on firing of serotonergic and noradrenergic neurons. This difference may provide superiority to paliperidone against risperidone for negative and affective symptoms of schizophrenia.

To the best of our knowledge there isn't a randomized, placebo controlled study about paliperidone augmentation of clozapine but we have found 2 case series. Esslinger et al found that paliperidone augmentation improved positive symptoms and allowed to decrease clozapine dosage in some of their patients. Chang et al observed improvements in PANSS, Brief Psychiatric Rating Scale (BPRS), CGI and Personal and Social Performance (PSP) scales. We also found improvements in positive but especially in negative symptoms of schizophrenic patients after augmenting clozapine with paliperidone.

Paliperidone augmentation of clozapine may improve positive and negative symptoms of schizophrenia and may allow decreasing dose of clozapine thereby improve metabolic side effects of clozapine. To prove these claims placebo controlled, randomised and blinded studies with large sample sizes are needed.

**Keywords:** paliperidone, clozapine, augmentation, negative symptoms

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**[PP-302] Mood disorders****Bipolar disorder and Obsessive compulsive disorder comorbidity: a case report**

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The frequent occurrence of anxiety disorders in bipolar patients is noteworthy in clinical and epidemiological studies. It was shown that, in bipolar disorder patients with comorbid anxiety disorder, therapeutic response was decreased and suicide risk was increased. Obsessive compulsive disorder is one of the most common comorbid anxiety disorders in bipolar patients and is reported to be present in 9-39% of the cases. Our case is a 39-year-old female patient, who is living apart from her husband and is a university graduate, who is actively working as a teacher. She was referred to our forensic outpatient clinic with a prediagnosis of kleptomania. In the psychiatric examination, the patient had good self-care and an age appropriate look. Her affect and mood were labile, cognitive functions were preserved and thought structure and content were normal. Upon analyzing past hospital records, we saw that she was hospitalized and followed up in the outpatient clinic with bipolar disorder and comorbid Obsessive compulsive disorder diagnosis. Clinical follow up revealed that she had manic episodes induced by OCD medications and she had some kleptomaniac behaviors continued during remission periods. Here we aimed to emphasize the difficulties in the pharmacological treatment of patients with comorbid bipolar disorder and Obsessive compulsive disorder.

**Keywords:** Obsessive compulsive disorder, bipolar disorder, kleptomania

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**[PP-303] Psychopharmacology****Low dose paroxetine-induced galactorrhea with normal serum prolactin level: a case report**

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Paroxetine is a selective serotonin reuptake inhibitor (SSRI), which has antidepressant and anxiolytic properties. Paroxetine is commonly seen side effects are nausea, headache, sedation, dry mouth, sexual dysfunction, sleep and constipation. Galactorrhea is a rare side effect in the use of paroxetine. This is the second report in our country about paroxetine-induced galactorrhea with normal serum prolactin level. A 33-year-old married woman with two children, who has depressive symptoms about 4 months used fluoxetine 40 mg/day on a regular medical treatment 2 months but complaints did not decline in therefore fluoxetine was ceased, paroxetine 20 mg/day was started as medical treatment. Patient admitted again to psychiatric clinic starting on the seventh day of paroxetine treatment and continued for five days with chest pain, flowing milk from both breasts. The patient was not taking another medication. For the first time in history it was noted that this complaint. There were no abnormalities in complete blood count, blood biochemical tests, thyroid function tests, prolactin (18.29 ng/ml, N: 3.34 - 7.26) and other pituitary hormones. Breast ultrasound and magnetic resonance imaging of the hypothalamic/pituitary area were normal. The galactorrhea ceased approximately 1 week after the discontinuation of paroxetine, at which time she was restarted on escitalopram 10 mg/day. She was maintained on escitalopram 10 mg/day for the next 6 months without a recurrence of galactorrhea and with a remission of her depression. In case reports, antidepressant-induced galactorrhea with high or normal prolactin level was found. The probable etiologic mechanism increased of serum prolactin level mediated by serotonergic activation or mediated by serotonergic inhibition of prolactin inhibitor factors such as dopamine as antidepressant administration. TRH hypersensitivity has been suggested to be responsible for galactorrhea with normal serum prolactin level. Consequently, further studies are needed for the understanding of the mechanisms behind SSRI induced galactorrhea.

**Keywords:** paroxetine, galactorrhea, prolactin

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**[PP-304] Sleep disorders****Usage of melatonin at childhood sleep terror: case report**

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**Introduction:** Sleep terror is a parasomnia seen during nonrapid eye movement (NREM) sleep. They typically arise from slow wave (N3) NREM sleep. Sleep terrors have been reported to affect approximately 3% of children and <1% of adults. Management of sleep terrors may take many forms. Along with that its etiology is not enlightened completely, an exact clearness doesn't exist about the treatment. Although the most used medicines at pharmacological treatment are benzodiazepines and antidepressants, melatonin and other various agents have been used at treatment. In this presentation we aimed to discuss melatonin treatment in patient with sleep terror in the presence of the literature knowledge.

**Report of case:** 36 months old male patient was consulted to our clinic with complaints of frequently nocturnal awakening, screaming and fluttering for half an hour after falling a sleep, present for a year. There was not any remarkable problem in his birth history, but mother was stressed during pregnancy. She defined her child as stubborn child and claimed that his stubbornness and sleep problems were similar to his husband. Also we learned that patient's 8-year-old brother has difficulty in falling asleep and his sleep time was shorter than expected. Symptoms of autistic spectrum disorder were not observed in patient according to DSM-IV criteria. Patient's neurological evaluation was normal. After diagnosis of sleep terror, melatonin treatment for 1 mg/day has been started by our clinic. Patient tolerated the treatment and was complaint free at the end of the month.

**Discussion:** Sleep terrors are dramatic events that represent a partial arousal state from deep sleep and they are characterized by marked autonomic nervous system activation: tachycardia, tachypnea, tremulousness, mydriasis, and sweating are often present. Management of sleep terrors may take many forms. Although the most used medicines at pharmacological treatment are benzodiazepines and antidepressants, melatonin and other various agents have been used at treatment. We presented 36 month old male patient with symptoms of severe sleep terror and we obtained positive results of melatonin treatment. There is not sufficient information in the literature about the melatonin use in sleep terror. According to this case presentation, melatonin appears to be safe and well tolerated treatment for sleep terror in children . More controlled studies are needed on this issue.

**Keywords:** melatonin, sleep terror

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**[PP-305] Obsessive compulsive disorder****Treatment resistant trichotillomania: a case report**

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Trichotillomania (TTM) is a type of psychiatric disorder, which is characterized by repetitive hair pulling. The individual suffering with this disorder pulls out hair in a chronic or compulsive manner from the scalp or eyebrows which results in excessive hair loss as well as personal distress. Hair pulling in individuals suffering from TTM leads to pleasure and relief in tension. TTM is reported to affect as much as 4% of the population with the highest incidence in childhood and adolescence. TTM has been classified as an impulse-control disorder (ICD). However, researchers suggest that based on the phenomenological and psychological overlaps with Obsessive compulsive disorder (OCD), TTM is best described as an obsessive-compulsive spectrum disorder (OCSO). Little is known about the etiology of hair pulling and its relationship to other OCSO. First-line therapy is cognitive behavioral therapy, with strongest support for the subtype habit-reversal training. The effect of medication on trichotillomania has not been systematically evaluated.

In this presentation, we aimed to discuss a case diagnosed with TTM who had been tried to treat with SSRIs and an antipsychotic agent. A 14-year-old girl applied to Child and Adolescent Psychiatry Department of Dokuz Eylul University School of Medicine with hair pulling, irritability, anhedonia, appetite and sleep disturbance. These symptoms had been going on for two years. When she applied to another psychiatric outpatient unit one year ago, she began to use sertraline 50 mg and risperidone 0.5 mg per day. After our psychiatric

evaluation, she was diagnosed with Trichotillomania and Major Depression, and Sertraline treatment was increased to 100 mg per day and Risperidone 0,5 mg per day was continued. Her symptoms like hair pulling, sadness, anhedonia, increased appetite and weight gain decreased in process but she continued to suffer from these symptoms. Then sertraline treatment was stopped and another SSRI fluoxetine was used. Her symptoms were not responded to fluoxetine. She did not continue her treatment.

In our case, her complaints were resistant to medication. The effect of medication on trichotillomania has not been evaluated yet. Some effective behavioral and pharmacological interventions exist for the treatment of trichotillomania; randomized, controlled trials in adults with trichotillomania are very few. Many adults with trichotillomania continue to experience severe and impairing symptoms of hair pulling despite using all evidence-based treatments. There are currently no published randomized, placebo-controlled trials of any pharmacological agents for the treatment of pediatric trichotillomania. According to our experiences, trichotillomania treatment with SSRIs and antipsychotic agents had limited effect.

**Keywords:** trichotillomania, adolescent

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### [PP-306] Addictions and related disorders

## Delusional rape thoughts induced by synthetic cannabinoids: report of two cases

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Marijuana is the most frequently used illicit substance throughout the world. Psychoactive compound of marijuana is tetrahydrocannabinol, which acts on CB1 and CB2 receptors. New products that contain synthetic cannabinoids are becoming increasingly popular among substance users. Little is known about the toxicology of these compounds. Synthetic cannabinoid compounds are psychoactive compounds, which act on cannabinoid receptors stronger and cause serious clinical and psychiatric presentations. It was previously reported that JWH-018, the most common compound, might precipitate psychosis in vulnerable individuals. Although alleged rape is a frequently reported phenomenon, delusional rape is very rarely reported in clinical practice. In this paper, we aim to share two male patients, who had persistent delusional rape thoughts after using synthetic cannabinoid products.

Case 1. A 26-year-old male was referred for alcohol addiction. He had been using alcohol, designer drugs, cocaine and cannabis for several years. His compulsive usage resulted in selling of all his belongings. After a remission period, he started using Bonzai and Jamaica (synthetic cannabinoid products in Turkey) with his friends. Since then, delusional thoughts about being raped by his friends occurred, resulting in homicidal thoughts and behavior. He had reference delusions that all people could understand at a glance that he had been raped. He was compulsively exploring about anal transplantation. He was planning to go abroad for this operation. Because of delusions, he had severe social withdrawal. After he has bought two knives for homicidal intention, he was brought to our clinic. His symptoms resolved partially after addition of 6 mg risperidone.

Case 2. A 22-year-old male started using "Bonzai" after cannabis and designer drugs. Since then, reference delusions, Schneiderian delusions and delusions of being raped occurred. He had been seeking the alleged rappers for five months with homicidal intention when he was hospitalized. His homicidal thoughts disappeared and delusions resolved partially after three injections of 150 mg paliperidone palmitate.

To our knowledge, this is the first report of delusional rape thoughts induced by synthetic cannabinoid compounds. Their examination of anal region was normal. Patients also had reference delusions that people know they had been raped when they saw the patients. Both patients had no previous or family history of psychotic symptoms. Delusions appeared after synthetic cannabinoid abuse and resulted in hospitalization due to suicidality and homicidality in both cases. Therefore, patients who have risk factors for psychosis should be counseled against using synthetic cannabinoids and abusers of these products should be assessed and followed for psychotic symptoms. In conclusion, recreational use of products, which include synthetic cannabinoid compounds, is an ever-increasing problem, which can cause various psychotic manifestations including persistent delusional rape thoughts and clinicians must be aware of psychotic disorders induced by synthetic cannabinoids.

**Keywords:** addiction, psychotic disorders, synthetic cannabinoids

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**[PP-307] Schizophrenia and other psychotic disorders****Comorbid schizophrenia and Obsessive compulsive disorder associated with mega cisterna magna: a case report**

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For many years, the cerebellum is traditionally regarded as an organ that subserves coordination, balance, gait, and fine motor control. Today, novel findings gathered from neuroanatomical research and modern functional neuroimaging studies point out the importance of the cerebellum involvement in the pathophysiology of psychiatric disorders. There is converging evidence suggests that schizophrenia may be associated with cerebellar anomalies and a cerebellar dysfunction could underlie some of the clinical psychiatric and neurological symptoms as well as cognitive dysfunctions observed in schizophrenia. Moreover, involvement of cerebellar dysfunction has been suggested in the pathogenesis of Obsessive–Compulsive Disorder (OCD) and schizophrenia- OCD comorbidity. Dandy-Walker complex (DWC) is a series of anomalies in the posterior fossa, including Dandy–Walker malformation, Dandy–Walker variant, mega-cisterna magna and posterior fossa arachnoid cyst. Mega cisterna magna is the mildest form of “Dandy-Walker complex” and a developmental variation of the posterior fossa characterized by the enlargement of the cisterna magna, morphologically intact vermis and cerebellar hemispheres. According to our knowledge in literature, there is a case report about Dandy Walker continuum with schizophrenia comorbid with OCD. Our aim is to present here a case of schizophrenia comorbid with OCD and mega cisterna magna.

A 57-year-old female applied to our psychotic disorders outpatient clinic with a complaint of intrusive urges to say some words, which she didn't want to say and a fear of being heard from other people. In her history, there were several hospitalizations with paranoid, persecutory delusions and visual hallucinations. There was no history of psychiatric disorders in the patient's family. In her mental examination, her affect was blunted, in her thought content there were doubt and aggression obsessions accompanied by mental compulsions. At the time of application, she had been taking 4 mg risperidone and 300 mg quetiapine per day. In her neurological examination, there was no significant finding and electroencephalography was unremarkable. Cranial Magnetic Resonance Imaging (MRI) scan disclosed “mega cisterna magna”.

In this case, mega cisterna magna and schizo-obsessive symptoms may be found together coincidentally or any cerebellar dysfunction due to mega cisterna magna may contribute to the occurrence of some psychotic symptoms and obsessions. Such neurostructural variants may offer an insight into a better understanding of the neurodevelopmental models underlying schizophrenia comorbid with OCD.

**Keywords:** Dandy-Walker complex, mega cisterna magna, obsessive compulsive disorder, schizophrenia

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**[PP-308] Psychopharmacology****Neuroleptic malignant syndrome in a patient with bipolar mood disorder, upon haloperidol addition to lithium treatment: a case report**Pelin Kartal<sup>1</sup>, Serkan Zincir<sup>2</sup>, Selma Bozkurt Zincir<sup>3</sup><sup>1</sup>Maltepe University, Faculty of Medicine, Department of Psychiatry, Istanbul-Turkey<sup>2</sup>Golcuk Military Hospital, Department of Psychiatry, Kocaeli-Turkey<sup>3</sup>Erenkoy Mental Health and Neurology Training and Research Hospital, Department of Psychiatry, Istanbul-Turkey

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Neuroleptic malignant syndrome (NMS) is a rare and life-threatening complication of antipsychotic treatment. It is considered to occur due to dopaminergic blockage in central nervous system. Clinical picture of NMS consists of muscle rigidity, hyperthermia, autonomic dysfunction and clouding of consciousness. In this paper, 35 year-old female patient with bipolar mood disorder, while maintaining in lithium treatment for five years, after the addition of haloperidol, occurring NMS is presented.

A 35-year-old female patient was admitted to emergency service with the complaints of high fever, sweating, clouding of consciousness

and speech disturbance. She was on lithium therapy with a diagnosis of bipolar mood disorder for the last five years. 2 months ago, due to the complaints of loss of appetite, insomnia, irritability, increase in self-care and amount of speech, psychiatric medication was arranged as lithium 600 mg/day and haloperidol 30 mg/day (i.m) and biperidene 10 mg/day (i.m) by her psychiatrist. On the sixth day of the patient's treatment, she was admitted to the hospital because of the development of NMS.

After administration of antipsychotic drugs, particularly hyperthermia, rigidity, altered consciousness when deemed, leukocyte count, CPK levels and blood pressure should be monitored closely. In patients suspected of NMS, which can be fatal in terms of results, as well as supportive therapy, rapid initiation of bromocriptine and/or dantrolene could be a life-saving approach. Including particularly parenteral, multiple, high doses and in particular the use of high-potency antipsychotics may increase the risk of NMS should be considered. Although antipsychotic drugs are being highlighted for the risk of NMS, importance of the lithium use in terms of the risk of NMS and an increase in this risk with lithium used in conjunction with antipsychotic treatment should be considered. In our case, responding well to treatment and in recovery without sequel; the early diagnosis and antipsychotic drugs be discontinued immediately and it is important to begin bromocriptine treatment in addition to supportive therapy.

**Keywords:** neuroleptic malignant syndrome, antipsychotic drugs, bipolar disorder

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### [PP-309] Addictions and related disorders

## Substance abuse induced catatonia and its successful treatment with electroconvulsive treatment: a case report

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Catatonia is a neuropsychiatric syndrome that can also occur depending on many general medical conditions, neurological diseases or certain drugs and characterized by hypokinesia, mutism, negativism, nutrition denial and posturing. Other than psychiatric disorders, about 30-80% of patients with catatonia are developing due to a general medical condition. In this paper, we report a case of catatonia occurring due to substance abuse and its successful treatment with electroconvulsive treatment (ECT).

A 22-year-old female patient was admitted to our clinic for the last two days of inability to work, inability to speak, inactivity, food refusal, unwillingness to communicate due to loss of interest. On mental health assessment, reduction in patient self-care and verbal communication cannot be established that were observed. Her affect was blunted and apathetic. Due to negativist and mutistic appearance of the patient we could not evaluate the other components of mental status examination. There was no psychiatric disorder in the patient's history and family history. Symptoms of disease had started two weeks ago after the use of PAM (marijuana and magic mushroom) five to six times, with complaints of inability to recognize family members, confusion, reduction in speech rate and amount of talking, slowing of the movements, loss of appetite and these symptoms has been gradually intensified. Patient's clinical picture was evaluated as catatonia, which is associated with the substance abuse and ECT was planned. All the symptoms of catatonia regressed after the fourth ECT session. The patient began taking food, negative attitudes have decreased, mutism disappeared and began to communicate with the treatment team. ECT treatment of the patient was completed and she was discharged on the seventh session. Symptom appearance of catatonia, caused by either psychiatric disorders or general medical conditions, does not change depending on the etiology. Therefore, medical and toxic reasons of catatonia must always be considered, because often multiple etiologic factors may be related to catatonia.

**Keywords:** catatonia, substance abuse, psychiatric disorders, ECT

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**[PP-310] Attention deficit-hyperactivity disorder****Evaluation of emotion recognition and social cognition abilities in attention deficit and hyperactivity disorder patients**

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**Objective:** Previous studies often show Attention deficit hyperactivity disorder (ADHD) comorbidity in children with Autism Spectrum Disorders (ASD), however, current studies state that there could be undefined autistic features in children with ADHD. Deficits in social functioning, emotion recognition and social cognitive abilities are the core symptoms of ASD. In ADHD, there happens to be difficulties in social functioning areas, besides deficits in number of daily life activities such as cognitive, academic, familial and vocational functions. In this study, we aimed to compare emotion recognition and social cognition abilities between ADHD patients and normal controls.

**Method:** 20 patients diagnosed with ADHD that were regularly examined at Ege University Faculty of Medicine, Child and Adolescent Psychiatry Outpatient Clinic and 20 controls were included in the study. Comprehension Test, Faux Pau Test, Eyes Test and Faces Tests were performed. The statistical analyses were performed using SPSS 16.0 program.

**Results:** 80% (n=16) of the ADHD group were male and the 20% (n=4) were female. 5% (n=1) of the control group were male and the 95% (n=19) were female. Mean age of the ADHD patients was  $11.95 \pm 1.50$  and the controls was  $13.75 \pm 1.37$ . The differences in Faces Test, Eyes Test, Faux Pau and Comprehension Test between the two groups were significant. It was statistically shown that the age and gender differences between the two groups did not affect test performances. There was also no significant difference on test performances between the 10 patients that were on medication and another 10 that were not. Both the group that was on medication and the other group that was not, performed worse than normal controls.

**Conclusion:** The findings indicate that the ADHD group has inability in emotion recognition and social cognition. We think that it is also important to pay attention to the deficits in social functioning and social cognition of ADHD patients through the treatment process. Studies with larger samples are suggested for investigating the factors related with the social cognitive deficits in ADHD and whether there is a social deficit or ASD-related ADHD subgroup or not.

**Keywords:** attention deficit hyperactivity disorder, emotion recognition, social cognition

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**[PP-311] Post-traumatic stress disorder****Stress reaction and depression after bomb attacks of Reyhanli**

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**Objective:** Terrorism attacks are the form of the actions, which are taken to create maximum psychological impact on the target population. As a result, of two separate bombings on 11 March 2013 at Hatay, Reyhanli 52 people died and 146 people injured. The purpose is to determine the ratio of depression, anxiety and post-traumatic stress disorder (PTSD) on sixth month after the blast and the risk associated with them on people, who directly exposed to two separate explosions visually and auditory, and people who were living there but indirectly witness them.

**Method:** In this study 43 people, who were directly exposed, 42 people who were indirectly exposed to the explosions and 45 healthy people as a control group are included for a total of 130 individuals in sixth month after the blast. Beck Depression Inventory, civilian versions of post-traumatic stress disorder checklist, Trait Anxiety Inventory (STAI) FORM TX-1, (STAI) FORM TX-2 and sociodemographic information form were administered to all patients.

**Results:** The ratio of depression, anxiety and post-traumatic stress disorder (PTSD) in people, who were directly exposed to explosions visually and auditorily, and people, who were living there but indirectly witness the explosion were significantly higher, when statistically compared to control group ( $p < 0.05$ ). Among the three groups there were no statistically significant differences in terms of age, gender and demographic factors ( $p > 0.05$ ).

**Conclusion:** Our study has supportive information about the individuals, who were exposed to terrorist attacks have high ratio of PTSD. Unlike other studies, our study is also one of the few studies that evaluates individuals with PTSD have higher ratio of depression and anxiety.

**Keywords:** posttraumatic stress disorder, depression, anxiety, terrorist attack

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**[PP-312] *Electroconvulsive treatment***

## Safe and effective use of electroconvulsive therapy during pregnancy: three-year-data from a training and research hospital

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**Objectives:** The main objective of this study is to add to the available data on efficacy and safety of ECT use during pregnancy and to demonstrate ECT's short-term effects on the newborns' development.

**Methods:** In this study, medical records of 25 pregnant women, who were hospitalized in our psychiatry clinic and received ECT for their psychiatric disorders between 2010 and 2013, have been retrospectively reviewed. Data on newborn babies, with their parent's permission was obtained from birth records.

**Results:** The mean age of patients was 28.24±5.22 years. The mean ±SD number of bilateral ECTs performed was 8.84±1.77. The mean Clinical Global Impression score before ECT was 5.68±0.74, whereas it was decreased to 2.08±0.86 after the ECT sessions. There were some minor maternal complications of ECT such as headache, pelvic pain, confusion and transient memory loss in descending order. All neonatal health indicators were within normal limits.

**Conclusions:** Based on the findings of this study, ECT seems to be an effective and safe treatment option for treating major psychiatric disorders during pregnancy and it would be best to specify that the risks of maternal and fetal adverse events are low.

**Keywords:** electroconvulsive therapy, pregnancy, fetus, safety

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**[PP-313] *Attention deficit-hyperactivity disorder***

## Somnambulism induced by methylphenidate

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Attention deficit hyperactivity disorder (ADHD), characterized by hyperactivity, attention deficit and impulsivity far beyond the developmental levels is an important psychiatric illness with a prevalence of 5% worldwide. Sleepwalking, also known as somnambulism, is a parasomnia that tends to occur during arousals from slow-wave sleep. It most often emerges in the first third or first half of the sleep period when slow-wave sleep is more common. Sleepwalking consists of a series of complex behaviors that culminate in walking around with an altered state of consciousness and impaired judgment. Parasomnias are much more prevalent in children with psychiatric and neurological disorders and can be also exacerbated or induced by psychopharmacological agents. Methylphenidate is the first line treatment for children diagnosed with ADHD.

In this presentation, we aimed to discuss a case who had somnambulism after treatment with methylphenidate.

GE was a 12 years old boy. He applied to Child and Adolescent Psychiatry Department of Dokuz Eylul University School of Medicine with the symptoms of attention deficit, hyperactivity, concentration difficulties. After psychiatric evaluation, he was diagnosed with Attention deficit hyperactivity disorder. He was living with his mother and father. After methylphenidate 10 mg was started

for the treatment and the dose of methylphenidate was increased to 36 mg per day. He has used OROS methylphenidate 36 mg for eight months. The patient applied with a complaint of getting out of the bed then the house while asleep, waking up outside and not remembering how he got there. He was consulted with pediatric neurology and tested with EEG, ECG and PSG. The methylphenidate dose was reduced and then the symptoms related with sleepwalking regressed.

Our search confirms that it was the first case report in which somnambulism induced by methylphenidate. Methylphenidate is a noradrenergic and dopaminergic drug, which is associated with alterations in monoaminergic functions, may be an interaction at the level of these neurotransmitters is suggested as the underlying mechanism of somnambulism, which is induced by methylphenidate. Somnambulism is a common parasomnia that reflects impairment in the normal mechanisms of arousal from sleep in which motor behaviors are activated without full consciousness. Motor behaviors are initiated during deep non-rapid eye movement or slow-wave sleep (stages 3-4), and may be limited to relatively simple manifestations, such as sitting up, fumbling with objects or bedclothes, or mumbling. In literature, there are case reports in which somnambulism was induced by antipsychotics such as olanzapine and quetiapine and selective serotonin reuptake inhibitors such as paroxetine.

**Keywords:** attention deficit hyperactivity disorder, methylphenidate, somnambulism

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### [PP-314] *Mood disorders*

## Disruptive mood dysregulation disorder as a new entity bridging oppositionality and unipolar mood disorders: three cases

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Disruptive Mood Dysregulation Disorder (DMDD) a novel diagnosis listed in DSM-5, which is characterized by severe and recurrent temper outbursts. Between outbursts, children with DMDD display a persistently irritable or angry mood. As a new entity, the treatment guidelines are still not elucidated. Here, we present three cases that are thought to fulfill criteria for DMDD as set forth in DSM-5 and their treatment.

**Case 1:** The patient was an 11-year-old girl, who was first evaluated for a temper tantrum in an emergency setting. She had been irritable and angry for the past 2 years and temper tantrums involving shouting at and threatening family members. During those tantrums, she attacked furniture and kitchen utensils with a knife. No discrete mood episodes could be elicited and cardinal symptoms of mania were not defined. Screening forms supported presence of ADHD. She was diagnosed as having DMDD and ADHD and started on risperidone 0.5 mg/ day and methylphenidate 20 mg/ day. At the second visit, temper tantrums were reported to be much reduced with moderate improvement in ADHD symptoms.

**Case 2:** The patient was a 7-year-old boy, who was brought for anger and irritability. He had been irritable and angry for the past 18 months and he had temper tantrums almost every day, which involved throwing things and threatening family members with knives. At the end of mental status examination, he was thought to fulfill criteria for ADHD and DMDD and started on OROS methylphenidate 18 mg/ day and risperidone 0.5 mg/ day with moderate improvement.

**Case 3:** The patient was a 13-year-old male adolescent, who was being followed up at our department with diagnoses of ADHD and BP-NOS. He had been irritable and angry for the past 4 year and temper tantrums almost every day, which involved threatening and hitting parents along with throwing furnitures around. Moreover, no distinct mood episodes and none of the cardinal symptoms of mania could be elicited. Re-evaluation led to his being diagnosed with ADHD and DMDD as per DSM-5 criteria and started on methylphenidate and risperidone with moderate improvement.

DMDD is a new diagnostic entity. Research has demonstrated that children with DMDD usually do not go on to have bipolar disorder in adulthood. They are more likely to develop problems with depression or anxiety. In all of our cases, family history was positive for depressive and anxiety disorders while ADHD was comorbid. One of our patients was also diagnosed as having BP-NOS according to DSM-IV-TR reflecting lack of a better alternative. Our results may support the proposed relationship between DMDD and depressive/ anxiety disorders as well as the utility of this diagnosis for cases that had to be previously diagnosed with BP-NOS. Although all of our cases seemed to improve moderately with methylphenidate combined with risperidone it must be kept in mind that the natural evolution of DMDD and treatment guidelines were still not clearly known and that studies with larger samples who would be followed for longer

periods will be necessary.

**Keywords:** disruptive mood dysregulation disorder, treatment

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**[PP-315] Mood disorders**

## Effectiveness and adverse effects of methylphenidate treatment in children diagnosed with DMDD and ADHD: a retrospective study

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**Objective:** Attention deficit hyperactivity disorder (ADHD) is a commonly diagnosed psychiatric disorder in children. Since there is a debate about the over-diagnosis of bipolar disorder (BP) in childhood and facilitating research on pediatric BD, Leibenluft et al(2003) described a clinical syndrome called severe mood dysregulation (SMD). The hallmark of SMD is extreme, impairing, and chronic irritability, accompanied by hyperarousal symptoms. In DSM-5, this disorder is renamed as Disruptive Mood Dysregulation Disorders (DMDD) and hyperarousal symptoms are removed from the criteria for avoiding over-diagnoses among children and adolescents with ADHD. Comorbidity with ADHD and DMDD is very common in children and adolescents and reported as 86.9%. DMDD diagnosis refers to children with persistent irritability, hyperarousal, and emotional reactivity and temper tantrums that lack other cardinal manic symptoms such as elevation. There has been increasing debate surrounding the diagnostic relevancy of DMDD and other manic-like symptoms in children with ADHD. However, there has been little investigation into the impact of these symptoms on the efficacy of ADHD treatments or into the development of treatments specifically for DMDD. In this study, we aimed to present a case series in terms of the effectiveness and safety of methylphenidate in children, who are diagnosed as having DMDD and ADHD.

**Method:** In collaboration with J.Kaufman, Ph.D., Leibenluft et al, developed modifications to the Schedule for Affective Disorders and Schizophrenia (K-SADS-PL) to ensure that DMDD could be diagnosed reliably. Cases who applied to Child and Adolescent Psychiatry Department of Dokuz Eylul University School of Medicine with the symptoms of ADHD and DMDD, and whose diagnostic confirmation according to K-SADS-PL was provided as ADHD and DMDD and currently under follow up in our clinic were recruited to study. Their sociodemographic data, treatments, the using time, doses and adverse effects of methylphenidate were evaluated retrospectively by child psychiatrists.

**Results:** There were nine cases, who were diagnosed as ADHD and DMDD, they were all male. The average of their ages was 13.55, the average age with these diagnoses first evaluated was 8.44. The mean follow-up period was  $45.11 \pm 26.84$  months and the range was 2 and 86 months. Eight of nine cases had reported adverse effects with methylphenidate. Increasing irritability had been seen in all cases and increasing tantrums had been observed in five cases. Methylphenidate(MPH) treatment was tried once in eight of nine cases but only one of them used MPH twice and irritability was seen for two times during the period of usage of MPH.

**Conclusion:** Research on the pathophysiology and treatment of children with DMDD and ADHD is very important for cases and their families. The evidence-based knowledge is insufficient for clinicians on whether children with DMDD and ADHD should first receive stimulants and behavior therapy for ADHD or mood stabilizers for mood dysregulation. In the present study, MPH was not tolerable for children, who were diagnosed as ADHD and DMDD and MPH usage increased the irritability clearly but in Waxmonsky's study MPH and behavior therapy were both found tolerable and effective treatments for children with ADHD and DMDD; and in addition, they determined that additional treatments might be needed to optimize their functioning.

**Keywords:** attention deficit hyperactivity disorder, disruptive mood dysregulation disorders, methylphenidate

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**[PP-316] Mood disorders****Secondary mania related to steroid use**

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Corticosteroids are commonly used for treating various diseases. It is known that there are many steroid-related psychiatric disorders. Mania, depression, psychotic disorders and delirium are the most common psychiatric side effect of steroids. It is suggested that short-term use of high dose steroids causes mania whereas long-term use of low dose steroids causes depression. In this report, we present a case of a patient, who had manic episode following high dose methylprednisolone used for Addison's disease.

A 36-year-old woman with irritability, hostility, increased talkativeness, sleepless, increased in religious activities, persecution and grandiose delusions were hospitalized in our in-patient clinic. She was presented to an internal medicine clinic with complaints of fatigue, loss of appetite, nausea, weight loss and darkening of the skin and was hospitalized one week ago. Addisonian crisis was prediagnosed, as her plasma cortisol level was 9.35 mcg/dl and ACTH level was above 1250 pg/ml. She received methylprednisolone 80 mg/day for two days and prednisolone 20 mg/day for the following three days. She was discharged with a treatment regimen of prednisolone 20 mg per day after her biochemical parameters were normalized and her symptoms disappeared. Two days after her discharge, she experienced irritability, hostility, increased speech and insomnia and was hospitalized in our clinic. The patient without any previous psychiatric diagnosis and no history of psychiatric illness in the family was considered as steroid-related mania. The dose of was decreased prednisolone to 7.5 mg/day by internal medicine specialist. As she rejected to take oral medications, we added haloperidol 10 mg per day to her treatment regimen. The severity of irritability and hostility symptoms decreased; as such, haloperidol treatment was tapered to 5 mg/day three days after her hospitalization. She decided to take oral medications; for this reason, her treatment was changed to olanzapine 5 mg/day in the fifth day. She was discharged two weeks later and in the examination, which was done 15 days after her discharge, she had no psychiatric complaints.

Previous studies showed that psychiatric side effects of corticosteroids were related to dose and duration of the medication. The use of 80 mg methylprednisolone followed by manic symptoms within a week in our case is consistent with previous studies. Four criteria are required for the diagnosis secondary mania: A close temporal relationship between mania and medication use, late onset, absence of family history and no previous history of a psychiatric disorder. Our case meets all these criteria and this supports the claim that manic episode was related to corticosteroids. It was reported that olanzapine is effective in steroid-related manic episodes. In our case, olanzapine rapidly decreased the manic symptoms and remained effective during follow-up. Corticosteroids that are used for various diseases may cause medical and psychiatric side effects. Therefore, medical side effects as well as psychiatric side effects of corticosteroids should be explored carefully.

**Keywords:** corticosteroid, mania, olanzapine

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**[PP-317] Schizophrenia and other psychotic disorders****Peripheral edema as a side effect of risperidone: a case report**

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Risperidone is an atypical antipsychotic agent, widely used in treatment of schizophrenia, bipolar disorder, and several other psychiatric disorders. Its therapeutic activity is mediated through combination of D2 and 5-HT<sub>2</sub>, α<sub>1</sub> and α<sub>2</sub> adrenergic, and histamine H<sub>1</sub> receptors antagonism. Among the most common side effects, thus reasons for its discontinuation are extrapyramidal symptoms, dizziness, hyperkinesia, somnolence, and nausea. Edematous adverse effect of antipsychotics, however, is reported only in very few previous studies. In that report, we present a patient manifesting edematous adverse effects due to risperidone.

Mr. X, a 21-year-old single male with mild intellectual disability, living with his mother, isolated himself, ceased speaking with anyone for 5 months, had disorganized behavior, over-sleeping, deteriorated personal hygiene for the last month of the mentioned period was admitted as inpatient due to the complaints he reported. At the initial mental status examination, the patient did not speak and he was

suspected to have delusions of persecution and disorganized behavior. He was diagnosed as post-traumatic stress disorder comorbid to depression with psychotic symptoms. Treatment was commenced with paroxetine 20 mg and risperidone 1 mg/day and raised after four days to 2 mg/g, after which the patient developed marked bilateral edema over his lower legs and feet, at the end of 8<sup>th</sup> day of treatment. Physical examination revealed 3+ pitting edema in his lower extremities. No explanation for the edema was provided via the results of complete blood cell count, serum electrolytes, protein, albumin, renal and liver functions, thyroid function, vitamin B12 and folate levels, chest radiography, and electrocardiogram. The diet of the patient was not changed, nor did he receive any fluid intake. An internal medicine consultation also revealed no other pathological signs than edema. Risperidone dose was then tapered to 1 mg/day, which resulted in no change in edema, however with total discontinuation of risperidone afterwards; edema was entirely resolved within one week.

Several explanations can be raised for the presence of edema occurrence secondary to risperidone therapy: 1. Risperidone could have an effect on peripheral vascular system  $\alpha$ -receptors, causing vasodilatation and thus having raised the hydrostatic pressure in blood capillaries, which in turn results in edema. 2. Risperidone-induced 5-HT<sub>2</sub> receptor blockade could be causing an increase in cyclic adenosine monophosphate levels, relaxing vascular smooth muscles via phosphorylation of myosin light chain kinase. 3. Dopaminergic blockade could be altering the renal regulation of fluid and electrolytes. With number of risperidone-dependent edema cases increasing, and considering that edema tends to be overlooked by the physicians unless the patient complains, the situation could be more frequent than thought. Thus, further studies should pay particular attention to dose-dependent effects of risperidone-associated edema, as well as the potential differentiating pathogenic roles of the varying forms of risperidone. In that aspect, it is necessary as well to monitor events associated with other atypical antipsychotics having similar pharmacologic mechanisms with risperidone, such as olanzapine, quetiapine and paliperidone.

**Keywords:** risperidone, edema, adverse effect, antipsychotics

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### [PP-318] Attention deficit-hyperactivity disorder

## Plasma dopamine and noradrenaline levels in children with attention deficit and hyperactivity disorder

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**Objective:** Attention deficit hyperactivity disorder (ADHD) is an important psychiatric disorder due to its prominent effects on the patients' and their families' quality of life, with a 5% prevalence worldwide. Although the pathogenesis of ADHD is still largely unknown, evidences derived as results from many studies focus primarily on dopaminergic and noradrenergic systems. The aim of this study is to determine plasma dopamine (DA) and noradrenaline (NA) levels of the cases diagnosed with ADHD at the pre- treatment process and to compare these levels with DA and NA levels of the healthy control group.

**Method:** Fifty children with ADHD and 50 healthy children between ages 6-12 were included in the study. Psychiatric diagnoses were determined by using Kiddie Schedule for Affective Disorders and Schizophrenia for School Aged Children- Present and Lifetime Version (K-SADS- PL) as semi-structured clinical interview and plasma DA and NA levels were measured before the initiation of treatment. Cases' parents were asked to fill in Child Behavior Checklist for ages 4-18 (CBCL) and Dupaul ADHD scale while their teachers were asked to fill in Conners Teacher Rating Scale- short form. ADHD symptom severity was measured by Clinical Global Impression scale (CGI).

**Results:** No statistically significant difference was found for NA levels between case and control group while there was a borderline statistically significant difference for plasma DA levels ( $p=0.990$  and  $p=0.05$ , respectively). No statistically significant difference was found, when plasma DA and NA levels were compared for ADHD subtypes in the case group ( $p=0.390$  and  $p=0.213$ , respectively).

**Conclusion:** Evidences regarding neurobiological causes that may affect the emergence of ADHD support the possible roles of catecholaminergic pathways over cognition and movement. Getting a better understanding of the possible roles of catecholaminergic and non-catecholaminergic systems in ADHD might help in both getting a better grip of the disorder and determining better treatment regimen that shall target the disorder.

**Keywords:** attention deficit hyperactivity disorder, dopamine, noradrenaline

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**[PP-319] Psychosomatic medicine - liaison psychiatry****Evaluation and psychiatric follow up a case: rectal perforation for autoeroticism with unfamiliar object**

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In this paper, a case that has complicated rectal perforation just after putting on unfamiliar object in his anus for autoeroticism during the age of puberty and its treatment process and the psychological and social problems in this process will be discussed in detail.

The case -16 years old male- applied to Marmaris State Hospital's Emergency department with abdominal pain, fever, rectal bleeding complaints after he had acquired some knowledge about autoeroticism from web site and shortly after insert a cleaning rod as an unfamiliar object into his anus for sexual gratification purpose the day before. He was assessed as acute abdomen and operated by a general surgeon. During the surgical operation process, rectal perforation was detected and Hartman Procedure was applied. The patient was referred to Ege University Pediatric Surgery Clinic ten days later, due to his general state. His physical state was not improved and he had fever. At pediatric surgery clinic, pleural effusion, intra-abdominal abscesses and hypoalbuminemia were detected and broad-spectrum antibiotics were applied and a chest tube placement was carried out. After fourteen days, his complaints were regressed; on 10<sup>th</sup> day of hospitalization, he was directed to Ege University Child and Adolescent Health and Disorders Department 'Consultation Liaison Unit' due to anxiety and sleep disorders.

Although, sexual interest is expected to increase during adolescence/puberty, unhealthy experiences, which acquired from inappropriate internet sites with incorrect information though developing technology, can lead to unexpected and dangerous consequences. Thus, the case with rectal perforation associated with insertion of unfamiliar object for autoeroticism was remarkably harmed because of the delay in applying to hospital and initiation of treatment, and inability to predict the real cause of complaints that was hidden by him. In the course of follow up, his

**Keywords:** rectal foreign body, anal autoeroticism, homosexuality, rectal perforation

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**[PP-320] Psychopharmacology****Liver enzyme elevation after first dose of paliperidone palmitate: a case report**

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In the literature, there is no reported case of liver enzyme elevation related with paliperidone palmitate (PP). In this case, we report a schizophrenic patient who developed liver enzyme elevation after the first dose of PP. The patient was admitted to our in-patient unit and was not on any medication for the last 9 months.

For routine medical examination, blood samples for biochemical tests, complete blood count, thyroid function tests, viral hepatitis markers were requested and all of them were within normal limits. She had no family or personal history of liver disease and no history of alcohol or substance abuse. After the administration of intramuscular PP 150 mEq, she complained for nausea. The following day, Aspartate aminotransferase (AST) level was 100 IU/L, alanine aminotransferase (ALT) level was 118 IU/L. After 6 days of the first PP dose, liver enzyme levels decreased to normal limits. On the 8<sup>th</sup> day of PP injection, the second initiation dose of 100 mg intramuscular PP was administered. After 2 days, the patient had no complaint of nausea, but AST level was 87 IU/L and ALT level was 91 IU/L. In the following 4 days, liver enzyme levels were gradually decreased to normal values. Clinicians should be aware of the possibility that PP can cause hepatotoxicity and this adverse event may be more difficult to deal with long-acting injectable agents like PP.

**Key words:** paliperidone palmitate, liver enzymes, hepatotoxicity

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**[PP-321] Obsessive compulsive disorder**

## Comparing metacognitive processes in autogenous and reactive OCD

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**Objective:** Obsessive compulsive disorder (OCD) is a clinical condition, which is formed by cognitive, emotional and behavioral components. According to cognitive model of OCD, development of OCD is associated with misinterpretation of normal intrusive thoughts, overinflated responsibility, thought suppression and thought action fusion. According to metacognitive therapy approach, ruminative thinking style plays an important role in the development and maintenance of OCD. This paper demonstrates the results of a study aimed to determine associations of OCD and emotional processing and cognitive processes.

**Method:** Forty-five Obsessive compulsive disorder (OCD) patients from a specialized outpatient clinic of Bakirkoy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery were enrolled into the study. Sociodemographic data form, Yale Brown Obsessive-compulsive Scale (Y-BOCS), Ruminative Thinking Style Scale (RTSS), Thought Action Fusion Scale (TAFS) and Leahy Emotional Schema Scale were used for assessment of cognitive and emotional processes of patients.

**Results:** Forty-six point eight percent of OCD patients had the clinical features of reactive subtype and 53.2% had autogenous features. In Y-BOCS total test score and sub-test scores did not differ in reactive and autogenous groups ( $p=0.370$ ,  $p=0.607$ ,  $p=0.374$ ). The difference between RTSS scores of the two groups was not significant statistically ( $p=0.176$ ). LESS-control, LESS-acceptance of emotions, LESS-expression subscale scores were higher in autogenous group ( $p=0.018$ ,  $p=0.003$ ,  $p=0.003$ ) and LESS-comprehensibility subscale score was higher in reactive group ( $p=0.039$ ). TAFS total score, TAFS-morality and TAFS-Likelihood subscale scores did not differ significantly between OCD subgroups ( $p=0.088$ ,  $p=0.162$ ,  $p=0.235$ ). According to Spearman Correlation Analysis; RTSS was positively correlated with Y-BOCS and LESS ( $p<0.001$ ,  $p=0.034$ ). Additionally, Y-BOCS and LESS were positively correlated with TAFS ( $p=0.031$ ,  $p=0.011$ ).

**Conclusion:** Consistent with the findings of the previous studies, severity of rumination was found to be correlated with obsessive-compulsive symptom severity. However, there were no differences in ruminative thinking style in between the reactive and autogenous subgroups. Our study also showed that thought-action fusion is associated with obsessive-compulsive symptom severity. Similar to the relationship of emotional schemas in all types of anxiety disorders, present study also showed that emotional schemas are highly related with OCD symptoms in both subgroups. Different high scores of sub-scales in OCD subgroups are coherent with the suggestion that OCD is a highly heterogeneous condition, which is composed of two distinct subtypes. These findings are expected to provide a basis for classifying and explaining the heterogeneous phenomena of obsessive-compulsive disorder, and application of tailored therapy approaches.

**Keywords:** autogenous, emotional schema, Obsessive compulsive disorder, reactive

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**[PP-322] Schizophrenia and other psychotic disorders**

## Psychosis in tuberous sclerosis: case report

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Tuberous sclerosis complex is a neurocutaneous disorder characterized by multiple hamartomas of brain, eyes, heart, lung, liver, kidney, and skin. While in the 1/3 of the ones having the disease, a dominant heredity is at issue, in the remaining part, the sporadic mutations have been declared. According to the settlement, number and size of the tubers in the brain, there can be neuropsychiatric symptoms in the patients from the weak situations to the heavy clinics. The psychotic disorder, which is related with the tuberous sclerosis, has been declared even being rare.

The 25-year-old female patient applied to the psychiatric polyclinics with the complaints of having congestion in her throat and thinking

that there are foreign substances in her stomach, trying to cut her throat with the knife. It was learned from her story that she did not eat almost anything for 1 month due to her belief that there was congestion in her throat. Even though the doctor she applied, tried to make her believe in lack of congestion, she had expressions such as "cut my throat and open the congestion"; she claimed frogs were touring in her stomach and they disturb her. She said she wanted to get rid of the frogs from her stomach through a hole made with a knife. In her physical examination, on the face, there were symmetrical, angiofibroma-like lesions on the erythematous ground, unguinal fibroma and retinal hamartoma, shagreen patch were existing. It was learned that the patient was followed with the diagnosis of tuberous sclerosis and she used valproic acid 1500 mg/g and levetiracetam 2000 mg/g. In the intelligence test, it was determined that she had functionality in the limit intelligence level. In her cranial MR examination, a great number of hamartomatous lesions were observed as being expanded in the frontal, parietal and temporal region and as having cortical and subcortical placement in the brain. It was thought that these lesions were compliant with the tuberous sclerosis. The risperidone 4 mg/g was started to the patient with the diagnosis of the atypical psychosis. In the follow-ups, the patient whose delusions regressed was discharged for continuing her polyclinic follow-ups as outpatient.

The tuberous sclerosis is an autosomal dominant neurocutaneous syndrome, which is diagnosed frequently in the childhood age. The prominent neurological characteristics of the syndrome are the mental retardation, seizures and behavioral disorders. However, psychosis can rarely be observed. For this reason, each case for which the diagnosis of tuberous sclerosis has been established, should be examined in terms of the neuropsychiatric situations and should be followed.

**Keywords:** tuberous sclerosis, psychosis

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### [PP-323] Others

## The review of electroconvulsive therapy use in Samsun Mental Health Hospital in the year of 2012

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**Objective:** The observation that seizures led to alleviation of the psychiatric symptoms gave way to the development of methods for inducing seizures to treat certain psychiatric diseases in early 1900s; and now it is indicated for a number of psychiatric disorders as one of the safest treatment options. In this study, we aimed to investigate retrospectively, the use of ECT with regard to indications, effectiveness, complications and clinical features of the patients underwent ECT courses between January 2012 and December 2012 in a state mental hospital.

**Methods:** The charts of 86 inpatients admitted in Samsun Mental Health Hospital between January 2012 and December 2012 retrospectively analyzed. Along with sociodemographic form, indication of ECT, complications during and right after the sessions, and presence of continuation treatment with ECT and comorbidity have been noted as the paramount variables of the study. All ECT sessions were conducted with anesthesia. After ECT sessions, response has been evaluated by CGI-SI and scores under three has been assumed as response. Complication has been defined as the adverse events, which occurs during or after ECT, changes course of treatment or accepted as abnormal.

**Results:** Between January 2012 and December 2012 only %2.2 of the inpatients underwent ECT in Samsun Mental Health Hospital. 60% of the patients who underwent ECT, has been diagnosed with a psychotic disorder such as schizophrenia, psychotic disorder-NOS or delusional disorder. This was followed by bipolar disorder-manic episode (17%). Major indication of ECT in this study was the lack of response to pharmacotherapy (30.2%). After ECT sessions, response has been observed in 73 patients (84.7%). Most of the patients (%96.5) took some medications along with ECT, mostly antipsychotics. Most of the patients were taking drug combinations, mostly antipsychotic-antipsychotic combinations. Complications such as respiratory distress, confusion, prolonged seizures has been observed in 6 patients, but mortality has not been established.

**Conclusion:** In this study, we observed the indications, complications and some features of ECT in a mental state hospital in Turkey. In terms of complications, ECT was safe as mentioned before in other studies. However, we found that despite its relatively high response rates and safety, ECT has not been preferred frequently by psychiatrists. The reasons of this attitude would be investigated in the future studies.

**Keywords:** electroconvulsive therapy, indication, complication, response

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**[PP-324] Attention deficit-hyperactivity disorder****Co-existence of Attention deficit hyperactivity disorder and Rathke cleft cyst: a case report**

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Rathke Cleft Cyst (RCC) is remnant of Rathke pouch, which is formed by invaginations stomodaeum in 3<sup>rd</sup> or 4<sup>th</sup> week of gestational life. It is a benign tumor of the pituitary gland. Generally, asymptomatic, symptomatic cysts are quite rare. Although defined as a developmental cyst, it is more common in adults than children, and two times more common in females. To our research, this is the first case of coexistence of Attention deficit hyperactivity disorder (ADHD) and RCC. On the other hand, this case is the second youngest male patient who is diagnosed with RCC in the literature; first one is 4.5 year-old.

A 7-year-old-boy was brought to the Child and Adolescent Psychiatry Clinic with forgetfulness and hyperactivity. His development was delayed in reference to his peers (Delayed speech and walking). In the family history; his sister has Panic Disorder, and his uncle has mental retardation. Although he has attended to first grade class for nearly seven months, he could not learn to read and many complaints such as excessive speech at lessons, distractibility in homework, came from the teachers in this period. He is going to go to the repeat first class next year. He was diagnosed with ADHD and Mental Retardation. Magnetic resonance imaging (MRI) has been asked because of the child's atypical facial appearance, mental retardation and growth retardation. Rathke cyst (1.2x1.8x1.7 cm) was incidentally detected on brain MRI in the process of treatment and follow-up. Performed on blood tests FSH: 0.71 mIU/ml (0.95-11.95) LH: 0.03 mIU/ml (1.14-8.75) testosterone: 0.04 ng/ml (1.42-9.23), results of thyroid function tests, prolactin and cortisol levels were in the normal range. The patient was consulted to endocrinology and neurosurgery departments. We learned that transfenoidal surgery is planned. This is the first case presented in the literature about the coexistence of ADHD and RCC. RCC is rare in pediatric population. Headache, endocrine abnormality and visual loss are the major features of RCC. Our patient was asymptomatic; the cyst was recognized by chance. If there is no other condition with hypogonadotropic hypogonadism, people usually do not consult with a doctor in prepubertal period. Unless treatments are properly managed in adolescents and teenagers, some permanent health problems may be seen in following years. Thus, early diagnosis is important for children. In our clinic, we investigate thyroid hormones, hemogram, iron parameters etc. to diagnose diseases such as ADHD symptoms hyperthyroidism, hypothyroidism and iron deficiency anemia. If we had wanted endocrinological blood tests, we could have had a chance to capture pituitary lesions. If not in all cases, sometimes it may be useful to make MRI and detailed blood test patients who is with mental retardation, growth retardation, atypical facial appearance, considered a syndrome.

**Keywords:** Rathke cleft cyst, attention deficit hyperactivity disorder, endocrine abnormality

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**[PP-325] Schizophrenia and other psychotic disorders****Psychotic depression due to Hashimoto thyroiditis**

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Endocrine system disorders, especially thyroid disorders may cause a large number of psychiatric symptoms and aggravate existing ones. Thyroid disorders, particularly hypothyroidism are associated with depressive symptoms and cognitive problems, and rarely other psychotic complaints.

A 54-year-old, married woman was admitted to psychiatric emergency service with significantly reduced speech, suspiciousness, decreased self-care, fear of being poisoned. She was displaying aggressive behaviors. Her family reported introversion, decreased sleep and appetite for three months with a slow progression. She was in depressed mood with an anxious affect and persecutory delusions and showing a negativist attitude towards the interviewer. There was noticeable decrease in her psychomotor activity. In her personal history, patient was diagnosed as having Hashimoto hypothyroidisms four years ago and was under treatment, which patient did not remember the name of anti-hypothyroidism drug, until two months ago.

In the physical examination; her fever was 38.1 degrees celcius, in the complete blood count leukocytosis was detected. In the neurologic

examination, only pathologic finding was Babinski reflexes were bilaterally extensor. Upon prediagnosis of encephalitis, prophylactic ceftriaxone 2 gr/day treatment was applied for seven days. In further investigation, computed tomography, the cranial magnetic resonance imaging, electroencephalogram and lumbar puncture were performed and no significant pathology was found. Thus, she had been admitted to psychiatric service. In the laboratory examination, TSH was measured as 85 mIU/ml and anti-TPO was 102.7 mIU/ml. After internal medicine consultation, levothyroxine 200 microgram was started. Olanzapine 20 mg, venlafaxine 75 mg was started for psychiatric treatment. Electroconvulsive therapy was applied because of food rejection due to her persecutory delusions about getting poisoned, and nine sessions performed. Her delusions disappeared in 10 days, then her depressive mood improved in 3 weeks. TSH decreased to 5.8 mIU/ml Anti-TPO was decreased to 25.8 mIU/ml.

Hypothyroidism may cause depressive and psychotic symptoms and deficits in cognitive functions. Due to advanced age of patient, with no family history, development of the symptoms in a slow progression and concurrence with discontinued hypothyroidism treatment, the patient's state is concluded to be associated with hypothyroidism. In the literature, psychotic features in depression associated with hypothyroidism due to Hashimoto thyroiditis, have not been reported frequently or this reason we wanted to present you our experience.

**Keywords:** hypothyroidism, psychotic, depression

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### [PP-326] *Epidemiology*

## Evaluation of psychiatric emergencies of children and adolescents in a university hospital

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**Objective:** In this study, we aimed to evaluate the reasons of application, sociodemographic properties and diagnoses of patients admitted to Ege University Faculty of Medicine Children's Hospital Emergency Department, with psychiatric symptoms.

**Method:** The records of 215 patients, admitted to Ege University Faculty of Medicine Children's Hospital Emergency Department and consulted by Child and Adolescent Psychiatry between May 2010 and October 2013 were evaluated. The data was evaluated using SPSS 16.0 program.

**Results:** The majority (73.9%) of the patients was female and the mean age of the subjects was  $14.74 \pm 2.41$ . It was found that 45.1% (n=97) of the patients applied with suicide attempt, 20.9% (n=45) with aggressive symptoms, 18.6% (n=40) with anxiety and depressive symptoms, 5.1% (n=11) with psychotic symptoms, 5.1% (n=4) with substance and alcohol use, 4.2% (n=9) with spasms and myalgia, 0.9% (n=2) with child abuse impeachment. The patients' psychiatric diagnoses, their follow-up results were also evaluated.

**Conclusion:** Our result demonstrating that the majority of the patients was female, is consistent with European studies. While a Canadian study states the most frequent reason of psychiatric emergency admission to be substance abuse (41%), we found in our study that the most frequent admission reason was suicide attempt (45.1%). Socio-cultural variations could be the cause of this difference. European and American data indicate that the number of cases admitted to pediatric emergency services with psychiatric symptoms increase every year. Studies in this subject are limited in our country. Future studies in this area are considered helpful in order to evaluate and manage the child and adolescent cases presenting with psychiatric emergencies.

**Keywords:** child and adolescent psychiatry, diagnoses, emergency admissions

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**[PP-327] Mood disorders****Depression levels, suicide ideation and suicide attempts in child sexual abuse**Hatice Altun<sup>1</sup>, Ebru Findikli<sup>2</sup><sup>1</sup>Kahramanmaraş Sutcu Imam University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Kahramanmaraş-Turkey<sup>2</sup>Kahramanmaraş Sutcu Imam University, Faculty of Medicine, Department of Psychiatry, Kahramanmaraş-Turkey

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**Objective:** This study investigated the depression levels, suicide ideation and suicide attempts of sexually abused children and adolescents, who were referred for forensic examination to our child and adolescent psychiatry outpatient clinic.

**Method:** Forensic reports of 110 children and adolescents aged 8-17 years, who had been referred to our child psychiatry outpatient clinic between January 2012 and January 2013 were examined retrospectively. Depression levels of children were evaluated by Children's Depression Inventory (CDI).

**Results:** Of the cases, 79.1% (n=87) were female and 20.9% (n=23) were male. The mean age was 13.33±2.7 years. The psychiatric diagnosis rate was 79.2%. Post-traumatic stress disorder (41.8%) and depression (19.1%) were the most common psychiatric diagnosis established after sexual abuse. Mean CDI score was 17.32±8.8. According to the items of CDI asking about the suicide ideation; the rates of children answered 'I do not think about killing myself' item was 48.2% (n=53), 'I think about killing myself but would not do it' was 43.6% (n=48) and 'I want to kill myself' was 8.2% (n=9). 6 patients (5.5%) had attempted suicide after the sexual abuse. Forced vaginal or anal penetration, depressive disorder, post-traumatic stress disorder and gender female significantly increased the risk of suicide attempts.

**Conclusion:** In our study, results indicated that depression levels, suicide ideation and suicide attempts increased in the sexual abused children. Descriptive data related to the abused children and an understanding of the consequences of sexual abused children will help authorities in planning prevention. Besides, the risk of suicide must be handled and interventions should be planned on this basis and great significance should be given to the treatment and rehabilitation of the cases.

**Keywords:** children and adolescent, sexual abuse, depression, suicide ideation, suicide attempts

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**[PP-328] Psychopharmacology****A case of acute akathisia after a single dose of paliperidone**

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Akathisia is considered an extrapyramidal symptom (EPS) that is characterized by an objective inability to sit or stand still and by a subjective feeling of inner restlessness. The prevalence of acute akathisia ranges from 8% to 76%, while that of chronic or tardive akathisia varies from 0.1% to 41% during treatment with typical antipsychotics. We present a patient who developed severe acute akathisia after paliperidone administration for treatment of major depressive disorder.

A 35-year-old man, Mr. S., was admitted our hospital in February 2014. Mr. S. had been treated for major depressive disorder for almost 8 months. Multiple antidepressant treatments, most recently 40 mg/day paroxetine had failed to achieve an adequate response. One day before admission to our hospital, 3 mg/day paliperidone had been added to his treatment. On admission to our hospital, Mr. S. manifested a number of symptoms such as unable to sit and stand still, excessive anxiety, depressive mood, anhedonia, fatigue, psychomotor agitation, decreased appetite, and severe insomnia. He was diagnosed as drug induced movement disorder (akathisia) and major depressive disorder according to DSM-IV-TR. We stopped paliperidone treatment and started 3mg/day clonazepam and 60 mg/d propranolol treatment. Three days after beginning the clonazepam and propranolol, the patient's akathisia symptoms were remitted.

A large part of patients with major depressive disorder fail to achieve remission, evidence indicates that augmentation of atypical antipsychotics can play an important role in the treatment-resistant depression. Akathisia is frequently associated with the use of typical antipsychotic drugs. Akathisia develops after starting antipsychotic medication or can be seen following dose increase. Incidence of typical antipsychotic induced acute akathisia that is developed in first 2 weeks is reported to be occurred approximately 31%. Although akathisia can be seen during treatment with paliperidone, there are restricted numbers of reports in which akathisia had occurred after a

single dose. We suggest that patients should be informed about akathisia and clinicians should keep akathisia in their mind as potential and severe side effect while patients were started on treatment of paliperidone.

**Keywords:** paliperidone, akathisia, acute

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**[PP-329] Mood disorders**

## Pseudo-ephedrine induced mania in a schizoaffective disorder patient having remission for ten years

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This case is about psychiatric condition after usage of common cold medicine containing pseudo-ephedrine. Pseudoephedrine is an active stereoisomer of the medicine called ephedrine. It has a similar pharmacological mechanism. 5000 years ago, in ancient China, a plant called Ma-Huang, had been administered to cure various illnesses. In 1885, the active substance was purified by Yamanashi. In 1915 Hiroso and To, discovered the sympathomimetic effects of the purified substance. In modern medicine, pseudoephedrine is used for systemic decongestion via direct and indirect sympathomimetic effects. Directly, it is alpha and beta agonists, monoamine oxidase enzyme inhibitor. Indirectly, it increases Dopamine and Noradrenaline levels in central system. Common adverse effects are nervousness, tremor, tachycardia, hypertension, and insomnia.

A 42-year-old single female, third of four siblings, dropped out of college in the second year. She has been living with her mother and elder brother. She was diagnosed as having schizophrenia 20 years ago. Her first complaints became apparent at age 21, when she was studying second year in college. In that period, she used to talk to herself and had persecutory delusions. She was diagnosed with schizoaffective in second admission. She has been having a symptomatic remission with clozapine 600 mg/day and valproic acid 1000mg/day for the last ten years. This winter she had flu, then used a medicine prescribed by her general practitioner, which contains 30 mg pseudoephedrine for three times a day for five days. A few days after pseudoephedrine treatment, symptoms such as insomnia, accelerated speech, logorrhea, aggressive behavior arisen. As her symptoms were progressively increased in two-three weeks, she was taken to our psychiatric emergency department by her parents. Her mood was elevated and affect was blunted. Her speech was accelerated; interactions were missed with flight of idea. There was psychomotor activity increasing, she was having erotomanic and grandiose delusions, and audio hallucinations. She was having no insight. Valproic acid blood level was 55 in her admission. According to DSM-5 diagnose criteria schizoaffective disorder, with two sided diagnose, haloperidol 20 mg/day, biperidene 10mg/day, via parenteral route, was started because her state of excitation. Then clozapine 600 mg/day, valproic acid 1250 mg/day, were started orally. After clinical observation, parenteral treatment stopped and then added amisulpride 400 mg/day, instead. Valproic acid was increased to 1500 mg/day to reach effective blood level for mania (68). After there was no clinical improvement in her statement, she was considered as medically resistant to treatment, so electro-convulsive treatment was started. After seven sessions, her clinical statement resolves. She discharged with clozapine 600mg/day, amisulpride 400 mg/day and valproic acid 1500 mg/day orally.

Many drugs especially for cold and for flu symptoms are containing ephedrine and pseudoephedrine. In our case, pseudoephedrine-induced manic and psychotic symptoms in schizoaffective patient, who have had remission for ten years. Despite many cases showing that pseudoephedrine and ephedrine-induced psychotic and mood disorders use of pseudo-ephedrine in these patients is still an unheeded issue. Therefore, we need more research about this subject.

**Keywords:** mania, pseudoephedrine, psychosis

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**[PP-330] Psychopharmacology****Haloperidol and risperidone induced edema**

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Risperidone is an atypical antipsychotic agent widely used in the treatment of schizophrenia, bipolar disorder, and aggressive/self-injurious behaviors. It acts as an antagonist of the serotonin-2A (5-HT<sub>2A</sub>), dopamine-2 (D<sub>2</sub>), alfa-1 and alfa-2 adrenergic, and histamine H-1 receptors.

The most common side effects of risperidone are extrapyramidal symptoms, dizziness, hyperkinesia, somnolence, and nausea. However, after reviewing the literature on the complications of risperidone therapy, we found few case reports documenting peripheral edema secondary to risperidone pharmacotherapy.

Haloperidol is a typical antipsychotic and it acts as an antagonist of muscarinic-1 (M-1), histamine-1 (H-1), alfa-1 adrenergic receptors and dopamine-2 (D<sub>2</sub>) receptors on mesolimbic pathways, which provides antipsychotic effects, and on nigrostriatal pathways, which is responsible of extrapyramidal side effects such as akathisia, acute dystonia and Parkinsonism. Other common side effects are dizziness, hyperkinesia, somnolence, and nausea.

However, after reviewing the literature on the complications of antipsychotic treatment, we found few case reports documenting edematous adverse effects of atypical antipsychotics such as risperidone, olanzapine and clozapine.

65 year-old woman with a 20 years history of schizophrenia was referred to the inpatient ward after a court decision "to be taken from her house with a police and a doctor for being treated at mental health hospital". The presenting symptoms were persecutory delusions, and negative symptoms including social withdrawal and anhedonia. She was very angry and excited because of obligatory admission.

We administered the patient a low dose of haloperidol treatment (intramuscular) and titrated the dose up to 20 mg daily. On the 5<sup>th</sup> day, 50 mg risperidone long-acting injection was administered and proceeded once for each 15 days, because of her poor treatment compliance. After 10 days of haloperidol treatment, she complained for edema, and we observed that she has developed 2+ bilateral pretibial edema. She has been consulted by internal disease specialist and nothing was recorded associated with medical conditions like cardiac failure, renal disease, hepatic dysfunction or thyroid disorder. Physical examination and blood investigations (urea and electrolytes, liver function tests, thyroid function tests) were normal. Therefore, we stopped haloperidol and started risperidone. The edema fully resolved in 3 days after haloperidol was stopped. The dose of risperidone was gradually increased to 6 mg/day.

Additionally, the edema reoccurred in our case at the second week of the treatment with risperidone oral form. The patient developed 2+ bilateral edema of the lower legs, and a periorbital edema. Her oral risperidone was then discontinued, and the edema completely resolved in one week. Her treatment was switched to clozapine, 25 mg/day; we titrated the dose to 350 mg/day and she tolerated its titration well.

Our patient's psychotic symptoms gradually improved. 1 month later, she was discharged from the hospital with clozapine 350 mg per day and risperidone consta, 50 mg per 14 days.

A large and increasing number of edema cases are reported in recent years due to atypical antipsychotics and it shows that this side effect was not rare as regarded before. More over physicians should pay also attention to typical antipsychotics on the subject of edema just like in our case.

**Keywords:** edema, risperidone, side effect, haloperidol

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**[PP-331] Psychopharmacology****Desmopressin for enuresis associated with risperidone: a case report**

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Risperidone is proposed to be an effective agent for treating many psychiatric disorders in children and adolescents such as psychotic disorders, pervasive developmental disorders, conduct disorder and behavioral problems accompanying mental retardation. Excessive

appetite, weight gain, and sedation are among the most common adverse effects; on the other hand, risperidone-induced enuresis is rarely reported. There are a number of case reports in the literature about risperidone-induced enuresis in children. Antipsychotic-induced enuresis is an embarrassing and distressing adverse effect that may lead to severe compliance problems. Here, we report a pediatric case that developed nocturnal enuresis during risperidone and was treated successfully after administration of desmopressin.

Our patient was a 15-year-old boy with the diagnosis of psychotic disorder not otherwise specified. Risperidone 1 mg/d was initiated and titrated up to 4 mg/d, but he developed daily urinary incontinence during the second week. He and his family had no history of enuresis. All relevant medical history and workup, including physical exam, neurological exam, fasting glucose, urinalysis, thyroid stimulating hormone, and urine drug screen was unremarkable. For his enuresis, behavioral intervention was initiated; however, no improvement was observed. Then desmopressin, 120 mcg at night, was added to the treatment regime; and after the first week, his enuresis symptoms resolved completely.

The pathophysiology of antipsychotic-induced enuresis remains unclear. Risperidone primarily acts as an antagonist on the serotonin type 2A (5HT 2A) and dopamine type 2 (D 2) receptors; also it has a strong blockade effect for  $\alpha$ -1 and  $\alpha$ -2 adrenergic receptors.  $\alpha$ -1 adrenergic system regulates the tonus of internal urethral sphincters. It may be that antagonist effect of risperidone on the  $\alpha$ -1 receptors of the internal bladder sphincter causes urinary incontinence. However, besides the  $\alpha$ -adrenergic blockade, other mechanisms may be involved in the pathogenesis urinary incontinence associated with risperidone treatment. Regarding the management of enuresis associated with antipsychotics, several interventions including behavioral modifications. Appropriate risk management need not necessarily involve cessation of the antipsychotic medicine. There have been claims of successful treatment of antipsychotic induced enuresis with various adjunctive medications, all of which seek to exploit some of the different pharmacological mechanisms noted above; these include amitriptyline, desmopressin, ephedrine and anticholinergic drugs such as oxybutynin and trihexyphenidyl. This report suggests that in cases with enuresis that occurred during risperidone treatment, desmopressin may be an alternative. Early identification of this side effect, when combined with early treatment, may increase medication adherence.

**Keywords:** risperidone, enuresis, desmopressin

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### [PP-332] *Schizophrenia and other psychotic disorders*

## Very early onset schizophrenia: a case report

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Schizophrenia is defined as "early" when the onset is observed before 18, and "very early- onset schizophrenia" if the onset occurs before 13. Under 15 years old, its incidence is equal in boys and girls but in adolescents incidence is 2 times higher with boys. Clinical aspects like sneaky onset, disorganized behavior, hallucinations are noteworthy in childhood schizophrenia and negative symptoms are more dominant compared to adulthood schizophrenia, which is the most evident difference between those ages. Therefore, the symptoms of the disease usually recognized lately or falsely. In very early-onset schizophrenia, early diagnosis and treatment would affect the long-term course positively. Today there is not a certain consensus about the antipsychotic choice in childhood and adolescent age schizophrenia. The opinions about the pharmacologic treatment of schizophrenia in child patients are limited with clinician experience, case reports and small sampled studies data. It is remarkable that there were growing evidences about the efficiency of atypical antipsychotics, especially with olanzapine, risperidone, quetiapine in recent years.

The case is a 13-year-old girl presented with her biological family. The main concerns of the family were her bizarre behavior and speech, not eating or dressing on her own, loss of interest and social withdrawal. At the first interview, she did not respond to any attempt at communication and there was little random eye contact, with empty and meaningless looks She was talking to herself silently and had smiling or other facial expressions sometimes as she was speaking with someone. Her symptoms begun at the age of 10 and at the follow-up period she diagnosed as very early- onset schizophrenia. Here we discussed the patient in the light of literature, who was brought to our clinic with complaints like disorganized behavior, decrease in school success, introversion, insomnia, refusal of eating, incontinence ( both faces and urine) and followed with 4 mg/day risperidone. The one-month period of not eating or dressing on her own, social withdrawal, loss of interest and decreased psychomotor activation were possibly the elements of a catatonic picture. Risperidone was significantly effective both for positive and negative symptoms

The diagnosis of very early- onset schizophrenia requires a multidisciplinary approach, a detailed and careful differential diagnosis, with

particular attention to risk factors for developing very early-onset schizophrenia, exclusion of other neuropsychiatric disorders and a close long term follow up. The treatment of very early-onset schizophrenia should include psychopharmacological, social and educational approaches for both the patient and family.

**Keywords:** very early onset schizophrenia, clinical and familial features, diagnosis, treatment

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### [PP-333] *Psychotherapy*

## A case of conversion disorder, which was followed as multiple sclerosis

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E.S, 33 years old, female, married with 3 children, house wife. Chief complaints: falling down while walking, weakness in the lower extremities. 1 week before her last admission to Erenkoy Hospital Neurology inpatient department, she fell down in the street. In the following days, symptoms such as weakness in her left extremities, pain in her right half of the body, double vision and difficulty in standing up were appeared. Her complaint had first begun in 2003, as falling down and weakness in her left body half. Her symptoms ceased spontaneously without any treatment. In year 2006, numbness in her right body half, double vision, difficulty in swallowing, nausea, loss of balance were emerged. She was admitted to a hospital. Her MRI revealed non-specific abnormalities in white matter. Her symptoms were thought to be psychiatric, and she was given olanzapine 2.5 mg/day, diphenylhydantoin 200 mg/day. In year 2009, she was admitted to inpatient department with similar complaints as well as generalized body pain. Multiple Sclerosis was preliminary diagnosis and she was given steroids for 10 days. In year 2010, she was admitted to hospital again with numbness in left side of her face, double vision and difficulty in walking. Her diagnosis was somatization disorder and multiple sclerosis. She was given steroid for 10 days and then Interferon Beta 1a 100 mg weekly. Her symptoms repeated in 2013 in spite of the treatment. In her neurological examination, hypoesthesia and pain in her left body half and ataxic gait towards her left was detected. Her laboratory findings were within normal limits, her CSF examination was normal. Oligoclonal band and IgG index were within normal limits. Her MRI did not reveal any abnormality. Her EMG was normal. Her diagnosis was somatization disorder. She was not given any drug treatment, but was consulted to psychotherapy center for further evaluation.

In her psychiatric evaluation, it was understood that her symptoms were first started when she was pregnant to her first child in year 1999. Then her symptoms were repeated, in her second and third pregnancy in years 2003 and 2005. During the pregnancies and after the deliveries, her symptoms were aggravated. She was the fourth of 10 children. Her father died in year 1998. Her mother could not deal with her enough when she was a child. Mostly her elder sister took care of her. She was married when she was 17. Her sister was living together with her mother-in-law for the last 15 years. Her diagnosis was thought to be conversion disorder. At the end of the fourth interview, most of her symptoms were disappeared.

**Keywords:** conversion disorder, multiple sclerosis, psychotherapy

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### [PP-334] *Others*

## Falling in love: dream or dissociation?

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Dissociation is defined as a disruption in usually integrated functions of consciousness, memory, identity or perception of the environment. Dissociative disorders are closely related to childhood abuse or/and neglect. Trauma related intrusions might lead to

dissociative flashbacks. It has been often misdiagnosed as affective disorders, impulse control disorder or borderline personality disorder among others. We want to present a case that brought by her mother for irritability, destructive behavior, and depression after falling in love. She reported depression in her daily life and she felt helpless. In two weeks period, a range of symptoms and behaviors including amnesia, disturbance in sense of self, rapid shifts in mood and behavior, perplexing shifts in access to knowledge, memory, and skills as well as auditory and visual hallucinations revealed. Her mother reported a history of being able to see two different states in her daughter: a fourteen years old intelligent student, trusting state in which she speaks in a childish voice and having high-risk behavior like going off. Occasionally, she did not recognize people familiar to her. Supportive interviews as well as quetiapine and valproic acid were helpful for stabilization during the acute dissociative symptoms. In our interviews, psychological education for family, the stability of relationship between clinicians and patient has become the focus.

**Keywords:** amnesia, dissociation, love, treatment

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### [PP-335] *Mood disorders*

## Bipolar disorder in adolescents: a case report

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Mixed and rapid cycling types of bipolar disorder are more frequent in adolescent patients than the adult ones. It usually causes a decline in academic success, social and family functionality and increased suicide rates, legal issues. Therefore, it should be treated on time with the proper effective way. However, there is a limited data about the treatment of bipolar disorder in childhood and adolescent ages. There are very few studies published in last 10 years, which are credible and forward. The efficiency of lithium and other mood stabilizers, either monotherapy or in combined treatment, have been supported with studies consistently. Studies about the pharmacologic treatment of bipolar disorder in adolescents usually focused on acute mania episodes and subjects like depressive episode treatment, maintenance treatments, and comorbid diseases are relatively less studied. Besides, more studies are needed about the reliability, efficiency, tolerability, neurobiological effects on sick or under-risk child of medial ages.

This female adolescent presented initially at 15 years old with anxiety symptoms manifest as school refusal, social avoidance, and panic, as well as escalating verbal and physical aggression. A. was placed on fluoxetine 25 mg /day at age of 15, and following a school reintegration plan, she was able to have one year of more stable function. She presented again at the age of 17, in our clinic, uncontrollable physical aggression, excessive talking, insomnia and spending a lot of money. She was started on valproate and quetiapine to modulate her mood and explosive outbursts. She was given a DSM-IV-R diagnosis of bipolar disorder type I. In our study, which we present as a case report, we discussed the clinical aspects, differential diagnosis, current treatment approaches of bipolar disorder in a female adolescent inpatient diagnosed as bipolar disorder (manic episode) in the light of the literature.

The conception that bipolar disorder or manic-depressive illness could occur in childhood and adolescence has only recently been accepted, and some authors even suggest that it may be under-diagnosed, especially in adolescents. Some of the difficulties in diagnosing bipolar disorder in adolescents are atypical presentation, developmental influences, and comorbidity, especially with externalizing disorders. Clinicians need to be aware of the various presentations of adolescent-onset bipolar disorder.

**Keywords:** bipolar disorder, adolescents, pharmacologic treatment

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**[PP-336] Psychosomatic medicine-liaison psychiatry****Alterations in sleep quality, depression, anxiety and somatic symptoms in patients with fibromyalgia syndrome with treatment**Bugra Cetin<sup>1</sup>, Huseyin Gulec<sup>1</sup>, Hayal Ergin Toktas<sup>1</sup>, Ozgur Ulutas<sup>2</sup><sup>1</sup>Erenkoy Mental Health and Neurology Training & Research Hospital, Istanbul-Turkey<sup>2</sup>Erenkoy Physical Therapy and Rehabilitation Hospital, Istanbul-Turkey

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**Objective:** Fibromyalgia is a syndrome characterized by widespread musculoskeletal pain accompanied by fatigue; sleep disturbance, cognitive changes, mood disturbance and other somatic symptoms. Disordered sleep is such a prominent symptom in fibromyalgia that the American College of Rheumatology included symptoms such as waking unrefreshed, fatigue, tiredness, and insomnia in the 2010 diagnostic criteria for fibromyalgia. Long term outcome for the majority of patients with fibromyalgia, is sufficiently disappointing so that most patients can be considered to have resistant disease. In the treatment which symptoms to what extent is healed remains controversial. The aim of this study is to investigate the changes in symptoms among responsive and nonresponsive groups after the treatment.

**Methods:** 34 patients diagnosed as having fibromyalgia (FM) in Erenkoy Physical Therapy and Rehabilitation Hospital outpatient clinic were included in this study and 27 patients with FM completed the evaluation with Pittsburgh Sleep Quality Index (PSQI), Epworth Sleepiness Scale (ESS), Fibromyalgia Impact Questionnaire (FIQ), Visual Analog Scale (VAS), Patient Health Questionnaire Somatic, Anxiety, and Depressive Symptom Scales (PHQ-SADS) and Polysomnography (PSG) before medical treatment. In the sixth week of the treatment, the evaluation was repeated. Treatment response defined as 14% decrease on FIQ. The responsive group was compared with the nonresponsive group; and the values obtained before and after the treatment were compared for each group. In drug treatment, drug choice, the duration of treatment and the dose has been flexible.

**Results:** In the nonresponsive group only PSQI scores improved significantly ( $z:-2,077$ ,  $p:0.038$ ). Other parameters (ESS, FIQ, VAS, PHQ-SADS, PSG) are not significant. In the responsive group all the parameters (PSQI, PHQ15, GAD 7, PHQ 9, FIQ, VAS; respectively  $z:-2.522$ ,  $p:0.012$ ;  $z:-3.309$ ,  $p:0.001$ ;  $z:-2,042$ ,  $p:0.041$ ;  $z:-2,563$ ,  $p:0.010$ ;  $z:-3,621$ ,  $p<0.001$ ;  $z:-3.181$ ,  $p:0.001$ ) improved significantly, except sleepiness and PSG data. In both groups, subjective sleep quality improved but objective sleep measurements and sleepiness did not get better. In the responsive group; pain, depression, anxiety and somatic symptoms were significantly improved.

**Conclusion:** In the treatment response of fibromyalgia, the improvement of pain, depression, anxiety and somatic symptoms are more significant than subjective sleep quality. Despite the treatment, sleepiness and objective sleep measurements may not improve in both responsive and nonresponsive groups. These findings supports difficulty in treatment of fibromyalgia and this difficulty may be due to unimproved sleep.

**Keywords:** fibromyalgia, sleep, depression, anxiety, somatic symptoms

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**[PP-337] Psychopharmacology****Is dehydration a hidden danger in the use of lithium in elderly patients? a case report**

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Lithium is one of the first choice agents for long-term prophylaxis and treatment of acute episodes of bipolar disorders. It has a narrow therapeutic index; the target plasma concentration ranges from 0.6 to 1.5 mEq/L. Lithium toxicity can occur at levels > 1.5 mEq/L. There are three types of lithium poisoning: acute, acute or chronic and chronic. Factors that increase the risk for chronic toxicity in previously stable patients include other medications, illness, volume depletion. We report chronic lithium toxicity associated with dehydration in an elderly patient.

Our patient was a 63-year-old man, with his first manic episode experienced 5 years ago and used lithium carbonate 900 mg/day and quetiapine fumarate 50 mg/day for five years. His premorbid nature was hyperthymic. He was admitted to our psychiatric outpatient clinic

presenting with slurred speech, confusion, drowsiness, coarse tremor, hyperreflexia, apathy, ataxia, and bradycardia. Lithium plasma level was elevated to 2.69 mEq/L. The patient and his wife denied any taking lithium overdose however, 2 weeks ago, water intake and appetite decreased due to stress factors. Mental status examination was euthymic. Laboratory tests for blood serum glucose, serum calcium, sodium, and potassium, were well within normal limits. His blood urine and creatinine levels were slightly increased, not the levels as in renal failure. He had sinus bradycardia (HR: 50). His diffusion MR imaging was normal. He had no comorbid diseases or concurrent medications that can increase the risk of developing lithium intoxication. Because the patient had seriously high lithium levels and associated clinical conditions, he was consulted to nephrology for hemodialysis. With the first hemodialysis, his lithium level decreased to 2.1 mEq/L, than with second hemodialysis to 0.9 mEq/L, and his neurological manifestations recovered by hemodialysis.

It is now generally accepted that elderly patients do not tolerate lithium as well as younger patients and can develop serious adverse effects more rapidly while taking lower doses or at lower serum levels. Dehydration, which can be ignored in clinical practice, is important metabolic conditions that increase the risk of lithium toxicity. The best approach is certainly the use of preventive measures. Only increased physician awareness and the early use of effective treatment, namely dialysis, will prevent the mortality and protracted morbidity associated with this condition. This case illustrates some of factors that lead to lithium intoxication, advanced age, some metabolic disease, renal diseases, additional medication and dehydration. The most important factor is dehydration in elderly patients for lithium intoxication.

**Keywords:** lithium toxicity, dehydration

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### [PP-338] *Schizophrenia and other psychotic disorders*

## Self-injection of vitamin D3 and chronic renal failure: a case report

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Self-harm behavior is the act of damaging intentionally one's own body or a part of the body without suicidal intent. Severe self-injurious behavior is usually a manifestation of serious psychiatric disorders and may result in loss of an organ and/or organ function. Self-mutilation usually has irregular and repetitive characteristics. Medication misuse may lead to organ damage and failure. In this case, we present a psychotic patient acted in accordance with his delusions and developed renal failure after several self-injections of vitamin D, for a long time.

A 38 years old, single, unoccupied, male patient was evaluated at nephrology service while treated due to acute renal failure. His first complaints were irritability, restlessness, increased in religious involvement, aggressive behaviors when he was a student in university. He thought his complaints were result from his weakness and began to inject vitamin D3 and other vitamin supplements to his body. He had been hospitalized four times at psychiatry clinics, when his symptoms get worse. He had been injecting vitamin D, vitamin B12, and vitamin C preparations for ten years from his shoulders and hips

during this period; he had no complaints except for recurrent bizarre behavior. He did not use any psychiatric medication or treatment for the last 7 years. He had timidity, declined self-care, insomnia, loss of appetite and ulcers in his hips for last three months. He came in emergency clinic with these complaints under the custody of his family. He has been admitted with diagnosis of acute renal failure to internal medicine service. After improvement of metabolic conditions, he was transferred to our psychiatry clinic. In psychiatric examination, his self-care was insufficient, had somatic delusion of weakness of his body and delusion of medication himself with vitamin injections. In clinical follow-up, treatment of haloperidol 10 mg/day was continued that started in nephrology service. After partial remission in his psychotic symptoms, he was discharged. He did not attend to psychiatry outpatient clinic controls. Eighteen months later; his complaints such as weakness, fatigue, moodiness were increased and he was admitted to emergency service again. Blood creatinine level was found 7.8 in biochemical tests. He was hospitalized in nephrology service upon detection of chronic renal failure and he went under a hemodialysis program.

Iatrogenic hypercalcaemia most frequently induced by inconvenient use of vitamin D. The main symptoms of vitamin D3 intoxication occur due to increased absorption of calcium from gastrointestinal tract causing to hypercalcaemia. Calcium has many effects on nerves, heart, muscles, digestive system and kidney. In hypercalcaemia fatigue, nausea, vomiting, polydipsia, polyuria, dehydration, loss of consciousness, hypercalciuria, nephrolithiasis, nephrocalcinosis, and renal failure can develop. It is discussed that self-mutilations in patients with psychotic disorders are usually formed as disrupting the integrity of the body. Differently from other similar cases, vitamin

D3 injections had caused both metabolic and physical impairment at our patient's body. In our case, repetitive injections of vitamin D3 for about 12 years resulted in chronic renal failure.

**Keywords:** vitamin D, chronic renal failure, self-harm with psychosis

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**[PP-339] Mental retardation**

## High fever caused by caries in patient with Rubinstein-Taybi Syndrome and increase in psychiatric complaints; the importance of oral hygiene and care in psychiatry clinics

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Rubinstein-Taybi Syndrome (RSTS) is recognized with features such as broad thumbs, broad big toes palate problems, psychomotor growth deficiency and facial dysmorphism. Impaired oral and dental hygiene about oral care, crowding teeth, malocclusion, multiple caries and talon cusps are frequently observed. 27-year-old patient diagnosed as having RSTS, was admitted to the psychiatry clinic because of psychiatric complaints, high fever and general deterioration. Significant improvement was observed in all complaints after caries and oral hygiene treatment.

A 27-year-old female patient was diagnosed with RSTS. When she was 15 years old, aggressive behaviors, deterioration in impulse control, insomnia, mood disorders, visual hallucination and agitation were observed and significant improvement was observed after valproic acid 500 mg/day and risperidone 2 mg/day treatment. 5 months ago increase in fever, difficulty in walking and speaking, nausea, shivering, agitation attacks and fatigue was observed. Her fever was 38-39 and he was admitted to university hospital infection diseases clinic regarding fever etiology. Although detailed evaluations such as cranial MR, abdomen BT abdomen USG, routine biochemistry, blood and urine blood culture and peripheral smear were carried out during 2 months admission, she was discharged from the clinic as a result of ongoing high fever and clinic complaints with "fever of unknown origin" diagnosis. She was admitted to psychiatry clinic because it was evaluated that patients who could not be treated in clinical symptoms could display psychiatric behaviors such as agitation attacks and insomnia. The treatment of the patient who was taking valproic acid 500 mg/day and risperidone 2 mg/day until the admittance was changed as risperidone 2 mg/day, lorazepam 2 mg/day and propranolol 40 mg/day on the first day of admission. During the first week of admittance, significant improvement was not observed in her general medical situation and psychiatric complaints. Because of the evaluation carried out in our clinic regarding routine oral and dental hygiene, tooth extraction was carried out because of dental caries. After 5 days from tooth extraction, high fever disappeared dramatically; decrease in agitations and attacks were observed. On the 2<sup>nd</sup> week of admittance, her medical treatment was organized as lorazepam 1 mg/day and propranolol 20 mg/day because it was evaluated that clinical improvement was related with tooth infection. On the 20<sup>th</sup> day of her admittance, the patient was discharged thanks to general improvement in her situation.

On oral appearance of RSTS multiple dental anomalies and dental caries are observed. In these patients, rates of increased dental caries differ at the rate of 15-36% and oral hygiene is very important for treatment and tracking of patients. In our case, dramatic improvement was observed in all complaints after treating dental caries in our patient, who was having high fever, deterioration in general situation and psychiatric complaints as a result of infection caused by dental caries. General physical examination is very important because patients have trouble in expressing their complaints. With this case, it was aimed to express the importance of oral care and hygiene in patients whose cognitive functions are impaired.

**Keywords:** Rubinstein-Taybi Syndrome, high fever, oral care, psychomotor growth deficiency

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**[PP-340] Others****The effect of psychological status of patients with breast cancer on postoperative pain**Ilknur Yildirim<sup>1</sup>, Hulya Guveli<sup>2</sup>, Hasan Karanlik<sup>1</sup>, Murat Emin Guveli<sup>1</sup>, Serap Oflaz<sup>3</sup><sup>1</sup>Istanbul University, Institute of Oncology, Department of Clinical Oncology, Istanbul-Turkey<sup>2</sup>Istanbul University, Institute of Oncology, Department of Psychosocial Oncology, Istanbul-Turkey<sup>3</sup>Istanbul University, Istanbul Faculty of Medicine, Department of Psychiatry, Istanbul-Turkey

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**Objective:** This study investigated the extent to which demographic and psychological variables may influence postoperative pain after breast conserving surgery.

**Methods:** Thirty-five patients aged 18 to 65, with an American Society of Anesthesiologist physical status I or II and body mass index between 18.42 and 42.97, undergoing breast-conserving surgery were enrolled. State trait anxiety inventory (STAI) and beck depression inventory (BDI) were used to assess patients' psychological status one week before the operation. General anesthesia and postoperative analgesia were standardized. Patients were asked to rate their surgical site pain by Numeric Rating Scale at rest (NRSr) at 1, 2, 4 and 12 hours after surgery. Age, marital status, preoperative pain presence, neoadjuvant chemotherapy applying and educational status were noted. Pearson' correlation and chi-square test were used for statistical analysis.

**Results:** There were no serious adverse events during the whole study period. Eight patients suffered from nausea and received ondansetron 4 mg as antiemetic medication. Two of these patients had vomiting. Values of hemodynamic and respiratory changes were stable in all the patients through the 24-hour postoperative period. The average age of patients was  $42.91 \pm 10.25$ , STAI-1  $43.44 \pm 10.67$ , STAI-2  $43.91 \pm 7.15$ , BDI  $11.91 \pm 8.49$ . The median NRSr points are 5, 3, 2, 1 at 1., 2., 4., and 12. hour respectively. Pearson r showed positive correlation between depression and only NRSr at postoperative 4. hour ( $p < 0.05$ ). Marital and educational status, neoadjuvant chemotherapy and preoperative pain were unrelated to any of the measures.

**Conclusion:** However, given that anxiety and depression were not significantly associated with postoperative pain in this study, there is a need for further studies with more cases.

**Keywords:** anxiety, breast cancer, depression, pain

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**[PP-341] Schizophrenia and other psychotic disorders****ECT and clozapine combination and mania: a case report**

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Electroconvulsive therapy (ECT) and clozapine combination may predict resistant schizophrenia in literature although data is limited to case reports. Research is indicated as safe and effective on the combination of ECT and clozapine. Bloch et al. have described seizures extended with this combination. Kumar et al. reported a patient that develops delirium after combination of ECT and clozapine. ECT and clozapine combination provided this improvement long term consequences are not clear, it is suggested that the effect is sustainable. This article presented a patient who developed manic episode then 600mg/day clozapine and bilateral ECT combination.

A 36-year-old, single, male patient displaying disorganized behavior, irritability, treatment noncompliance, was admitted to the hospital. The first symptoms that appeared 20 years ago, were self-talking, hearing voices, she began as the self-orientation. The patient with schizophrenia was treated 5 times. He does not have any organic disease and alcohol use disorder. There was no family history of mental illness. We could not learn the drugs he used before. Since 2012, patient has been receiving clozapine 600 mg/day, risperidone 8mg/day, biperidene 4mg/day, zuclopenthixol depot. After implementation of planned ECT sessions irritability, aggression, hyperactivity, insomnia and grandiosity developed and ECT treatment was discontinued. His treatment was continued with medical treatment. Baseline Young Mania Rating Scale score was 26. His manic symptoms were decreased within next two weeks.

Following ECT applications, manic episodes were reported in the literature. However, while ECT and clozapine combining has not been reported any manic episode. In resistant schizophrenia, clozapine and ECT combination should be used with caution.

**Keywords:** electroconvulsive therapy, mania, clozapine

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**[PP-342] Disruptive behavior disorder**

## Aripiprazole and chlorpromazine combination in childhood self-mutilation: two case reports

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Medications have an important role in the treatment self-mutilation, which is a common admission complaint to the child psychiatry clinics. Aripiprazole is a partial dopamine agonist, which is approved by FDA for the treatment of schizophrenia, bipolar I disorder and aggressive behavior in autism in children and adolescents.

A8-year-old-girl, was admitted to the outpatient clinic of Bakirkoy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery by her mother with complaints of self-mutilation such as hitting head to the wall and hitting to her face by her hand. She was interned to the inpatient clinic for diagnoses and treatment. Her mother stated that these behaviors had started 3 years ago and increased progressively. Her mother was binding her hands by rope to prevent self-mutilation. She was diagnosed as autism spectrum disorder, when she was 5 years of age and epilepsy at the age of 2 years. Her weight was 19 kg. She had oxcarbamazepine 150 mg/day, valproic acid 15 mg/day, risperidone 1.5 mg/day, and mirtazapine 15 mg/day for 2 years but did not have recovery. Her treatment was changed to valproic acid 250 mg/day, aripiprazole 2.5 mg/day and chlorpromazine 100 mg/day. Aripiprazole dose was increased by 2.5mg in every two days with a maintenance dose of 15 mg/day and valproic acid was increased to 500 mg/day in 12 days. Her self- mutilation had declined significantly by the second week of the treatment. Second case is a 5-year-old-girl, who had a weight of 12 kg. She was admitted to the same clinic as the previous patient by her father and grandmother with the same complaints that is hitting head to the wall and slapping her face by her hands. She was returned to the inpatient clinic for diagnoses and treatment. She had been mutilating herself for 2 months. She was also tied up by rope, night and day. She was born premature and diagnosed as severe developmental delay 2 years ago. Firstly, she had poor eye contact and social interaction, but her eye contact, pointing, use of gestures and facial expressions and responding to name was increased by interaction with hospital staff. She was diagnosed as reactive attachment disorder. She did not respond to risperidone 3 mg/day and haloperidol 5mg/day. Her treatment was changed to valproic acid 120 mg/day, chlorpromazine 100mg/day, and aripiprazole 2 mg/day. Aripiprazole dose was increased to 6 mg/day by increasing 2 mg in every two days. Valproic acid dose was increased to 200mg/day in the second day and chlorpromazine dose was increased to 150 mg/day on the 19<sup>th</sup> day of the treatment. Valproic acid was stopped and topiramate 15 mg/day was added on the 22<sup>nd</sup> of the treatment. Topiramate dose was increased to 25 mg/day 7 days later and then increased to 50 mg/day 7 days later. Self-mutilation disappeared by the third week of the therapy. Our two cases provide evidence for effectiveness of aripiprazole in children and adolescent with self-mutilation

**Keywords:** aripiprazole, childhood, chlorpromazine, self-mutilation

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S302**

**[PP-343] Neuroscience: Neuroimaging-genetics-biomarkers****May mixed-handedness reflect cerebral lateralization abnormalities in mental illnesses with psychotic features?**Remziye Tuncel<sup>1</sup>, Gokben Hizli Sayar<sup>2</sup><sup>1</sup>Uskudar University, Faculty of Humanities and Social Sciences, Department of Psychology, Istanbul-Turkey<sup>2</sup>Uskudar University, NPIstanbul Hospital, Department of Psychiatry, Istanbul-Turkey

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**Objectives:** Cerebral lateralization is defined as the anatomical and functional differences between two brain hemispheres. Hand preference is accepted as a functional cerebral lateralization. Deficits in lateralization have been reported in handedness, language and anatomical asymmetry in schizophrenia, but the relationship between these anomalies has been unclear the excess of non-right-handedness (mixed handedness-ambiguous handedness-left handedness) in patients with psychotic symptoms compared with normal controls has been reported in many studies.

**Methods:** This study aimed to examine the relation between handedness and psychotic symptoms identified from study participants consisted of 728 patients consecutively admitted to the psychiatry department of the NPISTANBUL Neuropsychiatry Hospital were included. Handedness was assessed using the Edinburgh Handedness Inventory, giving a lateralization score ranging from -100% (full-left-handedness) to +100% (full-right-handedness). All diagnoses were made by psychiatrists using DSM IV criteria for psychiatric disorders.

**Results:** According to the preliminary results of this research, we will evaluate the association between left-handedness and age, education, and psychiatric diagnosis. We argue that a deviation from normal cerebral lateralization, as indexed by mixed handedness, is associated with the psychosis phenotype.

**Conclusion:** Findings will be discussed in terms of how mixed-handedness may reflect cerebral lateralization abnormalities in mental illnesses with psychotic features.

**Keywords:** handedness, lateralization, psychosis

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S303**

**[PP-344] Psychosomatic medicine-liaison psychiatry****Evaluation of psychosomatic recurrent abdominal pain in an adolescent girl: a case report**

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Treatment of a disorder should be based on knowledge of its cause(s) and its pathophysiological mechanisms. During the last few decades, our understanding of recurrent abdominal pain (RAP) of non-organic origin has increased. Criteria for diagnosing functional RAP according to the abdominal symptoms have been elaborated. There is a growing realization that stress is of importance in the etiology of many cases, and that stress can be of importance in allodynia and hyperalgesia of the intestine. The stressor, as well as the susceptibility to stress, differs markedly. The diagnosis of psychosomatic RAP should be based on a clear medical understanding of the bodily consequences of stress and according to clear diagnostic criteria. Cognitive therapy has been shown to be helpful for non-organic RAP according to several studies. In this presentation we aimed to present psychiatric evaluation and treatment process of a case that have had psychosomatic RAP for three years.

A 14 years old girl applied to Department of Child and Adolescent Psychiatry, Dokuz Eylul University School of Medicine with the symptoms of RAP and anxiety. She had been evaluated physically for any organic disease for many times but no organic disease was thought. Then physicians had suggested psychiatric evaluation for her. She was evaluated for depression and anxiety disorder; her intelligence was measured. Cognitive behavior therapy sessions were planned for this girl and she began to take down her pain during daytime.

In psychosomatic RAP pathophysiology; prolonged stress can influence the muscular system, hormonal regulation, intestinal sensitivity and motility, and the pain system, leading to muscular involvement, altered hormonal regulation, disturbed intestinal function and recurrent pain. A treatment method for psychosomatic RAP should effectively implement our knowledge of stress and its consequences for the brain and body by resolving psychosocial problems, focusing on coping and improving body regulation of stress. A decrease in

stress, better coping and improvement in bodily reactions should lead to reduce pain, which can be a treatment of psychosomatic RAP.

**Keywords:** psychosomatics, recurrent abdominal pain, adolescent

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**[PP-345] Adult attention deficit-hyperactivity disorder**

## Catalase and Thiol Levels in Adult ADHD Patients

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**Objective:** The prevalence of Adult attention deficit-hyperactivity disorder (A-ADHD) has been estimated to be 5%. There are several hypotheses regarding the etiology of ADHD. Although numerous researches have been conducted regarding neurobiology of pediatric ADHD, A-ADHD studies were relatively few. Many studies have indicated that oxidant mediated neuronal damage might play a role in the pathophysiology of various psychiatric disorders. Recently, oxidative stress has been studied in A-ADHD and there is an accumulating evidence to support its' role. We have previously reported that oxidants were high and antioxidant levels were low in A-ADHD. In the present study, we evaluated jointly whether catalase (CAT), an antioxidant, activity and thiol, an oxidant, levels are associated with A-ADHD or not. We expect to find the clues of oxidative imbalance more remarkably, since the nature of disease interferes more with brain related functions.

**Methods:** Twenty-five A-ADHD patients from Gaziantep University, diagnosed according to Turgay's Turkish version of Adult ADD/ADHD DSM IV-Based Diagnostic Screening and Rating Scale by two psychiatrists, and 25 healthy volunteer controls were included. The subjects strictly refrained from any substance intake and physical exercise after 08:00 p.m. on the day before collection. CAT and thiol were measured in plasma samples of study groups.

**Results:** Age, gender, and BMI index of patients and controls have shown homogeneity and there were no differences between the groups. Total score and subscores were not correlated with any of the mentioned biochemical parameters. The mean CAT levels in patients with ADHD were significantly higher and thiol levels were lower than those of controls (<0.001, <0.001, respectively). The patients, who had a comorbid psychiatric disorder exhibited significantly higher CAT and significantly lower thiol levels compared with patients, who had only ADHD.

**Conclusions:** In a previous study of ours, we found that A-ADHD patients' Total Antioxidant Status (TAS) were higher than controls and we interpreted this finding as a "rebound phenomenon" to the increased oxidative stress. Thus, we may also make the same interpretation to the present study findings. On the other hand, we found that A-ADHD patients had lower oxidants (thiol) level than controls. In a recent study that included the pediatric ADHD patients thiol levels were found higher in the ADHD group than the controls but the difference was not statistically significant. Malondialdehyde (MDA) and nitric oxide (NO), indicators of oxidative stress, were significantly lower in the pediatric ADHD group than the control group. Taken together with CAT results thiol levels might be decreased by increasing the antioxidant level. There is an equilibrium between oxidants and antioxidants thus, if antioxidant level increases, oxidants should be decreased secondarily. What we have seen from our results was this equilibrium. The etiology of ADHD is related with the alteration on dopaminergic activation and hypofunction of dopamine pathways. Dopamine is very susceptible to auto-oxidation when antioxidant defense is weak. Therefore, oxidative stress may be involved in dopaminergic pathways in A-ADHD. However, the exact relationship between oxidative stress and A-ADHD remains unclear and there is a need for further studies on this field.

**Keywords:** catalase, thiol, oxidative stress, adult ADHD

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S304**

**[PP-346] Neuroscience: Neuroimaging-genetics-biomarkers****Effect of maternal depression to tumor necrosis factor alpha levels in fetal cord blood**Emre Yilmaz<sup>1</sup>, Faruk Uguz<sup>1</sup>, Erdem Onder Sonmez<sup>1</sup>, Mine Sahingoz<sup>1</sup>, Gulsum Sonmez<sup>2</sup>, Zeynel Gokmen<sup>2</sup>, Kazim Gezgin<sup>3</sup>, Rahim Kucur<sup>1</sup><sup>1</sup>Necmettin Erbakan University, Meram Faculty of Medicine, Department of Psychiatry, Konya-Turkey<sup>2</sup>Konya Research and Training Hospital, Department of Pediatrics, Konya-Turkey<sup>3</sup>Necmettin Erbakan University, Meram Faculty of Medicine, Department of Obstetrics and Gynecology, Konya-Turkey

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**Objective:** In this study, we aimed to present the effect of major depression of a mother on the level of TNF- $\alpha$  in fetal cord blood.**Method:** The study included 58 pregnant women meeting criteria from pregnant women, who applied for elective cesarean to Konya Training and Research Hospital and Konya Necmettin Erbakan University Meram Medical Faculty Gynecology and Obstetrics Clinics between October 2011 and December 2012.**Results:** 28 mothers diagnosed as depression during pregnancy and first 30 mothers without a diagnosis of depression were compared as control groups. No significant differences in terms of age, work status, income level, abortion history, gender of baby and anesthesia method during cesarean were found between mothers diagnosed with depression during pregnancy and those without a diagnosis of depression. Pregnancy period and birth weights of babies of mothers diagnosed as depression during pregnancy were significantly lower. The levels of TNF- $\alpha$  in cord blood of babies of mothers diagnosed as depression during their pregnancy were significantly higher with respect to those of the cord blood of babies of mothers who were not diagnosed as depression during pregnancy.**Conclusion:** Our evidence motivates to conclude that major depression during pregnancy process might affect not only mental and psychosocial functions of mothers, but also neurogenesis by means of proinflammatory cytokines like TNF- $\alpha$  in developing fetal brain. Our review manifests significance of diagnosis and treatment of mother depression during pregnancy process.**Keywords:** TNF- $\alpha$ , depression, pregnancy**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S305****[PP-347] Others****Sociodemographic characteristics and psychiatric diagnoses of child and adolescents referred to special education**Hatice Altun<sup>1</sup>, Ebru Findikli<sup>2</sup><sup>1</sup>Kahramanmaraş Sutcu Imam University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Kahramanmaraş-Turkey<sup>2</sup>Kahramanmaraş Sutcu Imam University, Faculty of Medicine, Department of Psychiatry, Kahramanmaraş-Turkey

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**Objective:** Many children and adolescents with intellectual and physical disabilities apply to "the health board for the disabled" in hospitals to get their social and educational rights. The aim of this study was to evaluate the sociodemographic characteristics, complaints, psychiatric diagnoses of child and adolescents, who had been referred for special education by the child and adolescent psychiatry outpatient clinics.**Methods:** We retrospectively reviewed records of 104 children and adolescents aged 0-17 years, who applied to Child and Adolescent Psychiatry outpatient clinic at Kahramanmaraş between January 2009 and 2012. In all cases, age, gender, complaints, drug use, comorbid physical and psychiatric disorder, intelligence level, and psychiatric diagnosis according to DSM-IV-TR classification were evaluated.**Results:** Of the cases, 45.2% (47) were female and 54.8% (57) were male. The mean age was 5.23 $\pm$ 4.1. Most of the cases (63.5%, n=69) were in the range of 0-6 years of age. The most common complaints were determined as 'speech delay', 'delay than their peers', 'perception disability' in the range of 0-6 years of age, 'distractibility', 'learning disability' and 'academic failure' in the range of 7-17 years of age. The most common psychiatric diagnoses were mild (51.4%) and moderate (26.4%) cognitive developmental delay, pervasive developmental disorders (13.8%) in the range of 0-6 years of age, mild (62.5%) and moderate (12.5%) mental retardation, pervasive developmental disorders (12.5%) in the range of 7-17 years of age. 39.6% (41) of the cases were comorbid physical disorder and 49.5% (51) of the cases were comorbid psychiatric disorder. %18.3 of the cases were using psychiatric drugs.**Conclusion:** In our study, the most common psychiatric disorders in children and adolescents that require special education had been

identified as mental retardation and pervasive developmental disorder. Moreover, rate of comorbid physical and psychiatric disorders in the children were found to be high. Very few studies have yet been published in this field.

So further investigation in this field will contribute the statistical data of mental disabilities contribute in our country.

**Keywords:** special education, sociodemography, psychiatric diagnoses, mental retardation

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S305-S6**

**[PP-348] Psychopharmacology**

## Retrospective analysis of adopted cases referred to child and adolescent psychiatry outpatient clinic in the province of Tekirdag

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**Objective:** In 2011, the number of adopted children in Turkey was 20617. In the United States, approximately 120000 children are adopted annually, and adopted individuals is consisting of about 1.5 million children younger than 18 years. The face of adoption is changing, however, as decreasing domestic adoptions have been accompanied by a sharp increase in the number of international adoptions. Worldwide, approximately 40000 children per year are moved between more than 100 countries through adoption. This study's aim is to investigate adopted child and adolescent cases referred to Tekirdag State Hospital child and adolescent psychiatry outpatient clinic.

**Method:** File information of 27 cases that were referred to Tekirdag State Hospital, child psychiatry clinic between 01 June 2010 and 31 May 2012 were reviewed retrospectively. Socio-demographic characteristics of the children and reasons for referral determined.

**Results:** The mean age of the delinquent children was  $10.870 \pm 3.623$ , 66.7% were female (n=18), 59.3% (n=16) of the children's mother was housewife and mean age of these mothers was  $50.000 \pm 6.138$ . The most reason for application was irritability (44%, n=12) and the most diagnosis was anxiety disorders (22%, n=6). The most common treatment method was the use of SSRI (44.4%, n=12).

**Conclusion:** The studies show that; adopted children did not differ from their non-adopted peers or siblings from the same environment in terms of IQ, but their school performance and language abilities lagged behind, and more adopted children developed learning problems. Therefore, it is necessary to identify the factors that increase mental health and behavioral problems in foster children and measures must be taken for these issues. Follow-up and treatment of adopted children must continue in child psychiatry outpatient clinics to take precautions against mental illness that may arise in the future.

**Keywords:** adopted child, foster child, child and adolescent psychiatry

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**[PP-349] Attention deficit-hyperactivity disorder**

## OROS-MPH is more effective than ir-mph in Turkish children: a retrospective chart review

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**Objective:** The aim of this study was to evaluate the efficacy and safety of OROS-methylphenidate (OROS-MPH) compared with immediate-release methylphenidate (IR-MPH) in Turkish children with attention deficit hyperactivity disorder (ADHD).

**Method:** The medical records of primary school-aged children (7-14 years old), who were first-time referrals to the outpatient clinic, were reviewed, and 67 children receiving OROS-MPH (18-54 mg once daily) and 47 children receiving IR-MPH (15-60 mg in divided doses) were recruited for the study, for a total of 114 children receiving treatment for ADHD over 8 weeks. Baseline and 4- and 8-week assessment

records were reviewed. Efficacy assessments included the Turgay DSM-IV ADHD Screening and Rating Scale (T-DSM-IV), parent and teacher forms, and the Clinical Global Impression - Improvement and Severity (CGI-IS) Scale. Safety assessments included laboratory, ECG, heart rate, and blood pressure evaluations (at baseline and 8 weeks), as well as a scale completed by the parents to capture side effects at the 8<sup>th</sup> week.

**Results:** The total T-DSM-IV-S scores from both the parent and teacher forms decreased significantly in both groups over 8 weeks ( $p < 0.001$ ). No statistically significant differences between the OROS-MPH and IR-MPH groups were found with respect to the mean total score changes on the T-DSM-IV scale of the parent forms at 8 weeks. According to the teacher forms, OROS-MPH was found to be superior to IR-MPH based on the mean total score change from the 4<sup>th</sup> to the 8<sup>th</sup> week ( $p = 0.008$ ). OROS-MPH was again found to be superior to IR-MPH when comparing baseline-to-8<sup>th</sup>-week- and 4<sup>th</sup>-to-8<sup>th</sup>-week mean inattention score change on both the teacher ( $p = 0.007$  and  $p = 0.025$ , respectively) and parent ( $p = 0.015$  and  $p = 0.013$ , respectively) forms. With regard to hyperactivity-impulsivity scores, only comparisons of baseline-to-4<sup>th</sup>-week scores on the parent forms revealed statistically significant mean score changes (OROS-MPH > IR-MPH,  $p = 0.042$ ). OROS-MPH and IR-MPH were both well tolerated, with similar side-effect profiles.

**Conclusion:** OROS-MPH was found to be effective and safe in the treatment of ADHD symptoms in Turkish children.

**Keywords:** attention deficit hyperactivity disorder, methylphenidate, osmotic release oral system

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### [PP-350] *Learning disorders*

## Corpus callosum agenesis in a dyscalculic child, a case report

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In this poster, we aimed to present a patient, who has corpus callosum agenesis and displaying academic problems, attention difficulties and hyperactivity. We reviewed the literature and compared with the information of the patient who has been followed by our clinic. A 9-year-old boy patient with academic underachievement and attention difficulties was brought by his family to our clinic. Reading and writing skills were observed as normal however; his level of numeracy skills is significantly inadequate for his age and education. Difficulties at verbal expression skills, perceptual problems, short attention span and memory problems were observed. Ophthalmological and auditory examinations are performed in order to exclude related disorders. Patient has been found as normal intelligence, the difference of 30 points between verbal scores and performance scores were found in the WISC-R test. It is thought that corpus callosum has roles at electrophysiological and the sensory-motor development, perception and motor function, speech and speech disorders and to have functions in interhemispheric connections. Corpus callosum abnormalities are one of the most common structural abnormalities in the brain tissue. Callosal dysgenesis or agenesis, as can be seen in children with no symptoms can be seen in major problems are indicated. Have a short attention span, memory problems, problems in verbalization, cognitive disorders, dyspraxia, writing and reading problems may occur. We diagnosed specific learning disability in this patient with corpus callosum agenesis. This co-occurrence can be additional information for literature.

**Keywords:** corpus callosum, dyslexia, specific learning disability

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S307**

**[PP-351] Demantial syndromes****A case of frontotemporal dementia that was monitored long term as a misdiagnosis of depression**

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Frontotemporal dementia (FTD) is a focal clinical syndrome characterized by profound changes in personality and social conduct and associated with circumscribed degeneration of the prefrontal and anterior temporal cortex. Frontotemporal dementia, which is a highly heterogeneous disorder in terms of its clinical and neuropathological characteristics, is one of the neuropsychiatric disorders. Therefore some cases with frontotemporal dementia might receive psychiatric diagnoses like depression, bipolar disorder, schizophrenia and Obsessive compulsive disorder. The present case describes a female patient with FTD that followed by treatment of depression for nearly 5 years although not being response. A 64-year-old female was brought to our clinic by her husband because of indifference, impairment in personal hygiene (urinary and fecal incontinence), perseverative response only to the questions asked. The patient's symptoms, which were less talk, social withdrawal, apathy have started about seven years ago and was followed by depression for five years. The patient, who discontinued his treatment because of increasing his clinical symptoms 2 years ago was admitted to our clinic with a diagnosis of preliminary diagnosis FTD. During the psychiatric evaluation, we have made a detailed examination and imaging. Due to bilateral frontal and temporal lobes atrophy by magnetic resonance imaging (MRI) and hypometabolism in bilateral frontal and temporal regions by positron emission tomography using fluorodeoxyglucose (FDG-PET), she was diagnosed as FTD. Supportive treatment was recommended. FTD is the second most common cause of early onset dementia and is clinically characterized by progressive behavioral change, executive dysfunctions, and language difficulties. Clinical features of FTD include changes of personality, restlessness, loss of inhibition, apathy, social withdrawal and impulsiveness. FTD is separated from other dementias due to beginning psychiatric symptoms earlier than memorial impairment. In our case, although clinical symptoms were consistent with FTD, the patient was firstly diagnosed as having depression and has been followed for 5 years whereas her clinical symptoms became got worst. There was no differential diagnosis of FTD. Patients with FTD are frequently misdiagnosed as suffering from psychiatric conditions, mostly depression. Our case is important due to FTD was misdiagnosed with depression. Our case has been monitored for 5 years with a misdiagnosis of depression but it is an important case since it was not evaluated in detail despite being compatible with FTD.

**Keywords:** frontotemporal dementia, depression**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S308****[PP-352] Others****Copycat suicides in 5-year old children: presentation of 2 cases**Mustafa Celik<sup>1</sup>, Aysun Kalenderoglu<sup>1</sup>, Oguzhan Bekir Egilmez<sup>1</sup>, Sema Saglam<sup>2</sup>, Emel Koyuncu Kutuk<sup>2</sup>, Behice Han Almis<sup>2</sup>, Feridun Bulbul<sup>3</sup><sup>1</sup>Adiyaman University, Faculty of Medicine, Department of Psychiatry, Adiyaman-Turkey<sup>2</sup>Adiyaman Research and Education Hospital, Adiyaman-Turkey<sup>3</sup>Gaziantep University, Faculty of Medicine, Department of Psychiatry, Gaziantep-Turkey

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Suicide is a conscious, self-mutilative behavior. It is generally accepted that children comprehend irreversible nature of death at about 8-10 years and therefore suicides below 7 years of age are very rare. Social learning is an important factor causing contagion of suicides especially among children and adolescents. A novel by famous German poet Goethe (The Sorrows of Young Werther) caused suicidal behavior in many teenagers, who also copied Werther's dressing style and suicide method. The contagion of suicides after a widely publicized suicide is named as Werther effect by David Phillips. In literature, there are cases of children and adolescents who committed suicides after watching a scene of suicide in a TV program but these cases are usually at or above 7 years of age. Herein we present two children who committed suicide and died at age of 5.

**Case 1:** A 5-year-old boy was brought to child emergency department after hanging himself to a cabinet cover. Interview with his family revealed that he had no previous developmental abnormality or mental disorder. He watched a movie scene in which a female hung

herself with a rope and he hung himself half an hour later while his mother was in the other room.

**Case 2:** A 5-year-old boy was brought to emergency department after hanging himself to a door with a tie. He was alone at home for an hour. Interview with his family revealed that there was a TV-series in which hanging of a victim was shown. His family denied any developmental or mental disorder.

Role of TV programs in child and adolescent suicides is a frequently debated topic. The cases we present differ from previous ones with their very young ages, and copycat suicides without a suicide motivation. We suggest that regulations for televisions should include measures to avoid exposure of small children to suicide scenes.

**Keywords:** Werther effect, suicide, children and adolescents

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### [PP-353] *Schizophrenia and other psychotic disorders*

## Child sexual abuse and schizophrenia: case study

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Schizophrenia is a mental disorder characterized by a breakdown in thinking and poor emotional responses. There has been increasing awareness of the prevalence of childhood sexual abuse (CSA) and the psychological damage that this can cause. Prevalence rates of sexual abuse in the general population range from 4.0% to 21.4% in adults and from 3.0% to 33.2% in children. Males who had suffered child sexual abuse were 1.3 times, and abused females 1.5 times, more likely to have been subsequently treated for schizophrenic disorders than the general population. The medical literature has reported that both psychotic and non-psychotic symptoms in schizophrenia are related to childhood trauma (CT). History of childhood abuse and neglect are common in patients with first episode Schizophrenia (FES), and lead more prominent positive symptoms at first admission. In this paper we are going to discuss man who was abused at the age of 15 and after this traumatic event developed psychotic symptoms. A.P. and 28 years old man was abused by his neighbor at age of 16. After the sexual abuse that he experienced he have been agitated, nervous and afraid of something. He had chief complaints of having impaired sleep talking to self-became aggressive and violent. He was socially isolated and refused going to school. He had visual and auditory hallucinations. He was diagnosed with FES. Several times, he was admitted to EUMF again because of his hallucinations and persecutory delusions that he experienced when he refused taking oral medications. Child abuse and neglect have been found to be causally related to an increased risk of a wide range of psychiatric disorders including anxiety disorders, mood disorders, substance abuse and eating disorders. An association between childhood sexual abuse (CSA) and psychosis was strongly reported in most of the studies. In recent studies, were reported that CT could increase stress sensitivity. It was found that there was a correlation between the cortisol awakening response and childhood sexual abuse and a relationship between CT and decreased BDNF levels in FES patients. It might be possible that CT mediates proneness to psychosis by changing HPA axis and/or by epigenetic processes. Without a long-term prospective study of large numbers of children, who were sexually abused, it is very difficult to be certain whether CSA is an additional risk factor or casual factor in schizophrenia in these children. In conclusion, CSA increases the risk of developing psychotic illnesses and raises the importance of "asking about childhood trauma when trying to understand or assist people diagnosed with psychosis or schizophrenia". It is possible that interventions aimed at preventing CT in children would reduce the manifestation of psychosis among young people.

**Keywords:** schizophrenia, sexual abuse, psychosis

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S309**

**[PP-354] Others****Association between depression and serum cortisol and dehydroepi and rosterone-sulfate levels patients with fibromyalgia**Esra Aydıncal Semiz<sup>1</sup>, Sami Hizmetli<sup>1</sup>, Murat Semiz<sup>2</sup>, Ahmet Karadag<sup>3</sup>, Bulent Alim<sup>1</sup>, Merve Canli<sup>1</sup>, Mehmet Siddik Tuncay<sup>1</sup><sup>1</sup>Cumhuriyet University, Faculty of Medicine, Department of Physical Medicine and Rehabilitation, Sivas-Turkey<sup>2</sup>Gaziosmanpasa University, Faculty of Medicine, Department of Psychiatry, Tokat-Turkey<sup>3</sup>Numune Hospital, Department of Physical Medicine and Rehabilitation, Sivas-Turkey

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**Objective:** Fibromyalgia Syndrome is a chronic disease of the musculoskeletal system accompanied by the conditions such as widespread body pain, increased fatigue and hypersensitivity in specific anatomical regions, and sleeping disorder. Hypothalamic-pituitary-adrenal (HPA) axis abnormalities play a key role in the cause and pathogenesis of many psychiatric disorders and fibromyalgia. It is aimed to investigate that the serum cortisol and dehydroepiandrosterone-sulfate (DHEA-S) levels between fibromyalgia patients and control group, and to research whether depression has effects on these hormones or not.

**Method:** 72 patients and 39 healthy volunteers who were diagnosed as FMS according to the ACR 1990 criteria were included in this study. Patients were divided into two groups. There were 40 patients in the first group, who were applied both balneotherapy (BT) and physical therapy (FT). In the second group, there were 32 FMS patients, who were only FT applied. The control group was consisted of 39 healthy individuals. To determine the levels of the cortisol and DHEA-S, the blood samples were taken from the patients and the control group that match with the study criteria between 08.00 am and 09.00 am. Blood samples were taken twice including before and after treatment.

**Results:** Serum cortisol average of individuals in patient group and control group was found as  $10.10 \pm 4.08$   $\mu\text{g/dL}$  and  $11.78 \pm 3.6$   $\mu\text{g/dL}$ . DHEA-S level of patient group was determined as  $89.93 \pm 53.96$   $\mu\text{g/dL}$  while control group as  $143.15 \pm 107.92$   $\mu\text{g/dL}$ . Patients under balneotherapy treatment have an average of serum cortisol level of  $9.95 \pm 3.20$   $\mu\text{g/dL}$  before treatment and  $9.06 \pm 3.77$   $\mu\text{g/dL}$  after treatment while serum DHEA-S levels before and after treatment was found as  $77.60 \pm 48.05$   $\mu\text{g/dL}$  and  $76.84 \pm 48.71$   $\mu\text{g/dL}$ . Before the treatment Beck Depression score was  $11.58 \pm 5.65$ . After the treatment Beck Depression score was  $8.43 \pm 5.57$ .

**Conclusion:** In this study, serum cortisol and serum DHEA-S levels of fibromyalgia patients were significantly lower than levels of healthy control patients. However, there was no significant correlation between depression and serum hormones levels. Although the cause and effect relation cannot be clearly explained hence our study is cross-sectional, in view of our results and the data of early studies, low levels of serum cortisol and DHEA-S were thought to be related to physiopathology of fibromyalgia disease than depression.

**Keywords:** cortisol, dehydroepiandrosterone-sulfate, depression, fibromyalgia

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**[PP-355] Others****A case of lithium intoxication, neuroleptic malignant syndrome and acute renal failure comorbidity – a chicken and egg situation**

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Treatment of bipolar disorder (BD) may require multiple medications depending on severity and type of symptoms; in fact, sometimes it is unavoidable. However, the serious side effects of these psychiatric medications must be considered. In lithium toxicity, the rapid emergence of NMS that is seriously life threatening and embracing the possibility of being confused with many other conditions, should be recognized by clinicians. That the therapeutic index and toxic doses of lithium are very close makes treatment difficult. This BD case medicating with lithium and olanzapine had diarrhea and reduced oral intake for 4 days previous and developed ARF, NMS and Li intoxication. This paper seeks to answer the question of whether the renally excreted NSAID and AB medications given because the patient's symptoms were not recognized in this period triggered ARF or whether ARF linked to Li intoxication caused NMS.

The case was a male with an 8-year diagnosis of bipolar disorder. The family reported diarrhea had begun 4 days previously and 2 days before they had applied to the emergency service at another center due to fever and ketoprofen and cefprozil were administered. The patient had previously used valproic acid but 1 month before had begun lithium treatment and used lithium and olanzapine and reported confusion on the previous day. When the patient was brought to the emergency service, he was unconscious, could not cooperate, disoriented with spontaneous blinking and GCS of 13. The patients' vital measurements and blood values were irregular. On ECG T waves were peaked and sinus tachycardia was present. The patient was monitored in the ICU. Hemodialysis was performed. NMS prediagnosis was made. Treatment was recommended as bromocriptine 5-10 mg PO up to 45 mg/day, dantrolene could be added for 8 days at 1 mg/kg/day, IV hydration, cold blankets, ice and supportive measures for oxygenation. When symptoms regressed and general situation improved, the patient was moved to the wards and monitored. Treatment was regulated as 1000 mg/g valproic acid and he was discharged.

We believe the present in this case, especially diarrhea, vomiting, and lack of oral intake, resulted in dehydration and the use of medications excreted in urine, such as ketoprofen and cefprozil, negatively affected renal function. Because of simultaneous ketoprofen and lithium use the renal excretion of lithium reduced, levels in plasma increased and reached toxic levels. In fact, if they need to be used together, plasma lithium levels should be carefully monitored and lithium dose should be regulated during and after NSAID treatment. However in cases of severe lithium intoxication renal failure may develop. This brings to mind the chicken and egg situation, which comes first? In addition NMS is a complication of renal failure. No matter how many new pharmacological agents with low side effect profiles are available the reality of life-threatening complications developing, such as NMS, remains a problem.

As a result, it is important to recognize these conditions for early intervention.

**Keywords:** acute renal failure, lithium intoxication, neuroleptic malignant syndrome

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## [PP-356] Addictions

### A sociodemographic evaluation of addiction cases with suicide attempted

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**Objective:** EGEBAM is an addiction center that had been in operation since September 2003. We planned this study in order to assess sociodemographic evaluation of addiction cases with attempted suicide.

**Method:** We reached a total of 371 addiction cases that applied EGEBAM between February 2012 and April 2013. The data obtained from the outpatient records were entered in an information form, which has been developed by us. We found 30 addiction cases that attempted suicide out of 371 cases. All the data were collected and analyzed, using descriptive analysis, chi-square and t-test.

**Results:** Attempt suicide in addiction patients was female and 46.7% was male. The average age of the samples was  $15.83 \pm 1.78$ . 90% of these patients came with their family and others were sent by police. Eighty six percent of them had a previous treatment history. There was a substance abuse in 43.3% of their families. Forty three percent of the patients had lived on the streets. Forty percent of these patients had a crime. We found some differences between the sociodemographic evaluations. Eighteen percent of female group attempted suicide. On the other hand, Five percent of male group attempted suicide. About fourteen percent of the patients, who had a previous treatment history had a suicide attempt and the 2.2% of the others had at least one suicide attempt. 20% of the patients, who were living on the streets, had a suicide attempt and the suicide rates were 5.6% of the others.

**Conclusion:** Female gender, living on the street is a significant risk factor for suicide attempt among addiction patients.

**Keywords:** addiction, suicide attempt

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**[PP-357] Addictions and related disorders****Characteristics of heroin users admitted to child and adolescent substance abuse treatment and support center of Turkey**Caner Mutlu<sup>1</sup>, Ozhan Yalcin<sup>1</sup>, Arzu Ciftci Demirci<sup>2</sup>, Sema Bozbey<sup>1</sup>, Mine Elagoz<sup>1</sup>, Ayten Erdogan<sup>3</sup><sup>1</sup>Bakirkoy Prof. Dr. Mazhar Osman Research and Training Hospital, Department of Child and Adolescent Psychiatry, Istanbul-Turkey<sup>2</sup>Bakirkoy Prof. Dr. Mazhar Osman Research and Training Hospital, Child and Adolescent Substance Abuse Treatment and Support Center, Istanbul-Turkey<sup>3</sup>Duzce University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Duzce-Turkey

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**Objectives:** Monitoring characteristics of heroin users has always been a priority concern because of their public health impact. Few studies have examined initiation and progression patterns of adolescent heroin users. Knowledge about characteristics of heroin use in adolescents admitted to specialized inpatient units, may allow professionals to treat these better. Therefore, in the present study, we aimed to evaluate sociodemographic and clinical characteristics of adolescent heroin users admitted to a special inpatient unit.

**Methods:** This retrospective study reviewed demographic and clinical characteristics of heroin users hospitalized to Child and Adolescent Substance Abuse Treatment and Support Center (known as CEMATEM) at Bakirkoy Mental Hospital in Istanbul during year of 2011.

**Results:** The mean age of the subjects at admission for treatment was  $16.95 \pm 1.08$  (range: 14-18) years and 90.9% (n=40) were male. Of patients, 14 (31.8%) were immigrant and 30 (68.2%) left school. Most patients were in the middle socioeconomic status. Of patients, 36 (81.8%) committed one and 22 (50.0%) had two and more crimes. Percent of family history for substance and alcohol use were 45.5% and 31.8%, respectively. Twelve patients (27.3%) had at least one previous suicide attempt and 29 (65.9%) engaged in self-harm. Heroin was used by 54.6% of patients as third and fourth substance. Most common administration route of heroin at admission time was inhalation (61.4%), followed by injection (29.5%). Mean duration of heroin use was 22.5 months. Mean number of substances used before heroin was 1.95. Cannabis was most common first and second substance (n=23, 52.3%; n=13, 29.5%; respectively), and last substance before heroin use (n=19, 43.2%). Most common last substance was heroin for 59.1% of patients. After heroin, most commonly used substance was cocaine (n=9), which was found not to be used before heroin. Mean starting age of first substance and heroin use were  $13.37 \pm 1.43$  and  $15.08 \pm 1.17$  years, respectively. Transition from first substance to heroin was seen most commonly in second year (34.1%). In inpatients with heroin use, cannabis was the most commonly used substance, followed by ecstasy and solvents/inhalants.

**Conclusions:** We should be aware of possible heroin use risk for male adolescents, who use two substances at a time including cannabis for at least one year. In addition, it should be remembered that of adolescent heroin users, approximately half of this population might commit crimes and one-fourth had suicide attempt and self-harm. Further qualitative-quantitative studies are necessary to allow us to acknowledge and understand more about this young population in order to develop treatment modalities and to decrease the impact of heroin use on public health.

**Keywords:** heroin, substance abuse

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**[PP-358] Psychosomatic medicine-liaison psychiatry****Parental adjustment, coping styles and locus of control in mothers of children with cancer**Hulya Guveli<sup>1</sup>, Serap Oflaz<sup>2</sup>, Murat Emin Guveli<sup>3</sup>, Hilal Adaletli<sup>4</sup>, Selahattin Bolek<sup>2</sup>, Seher Unal<sup>5</sup>, Hulya Bingol<sup>5</sup>, Ayse Kilincaslan<sup>6</sup>, Mine Ozkan<sup>2</sup>, Rejin Kebudi<sup>5</sup><sup>1</sup>Istanbul University, Institute of Oncology, Department of Psychosocial Oncology, Istanbul-Turkey<sup>2</sup>Istanbul University, Istanbul Faculty of Medicine, Department of Psychiatry, Istanbul-Turkey<sup>3</sup>Istanbul University, Institute of Oncology, Department of Clinical Oncology, Istanbul-Turkey<sup>4</sup>Bakirkoy Prof. Dr. Mazhar Osman Research and Training Hospital, Istanbul-Turkey<sup>5</sup>Istanbul University, Institute of Oncology, Department of Pediatric Oncology, Istanbul-Turkey<sup>6</sup>Istanbul University, Istanbul Faculty of Medicine, Department of Child Psychiatry, Istanbul-Turkey

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**Objectives:** Despite recent advances in its treatment, the diagnosis of cancer in one of their children is still a major challenge for the parents. This study was conducted to determine the depression and anxiety (state and trait) levels, coping styles with stress and locus of

control of mothers of children with cancer followed up at a university hospital.

**Methods:** Twenty-five mothers of children, aged between 0 and 18 years and hospitalized in the Istanbul University Oncology Institute Pediatric Oncology Department, filled in the socio-demographic data form, Beck Depression Inventory (BDI), Spielberg's State-Trait Anxiety Inventory (STAI), COPE Inventory and Rotter's internal-external locus of control Scale.

**Results:** The mean age of the mothers was  $38.13 \pm 5.95$  years and around half of them graduated from the primary school. The vast majority was housewife and roughly a third (32%) of the mothers declared that they had no other persons to help them caring their children. The mean scores of BDI, STAI-state and trait anxiety scales were  $17.36 \pm 11.52$ ,  $49.80 \pm 11.76$  and  $50.92 \pm 8.80$ , respectively and there was no correlation between these scores. Nearly half (45.6%) of the mothers' BDI scores were above the cut-off ( $\geq 17$  points). The most common way of coping style was reported as religious coping (mean score =  $15.08 \pm 1.78$ ), which was followed by social support, positive interpretation, planning, active coping and acceptance. Active coping correlated with lower scores in the STAI-trait anxiety, and positive interpretation with lower BDI scores (for both relations  $p=0.04$ ,  $r=0.41$ ). The mean score of the locus of control scale was  $10.29 \pm 2.88$ . The rate of internal control was reported in 58% and external focus of control in 42%, and there was no correlation between the locus of control scores of mothers and anxiety or depression scores.

**Conclusions:** The mothers of children with cancer have high levels of anxiety and depression. Religious coping was by far the most commonly used type for coping with stress and most of the mothers reported internal locus of control. Screening the parents for the symptoms of anxiety and depression and supplying psychiatric support for the relevant cases seems important.

**Keywords:** anxiety, cancer, child, locus of control, stress

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### [PP-359] Learning disorders

## Neurological deterioration of a patient with attention deficit and hyperactivity disorder and dyslexia: case presentation

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Research studies suggest that the left hemisphere was involved in the pathophysiology of dyslexia. Some study results showed significant abnormalities in five left hemisphere structures involving the extrapyramidal and limbic systems: amygdala, hippocampus proper, parahippocampal gyrus, putamen, and globus pallidus. The left hemisphere is thought to play a major role in the temporal analysis of information. Here we present a case of dyslexia with globus pallidus lesion.

The patient was a 9 years old male, who was referred with complaints of "hyperactivity, attention deficits, learning disability, and poor academic degree". Past medical history was not any specific disease. The patient was born after a normal pregnancy and had a normal delivery. The patient was deprived of oxygen at birth. It was learned that he was receiving special education for 2 years. In mental status examination there was hyperactivity and severe attention deficit, verbal and non-verbal communication problems. Echolalia was observed in examination. Writing and reading ability was back by his age but answers to mental questions were appropriate to his age. of the patient history and mental status examination led us thought that the patient fulfilled criteria for Learning Disability (severe), ADHD (Current presentation Attention deficit) and Social Communication Disorder as per DSM-5 criteria. After 2 months, when the patient came to clinic, he was lethargic, tetraparesic and tetraplegic. The patient was fed through nasogastric intubation. In MRI, hyperintense signal changes were present in the both globus pallidus at T2 and FLAIR AG.

Here we present a complex case of neurologic and mental regression, which also fulfilled criteria for Learning Disability (severe), ADHD (Current presentation attention deficit), and Social Communication Disorder as per DSM-5. Such cases illustrate the need of globus pallidus dysfunction in Learning Disability.

**Keywords:** attention deficit hyperactivity disorder, dysfunction, globus pallidus, learning disability

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**[PP-360] Psychopharmacology****Exacerbation of tics with combining aripiprazole to pimozide: a case with Tourette's Syndrome**Betül Mazlum<sup>1</sup>, Sennur Zaimoglu<sup>2</sup><sup>1</sup>Istanbul University, Institute of Experimental Medical Research, Department of Neuroscience, Istanbul-Turkey<sup>2</sup>Marmara University, Institute for Neurological Sciences, Department of Child and Adolescent Psychiatry, Istanbul-Turkey

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Tourette Syndrome (TS) is a neuropsychiatric disorder characterized by chronic motor and vocal tics that have a waxing and waning course. There are many pharmacotherapeutic agents considered in the treatment of TS and antipsychotics are the leading ones. Among this group, pimozide is the one whose effectiveness has been proved by controlled randomized trials. Although aripiprazole is highly successful in treating the positive symptoms in schizophrenia and manic symptoms in mania and there is an accumulating data about the improvement of tics with aripiprazole, the evidence of its benefit in TS is restricted with case reports and open trials. We report an adolescent with TS, whose tics exacerbated after addition of aripiprazole to pimozide.

Fifteen years old male adolescent was on pimozide regimen for tics when aripiprazole treatment was added for a hypomanic episode. Ten days after the initiation of aripiprazole, the severity of the tics increased and new motor and vocal tics emerged. Although his irritability, psychomotor agitation and other hypomania symptoms improved, aripiprazole was discontinued. The severity of tics declined to its previous level after the cessation of aripiprazole.

Aripiprazole has partial agonist effect on dopamine D2 receptors, which is suggested to mediate its dopaminergic effect in hypodopaminergic conditions. This adolescent was on pimozide treatment, a potent dopamine D2 receptor blocker, when aripiprazole was added and it can be suggested that exacerbation of tics was related with partial agonist effect of aripiprazole. We suggest that although aripiprazole have promising effect on treatment of tics, clinicians should be cautious, when combining it with potent antipsychotic agents.

**Keywords:** Tourette syndrome, aripiprazole, pimozide, interaction

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**[PP-361] Schizophrenia and other psychotic disorders****A case report: schizophrenia with Obsessive compulsive disorder**

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The prevalence of Obsessive-compulsive symptoms is 2.5%-64% and the comorbidity of Obsessive compulsive disorder's prevalence is 0%-37.5% in schizophrenia. This broad scale found in previous researches is because of methodological differences. In a recent meta-analysis, the prevalence of OCD in schizophrenia was estimated to be 12.1%, a rate considerably higher than in the general population (2%-3%). Obsessive-compulsive symptoms, in schizophrenia patients, aggravate the psychopathology and demolish especially executive and cognitive functions. Compared with schizophrenia patients, schizo-obsessive patients exhibit an earlier age of onset, more depressive symptoms and suicide attempts, increased rates of hospitalization, decreased likelihood of being employed or married, lower quality of life and greater disability. Authorities suggest that this comorbidity was related with similar anatomic structure, neurological pathways and neurotransmitters, therefore differential diagnosis of these depends on insight. Diagnostic dilemma and distinction among the delusion, obsession and overvalued thoughts is challenging after allowing the OCD with "poor insight" in The Diagnostic and Statistical Manual of Mental Disorders (DSM). A 34-year-old male presented with fear of death, offensiveness and skepticism was thinking he would be poisoned or murdered. The patient was not able to cope with the idea of to be killed and was in need to be proved that he will not be killed or injured. He could not be sure about whether he has been told the truth about him. He was delusional and had compulsive behaviors through his delusions. After patient's psychotic symptoms have regressed with injection treatment, we gave to the patient 20 mg/day olanzapine and his compulsive symptoms decreased. However, four days later his compulsive and psychotic symptoms repeated and we dropped Olanzapine dosage and added 20 mg/day aripiprazole. Patients have become more aggressive and defensive although

his compulsive symptoms were decreased with aripiprazole treatment. Accurate diagnosis has prognostic and treatment implications, given that current treatments for schizophrenia and OCD differ, and first-line medications for one disorder can exacerbate the symptoms of the other. Antipsychotics can exacerbate obsessive-compulsive symptoms, and SSRIs may exacerbate psychosis.

**Keywords:** Obsessive compulsive disorder, olanzapine, schizophrenia

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**[PP-362] Schizophrenia and other psychotic disorders**

## Evaluation of sociodemographic and clinical characteristics of patients with schizophrenia in Diskapi Community Mental Health Center

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**Objectives:** Schizophrenia is a chronic psychiatric illness consisting primarily of positive and negative symptoms. In recent years, psychosocial treatment approaches have become more popular and have been understood as more useful in addition to biological treatment in patients with schizophrenia. In our country, these approaches have been provided by community mental health center since 2008. This study aims to define the sociodemographic and clinical profile of patients with schizophrenia in Diskapi Community Mental Health Center. In this way, psychosocial treatment approaches will be defined more clearly.

**Method:** The study was conducted in Ankara Diskapi CMHC in 2013. One hundred thirty two patient with schizophrenia as per Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM IV-TR) criteria attending Diskapi CMHC. They were administered a sociodemographic information form, Brief Psychiatric Rating Scale (BPRS), Global Assessment of Function (GAF), the Scale for the Assessment of Negative Symptoms (SANS), the Scale for the Assessment of Positive Symptoms (SAPS), Calgary Depression Scale for Schizophrenia (CDSS), Extrapyramidal Symptom Rating Scale (ESRS). The data obtained were analyzed using SPSS 15.

**Results:** Sociodemographic characteristics of 132 patients: 40.2% were female, 64.4% were single, 68.9% were unemployed, mean duration of education was 8.4 years, mean age was 37.8 years. Clinical characteristics of the patients: Mean duration of illness was 22.1 years. Mean number of hospitalizations were 1.95, mean score of GAF was 52.8, mean score of SANS was 49.5, mean score of SAPS was 26, mean score of BPRS was 26.5, mean score of CDSS was 6.6, mean score of ESRS was 6.1.

**Conclusions:** These findings will increase our understanding of sociodemographic and clinical characteristics of a patient with schizophrenia in our CMHC. Negative factors such as being single, being unemployed, duration of education is low must be considered. Scores of SANS and GAF were significant. The existence of clinically negative symptoms may adversely affect the functionally. We should make use of community oriented intervention programs that aim to strengthen psychosocial functioning.

**Keywords:** community mental health center, demographic factors, schizophrenia

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**[PP-363] Addictions and related disorders**

## A Wernicke-Korsakoff Syndrome case associated with use of alcohol

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Wernicke-Korsakoff syndrome is one of the neurological complications that occur due to thiamine deficiency. Wernicke encephalopathy is an acute or sub-acute encephalopathy, which may be seen after chronic malnutrition situations such as long-term alcohol usage, hunger strike, hyperemesis gravidarum and gastrointestinal surgery. Wernicke Encephalopathy's classical triad is ataxia, eye movement abnormalities and confusion or memory impairment. While it can be totally cured if it is treated at early stage, skipped cases may lead to

Korsakoff Syndrome, which is a subacute/chronic dementia caused by thiamine deficiency.

Our case is a 40-years-old male. 25 years of regular alcohol consumption, especially in increased amount in last 2 years, presented with forgetfulness, walking difficulties and falling, forgetting the time and places, telling events that do not happened. Seen in the examination chair, the patient's consciousness state was good and cooperation was partial. He was uninterested in examiners questions. His time and place orientation was impaired. His mood was depressive, affect was restricted. His associations were slowed down and goal directed. In his neurological examination, there was inability of looking up. There was weakness and atrophy in the distal muscles of the patient, who could not walk without help. Reflexes were hyperactive in lower extremities. Dysdiadochokinesia was present. In his detailed history, it was founded that he was not leaving his house for 1 year. Nine months ago signs such as forgetfulness, forgetting where he put his belongings, repeating the same questions had begun. In last three months, in addition to latter signs, walking difficulty, falling and double vision signs had started. His relatives reported complaints such as forgetfulness, losing belongings, telling the same things repeatedly especially in the last two months. Mixing up time and days, speaking meaninglessly, difficulty in focusing and telling stories of activities that he had never done complaints were also reported. There weren't any pathological findings in routine biochemistry, hemogram, thyroid function tests, serologic tests and PA lung graph. Anti TPO, anti TG, RF, CRP, vit-E, vit-B, HLA-B27, ANA, ANCA, GH, ACTH, LH, FSH, PRL and cortisol blood levels, which were measured in order to evaluate dementia etiology, were in normal range. Cranial MRI and EEG finding were normal. EMG was normal. In neuropsychological tests, there was visio-spatial function impairment accompanied with moderate-severe memory dysfunction. Memory was impaired in encoding, storage and retrieving phases. The patient was diagnosed with Wernicke-Korsakoff Syndrome and treated with diazepam detoxification therapy. In the 5<sup>th</sup> day of the IV thiamine replacement therapy, patient's ataxia and eye symptoms were improved. The patient whose symptoms, except memory symptoms, cured was discharged from hospital in 6<sup>th</sup> week of his treatment.

Parenteral thiamin treatment should be given rapidly in order to avoid Korsakoff Syndrome or death, in cases that gives findings of Wernicke Encephalopathy. Ataxia is usually starts recovering in the early weeks; but it may take 1-2 months or more time to recovery. Residual nystagmus and ataxia may be present with some of the patients.

**Keywords:** alcohol, thiamine, Wernicke-Korsakoff Syndrome

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### [PP-364] *Schizophrenia and other psychotic disorders*

## Cardiovascular risk and metabolic syndrome in Turkish patients with chronic schizophrenia

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**Objective:** The aim of this study is to determine the cardiovascular risk in patients with schizophrenia as well as the major risk factors (prevalence of metabolic syndrome, sedentary lifestyle, diet) in terms of their impact on cardiovascular illness.

**Methods:** The study was conducted between 04.2012 and 03.2013 in Erenkoy Mental and Neurological Diseases Training and Research Hospital, Clinic with participants, who meet the criteria of DSM-IV for schizophrenia, with a diagnosis of chronic. 454 patients were included in the study, who agreed to participate in the study, 198 healthy people with no known psychiatric disorders, were included in the study as a control group. Cardiovascular risk was assessed with Framingham Risk Scoring (FRS) system. According to the degree of risk patients were classified as <10%, 10-20% and >20%, respectively, and tagged as low risk, medium risk and high risk groups. The presence of the metabolic syndrome was examined. To determine the level of physical activity, the Turkish version of the International Physical Activity Questionnaire Short Form-seven days, was used. Dietary habits were evaluated by using the 'Simplified fat screener and simplified fiber/fruit/vegetable screener' scales.

**Results:** Mean age was 40.1±10.3 years in patients with schizophrenia (n=454) and 39.52±11.5 in the control group (n=198) (p>0.05). The average age of onset of schizophrenia was 24.96±7.9 years; mean disease duration was 15.1±8.7.

Framingham risk score in the patient group was 4.75±6.14 and in the control group was 2.63±3.53. The difference was significant (t: 4.533, p<0.001). Fat-rich diet were detected in 65% of the patients and in 55.1% of the control group. The difference was significant. ( $\chi^2$ : 5.765, p=0.016).

Physical activity levels were rated as mild activity in 61.2%, moderate activity in 38.1% and intense activity in 0.7% in the patient group. In the control group mild activity was existing in 46%, moderate activity in 50.5%, and intense activity in 3.5%. The difference was statistically significant ( $\chi^2$ : 11.18, p<0.001).

Prevalence of metabolic syndrome according to ATP-III criteria was 29.1% in patient group and 7.6% in the control group. Prevalence of metabolic syndrome according to ATP-III Acriteria in patient group was 33.7% and in the control group was 10.1%. Prevalence of metabolic syndrome according to IDF criteria in patient group was 37.7% and in the control group was 10.1%. All the differences were significant (respectively,  $\chi^2$ : 36.49,  $p < 0.001$ ,  $\chi^2$ : 39.3,  $p < 0.001$ ,  $\chi^2$ : 50.7,  $p < 0.001$ ).

**Conclusion:** This study revealed a significantly increased mean 10-year CVD risk and prevalence of metabolic syndrome in patients with chronic schizophrenia compared with healthy controls. The evaluation of Framingham risk score and screening for MetS might decrease the excess CVD risk in patients with chronic schizophrenia.

**Keywords:** chronic schizophrenia, cardiovascular risk, metabolic syndrome, physical activity, dietary habits

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### [PP-365] Psychopharmacology

## Two case reports of nasal congestion side effect with oral risperidone

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Risperidone is one of the most commonly used antipsychotic in Child and Adolescent Psychiatry. In two reports, the symptom of nasal congestion emerged within a few hours following risperidone use and disappeared after discontinuation of the drug.

The first case was a 15-year-old-boy, who was brought in for aggression, irritability, fears, forgetfulness, attention problems, verbal violence to his friends and teachers. He was given a diagnosis of Attention deficit hyperactivity disorder (ADHD) and Oppositional Defiant Disorder (ODD). He was started on OROS MPH 27 mg/day (0.6 mg/kg/day) and risperidone 1 mg/day. All of the symptoms showed much improvement but there was nasal congestion after taking risperidone. In the days when he forgot to take medication, the problem did not repeat. He used to take an antihistaminic after taking risperidone and it had solved the problem.

The second case was a 12-year-old girl was brought for attention deficit, irritability, aggression, anxiety. She had been diagnosed with Attention Deficit Disorder (ADD) and atomoxetine 25 mg/day and risperidone 0.25 ml/day was started. She noticed that 30-60 minutes after taking the risperidone her nose blocked. The next two days she did not take risperidone while taking atomoxetine and she realized that her nose did not blocked.

The clinician should be aware of this side effect and counsel the children/adolescents and their families about its occurrence in order to improve the adaptation of risperidone treatment.

**Keywords:** risperidone, side effect, nasal congestion, blocked nose, child and adolescent psychiatry

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### [PP-366] Others

## Indomethacin induced psychosis

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Indomethacin is, commonly prescribed, a non-steroidal anti-inflammatory drug (NSAID). Our information about the side effects on the CNS is limited. Cases about indomethacin induced psychosis have been reported, although the frequency of psychiatric reactions due to use of NSAID is unknown. Indomethacin induced psychosis and cognitive changes are more frequent in elderly patients. In this case, we present psychotic symptoms after the use of indomethacin with diagnosis of ankylosing spondylitis (AS) and discussed the possible mechanisms that lead to psychosis.

A 53 years old, female patient presents autism, no contact to anyone, approximately for two weeks; she has been collecting appliances in a corner at home. She thinks that she was spelled by relatives. Two days ago in the garden, she suddenly yelled and ran out of home. She was brought to

psychiatric emergency room and hospitalized for diagnosis and treatment. In her history, no psychiatric symptom has been recorded. In her family history, no psychiatric disorder has been identified. The patient did not use psychoactive substances. She has diagnosis of AS and she has been medicated with indomethacin 50 mg/d, naproxen 750 mg/d for four months regularly. In psychiatric evaluations, we observed the diminished emotional expression, irritable mood, disorganized behavior and increased psychomotor activity. She has delusions like 'there is a conspiracy threat to me' and 'I am cursed'. She had insomnia and lack of insight. Physical examination and laboratory tests and MRI showed no pathology. The patient's psychiatric symptoms were thought to be due to the use of indomethacin. For the treatment of psychotic symptoms, olanzapine 5 mg/day was started and indomethacin was discontinued. Three days after cessation of indomethacin, patient had significant clinical improvement and discharged at the request of the family. One week after discharge, patient displayed significant improvement in symptoms; her emotional expression, skepticism, and psychotic symptoms were recovered. Within a month, all psychotic symptoms disappeared.

In this article, we present a case about arising and progressive psychotic symptoms, started after 4 months use of indomethacin resolved following discontinuation of indomethacin. This effect can be explained with dopamine concentration in brain circuits. An experimental study conducted in rats has shown the use of indomethacin affects by changing the concentration of endogenous glutamate antagonist namely kynurenic acid and increases dopamine levels in the mesolimbic dopamine pathway. Another experimental study conducted in rats has shown that the use of indomethacin had inhibitory effect on COX1 and COX2, so affects PGE2 to alter catecholamine levels in the CNS. Change of the concentration of dopamine in the mesolimbic pathway may predict the emergence of psychotic symptoms. In similar cases, indomethacin was used in a dose range between 25 and 200 mg/day and history of indomethacin was less than 24 hours in one case. In our case the indomethacin was using as 50 mg/day for four months regularly. In this case, we aim that to be careful, use of indomethacin or other COX1 and COX2 inhibitors for patient's psychotic disorder or psychotic disorder risk factors, especially in elderly patients beginning with lower doses is important.

**Keywords:** indomethacin, psychosis, non-steroidal anti-inflammatory

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#### [PP-367] Others

### The effects of atropine and aminophylline premedication on respiratory problem after electroconvulsive therapy: a prospective, randomized, crossover trial

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**Objectives:** Electroconvulsive therapy (ECT) is a safe and efficient treatment as a last line of intervention for psychiatric disorders. Usually respiratory problems are observed after ECT procedure. In present study, we investigated effects of atropine and aminophylline on respiratory problems that occur after ECT undergoing general anesthesia.

**Methods:** Present study is a randomized, double blind, crossover trial. Patients were entered study either non-premedicated as Control Group or premedicated with atropine as Atropine Group or premedicated with aminophylline as Aminophylline Group in different ECT sessions. The demographics, psychiatric diagnoses and hemodynamic data of the patients were recorded. The respiratory sounds were auscultated before and after the ECT. Findings were recorded as normal respiratory sounds, fine crackles, coarse crackles or wheezing. Patients whose SpO<sub>2</sub> values were <90% were recorded separately. The period of time required for recovery of pathological respiratory sounds, seizure duration and anesthesia recovery time were recorded.

**Results:** The number of patients with low SpO<sub>2</sub> values and abnormal respiratory auscultation signs were less and recovery period of patient's were found shorter in Atropine Group. Depending on logistic regression analysis longer seizure duration was associated with increased incidence of respiratory problems ( $p < 0.001$ , odd ratio=1.23, %95CI:1.147-1.319). The risky seizure duration cut-off values were found 33sec., 39.5sec. and 41.5sec. at control, Atropine and Aminophylline Group respectively.

**Conclusions:** We have observed that respiratory problems develop frequently after ECT and atropine or aminophylline administration decreases the incidence of respiratory problems. We have also found that longer duration of seizure was a risk factor for respiratory problems and atropine premedication extend risky seizure duration.

**Keywords:** respiratory problem, anesthesia, electroconvulsive therapy

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**[PP-368] Psychopharmacology****Combined methylphenidate and atomoxetine therapy in attention deficit hyperactivity disorder; a retrospective study**

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**Objective:** Attention deficit hyperactivity disorder (ADHD) is a neurodevelopmental disorder, which is characterized by hyperactivity, impulsivity and lower sustained attention. Most of the symptoms of ADHD resolved with pharmacotherapy. ADHD treatment consists stimulants (methylphenidate) and non-stimulants (atomoxetine). Combined therapy administered in patients which symptoms doesn't resolve with monotherapy or couldn't use effective treatment dose because of adverse effects. Our purpose in this study is investigated efficiency, safety and tolerability of combined therapy.

**Method:** We included 12 patients, which apply to Ege University Child and Adolescent Psychiatry Department Disruptive Behavior Disorders Clinic and diagnosed with ADHD and using combined therapy. These patients' files searched retrospectively. We use Turgay ADHD scale, child behavior checklist (CBCL) for ADHD diagnosis, clinic global impression scales (CGI-S and CGI-I) for clinic evaluation. To evaluate patients mental capacity we use Wechsler Intelligence Scale for Children (WISC-R).

**Results:** We evaluate 12 patient with ADHD diagnosis and using combined therapy. Mentally retarded patients don't included. Age group is between 7 and 17. Current axis I disorders among participants were ADHD only (n=7, 58.3%), ADHD with conduct disorder (n=2, 16.7%), ADHD with other psychiatric conditions (n=3, 25%). Commonest side effects in our patients are irritability (n=5, 41.6%), anorexia (n=3, 25%), palpitations (n=2, 16.7%), headache (n=1, 8.3%), no side effect (n=2, 16.7%). We found significant improvement in ADHD symptoms in 9 out of 12 patients (CGI-I point=2), minimal improvement in 2 patients (CGI-I point= 3), no change in 1 patient (CGI-I point=4).

**Conclusion:** Commonest side effects in our patients are irritability, headache, anorexia and palpitations. These side effects and their frequencies found similar with monotherapy. 9 out of this 12 patients show significant improvement in their symptoms, we found this improvement statistically important which means combined therapy enhance the effectiveness of monotherapy. These results about efficiency and safety are consistent with findings in recent literature.

**Keywords:** attention deficit hyperactivity disorder, combined therapy, atomoxetine, methylphenidate

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**[PP-369] Psychopharmacology****Excessive masturbation behavior associated with fluoxetine in a child: a case report**Nur Yalcin Yetisir<sup>1</sup>, Hatice Altun<sup>2</sup>, Neslihan Caglar<sup>3</sup><sup>1</sup>Kahramanmaraş Sutcu Imam University, Faculty of Medicine, Department of Psychiatry, Kahramanmaraş-Turkey<sup>2</sup>Kahramanmaraş Sutcu Imam University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Kahramanmaraş-Turkey<sup>3</sup>Firat University, Faculty of Medicine, Department of Psychiatry, Elazığ- Turkey

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Masturbation can be seen in the normal course of development of children. Masturbation is common among young children. A prepubertal child with anxiety disorder, who developed excessive masturbation behavior during fluoxetine treatment is presented here, as a case report. A 5-year-old girl was admitted to our child and adolescent psychiatry outpatient clinic for fear of being behind a closed door and being alone in a room, frequently hand washing, being afraid of dogs and darkness, uneasiness, difficulty in falling asleep and nightmares. During the examination, she asked to keep the door open and she did not want to be apart from her mother. She seemed timid, spoke low voice and reluctantly. Her mood was anxious and could not be interviewed alone. There were not any diseases in her history. Family history revealed that her uncle was schizophrenia. She was diagnosed as having anxiety disorder according to DSM-IV. Fluoxetine 10 mg/day, was initiated for anxiety symptoms. Ten days after, her mother reported that her anxiety symptoms, nightmares and frequent hand washing decreased. However, masturbation was reported to be excessively increased. Her family said that it was publicly and listlessly. Her mother said that she masturbated three to five times daily, and each attempt continued for about 5–10 min. During fluoxetine treatment, she did not develop any other behavioral problems or hypomanic /manic symptoms. Because excessive

masturbation developed after initiation of fluoxetine, the dose of fluoxetine was reduced as 5 mg/day. In the control examination after two weeks, her masturbation behaviors have been disappeared.

Excessive masturbation behaviors in children have been reported following use methylphenidate risperidone, olanzapine and lithium. As we know excessive masturbation after fluoxetine not reported in the literature. The psychopathological relationship between excessive masturbation and fluoxetine treatment remains unclear. Clinicians treating children with fluoxetine should be aware of behavioral side effects, which may be alleviated by dosage reduction or possibly by starting with lower doses.

**Keywords:** excessive masturbation, fluoxetine, child

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### [PP-370] *Mood disorders*

## Mania induced by reducing the dose of venlafaxine

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During the use of antidepressants, mania/hypomania can be seen and be associated with mood disorders. Although they are less frequent, hypomanic or manic situations associated with discontinuation or reduced dosage of antidepressants have also been reported. The presented case is about the phenomenon of exacerbation during a manic episode while reducing the dose of venlafaxine, which has been used for a year.

A 25-year-old female patient diagnosed as depression, has been followed regularly in the clinic for 18 months. The dose of venlafaxine was reduced to 75 mg/day from 150 mg/day, which she has been using for a year without psychiatric symptoms. After five days, she applied to the clinic with manic symptoms including irritability, grandiosity, insomnia and an increase in goal-directed activities, and she was placed under psychiatric and organic evaluations for diagnostic differential. There was no organic pathology that could be associated with mania, and family history was also negative. It was thought to be a mania that was induced by antidepressant discontinuation. Venlafaxine was discontinued and olanzapine of 10 mg/day and lorazepam of 3 mg/day were started and she was followed by our clinic.

Exacerbation of the disease related to discontinuation of psychotropics and symptoms related with discontinuation of the medication should be carefully monitored. The emergence of withdrawal symptoms or the exacerbation of depressive symptoms, related to the discontinuation of antidepressants is common. Withdrawal symptoms related to discontinuation of antidepressants occur within hours or days. Symptoms like restlessness, headache, nausea and anxiety are observed and the patient becomes normal shortly after s/he starts taking the drug. In our case, five days after the dose reduction, mood symptoms were more dominant than withdrawal symptoms. The manic/hypomanic shift while taking antidepressants is a common; they are frequently expected within the first 4-8 weeks of the first usage of the medication. As our case used this medication for 18-weeks with no mood elevation during this period, this suggests that we do not think the diagnosis is not a drug-induced manic episode. In their research, where manic states depending on antidepressant discontinuation was studied, Narayan et al. used four criteria: a manic state that starts after stopping or reducing the dose of an antidepressant, no pharmacological confounders are present that could account for the manic state, e.g., stimulant misuse or stoppage of an antimanic drug prior to the onset of the manic state. Continuous antidepressant treatment should have been administered for at least four weeks before the manic state begins. Symptoms begin within one week of antidepressant stoppage or dose reduction. Our case meets all the criteria mentioned above. Decisions of discontinuation of antidepressant medication and follow-up of this process must be done carefully. It should be considered that manic symptoms that were developed in this process could be related with mood episodes due to discontinuation of the medication. In our case, Venlafaxine was regularly used for 18-months. It was used at a dose of 150 mg/day for one year; when it was reduced to 75 mg/day, the manic symptoms began.

**Keywords:** antidepressant discontinuation, mania, venlafaxine

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**[PP-371] Tic disorders****Atomoxetine use in Attention deficit hyperactivity disorder and comorbid tic disorder in PANDAS: two case reports**Sevcan Karakoc Demirkaya<sup>1</sup>, Mithat Demirkaya<sup>2</sup>, Elif Akin<sup>1</sup>, Canan Yusufoglu<sup>1</sup><sup>1</sup>Erenkoy Mental Health and Neurology Training and Research Hospital, Department of Child and Adolescent Psychiatry, Istanbul-Turkey<sup>2</sup>Fatih Sultan Mehmet Training and Research Hospital, Department of Neurology, Istanbul-Turkey

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The acronym PANDAS is for pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections, has 5 criteria: presence of OCD and/or tic disorder, prepubertal symptom onset, sudden onset or episodic course of symptoms, temporal association between streptococcal infections and neuropsychiatric symptom exacerbations, and associated neurological abnormalities. Atomoxetine is a type of non-stimulant medicine with a selective noradrenaline re-uptake inhibitor activity. Here we report two cases with diagnosis of Attention deficit hyperactivity disorder and PANDAS. Both of them have tics therefore; we preferred atomoxetine for ADHD instead of stimulant agents. Sydenham's chorea (SC) was excluded by neurological examination. Their clinical global impression (CGI) severity (S) and improvement (I) scores were obtained. Case 1 is a 10-year-old girl. She was hospitalized two months ago for streptococcal pneumonia and high fever for 5 days, motor tics started in the 2nd day of hospitalization. She was admitted to clinic with complaint of involuntary movements of head, mouth, eye blinking and irritability. She was diagnosed as tic disorder as PANDAS phenomena and ADHD mixed type. Her laboratory findings were normal except ASO. Her ASO level was higher (777.7 U/L). Atomoxetine (starting dose 10 mg, final dose 35 mg/day) was administered. Her CGI-S was 6, CGI-I was 2 for both ADHD and tic disorder. Decreased appetite was seen as side effect, but she lost only 1 kg in 3 months. She was also on penicillin prophylaxis, her final ASO level is still high with level of 216 U/L.

Case 2 is a 13 ½ year old boy. He has been followed for acute rheumatic fever (ARF) since 5 years old. He has involuntary movements for 3 years. He is on depot penicillin prophylaxis. EEG, cranial MR and CT assessments, laboratory findings were normal. Neurologic examination ruled out SC. His cardiac examination showed minimal mitral valve regurgitation. He was diagnosed with both PANDAS and ARF. Before admission to our clinic, he was treated with haloperidol and risperidone unsuccessfully. His mother and teachers complained about ADHD symptoms. Atomoxetine was administered (starting from 10 to 60 mg/day), his CGI-S was 5 and CGI-I for ADHD is 2 and for tics 3. Therefore aripiprazole (5 mg/day) was added to his treatment. Now his CGI-I is 2 for tics. Nausea, dizziness were seen as side effects. Here we present two cases with diagnosis of ADHD and tic disorder following by PANDAS. Instead of stimulants, atomoxetine is preferred for ADHD comorbid with tic disease. Our first case is successfully treated with atomoxetine whereas the other showed little improvement. Tic disorder was of acute type in the first case but chronic in the second case. Drug metabolisms may differ according to age and gender, leading to different effects on subjects.

**Keywords:** PANDAS, atomoxetine, tic disorder**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S321****[PP-372] Schizophrenia and other psychotic disorders****Two cases of Ekbom Syndrome**Merve Sahin<sup>1</sup>, Hamza Sahin<sup>2</sup>, Fatma Ozlem Orhan<sup>1</sup><sup>1</sup>Kahramanmaraş Sutcu Imam University, Faculty of Medicine, Department of Psychiatry, Kahramanmaraş-Turkey<sup>2</sup>Kahramanmaraş Sutcu Imam University, Faculty of Medicine, Department of Neurology, Kahramanmaraş-Turkey

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Ekbom syndrome is a rare psychiatric disorder that usually presents to dermatology clinics. It is characterized by the perception that one's body is infested by invisible mites or insects. In here, we present two cases of Ekbom syndrome.

**Case One:** A case of Ekbom syndrome, which has been considered as if she had trichotillomania is presented.

A 62-year-old housewife applied dermatology outpatient clinic due to the itching sensation. She claimed that insects were visiting all over her body, especially at nights. Subsequently, she was referred to our clinic for her depressive mood. She has not received any previous psychiatric treatment. In the first mental state examination, the patient seemed age-appropriate, self-care worse, the affect was depressive, mood euthymic, stream of thought nature and content of thought parasitic. Tactile hallucinations were present. Physical

examination, pruritic lesions were common in her body. Her neurological examination and laboratory tests were unremarkable. Cranial MRI showed non-specific ischemic gliotic foci. In this patient, we thought depression and delusional parasitosis as the initial diagnosis. Citalopram and risperidone were started. Delusions of parasitosis were reduced. Delusions were limited in the head and abdomen. After 3 months, a burning pain has appeared on her head during the last month. She said that only she could be relaxed by pulling out her hair. Delusions of parasitosis most were concentrated in the head. On physical examination, her pruritic lesions on the body had passed. On her head, she had a balding area, which was about 1.5 cm in diameter. Citalopram dose was increased. After this therapy, her delusion of parasitosis has disappeared.

**Case Two:** A 72-year-old female patient with a history for hypertension, diabetes, bronchial asthma, coronary artery disease, who was operated for multinodular goiter applied with the complaints of delusional parasitosis. She said that insects were visiting all over her body during the 2 years. Firstly, it was started in her hand, arm and face; subsequently it was spread to whole body. According to the history from her daughter, she had been depressed, crying, self-talking during the 2 years. She was always scratching and wounding her own body; and she was thinking that there were insects in these wounding areas. 2 years ago, she had applied dermatology outpatient clinic for this complaints. In her psychiatric examination, the patient seemed age-appropriate, self-care well, affect depressive, stream of thought nature and content of thought parasitic. Tactile hallucinations were present. Her neurological examination and laboratory tests were unremarkable. Mini Mental State Examination score was 25. There were no depressive symptoms and findings. Cranial MRI showed non-specific ischemic gliotic foci. Citalopram and risperidone were started. After increasing the dose of risperidone, her delusions of parasitosis and her wounds have disappeared.

As in our case, the majority of cases of Ekblom syndrome present to dermatology clinics. Moreover, patients are often reluctant to see psychiatrists for their skin manifestations. Therefore, it is very important for the dermatologist to keep in mind this disease and consult the patient to psychiatry for the correct diagnosis and treatment for these patients.

**Keywords:** ekblom syndrome, trichotillomania, delusional parasitosis

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### [PP-373] Neuroscience: Neuroimaging-Genetics-Biomarkers

## Effect of agomelatine on adult hippocampus apoptosis and neurogenesis in the stress model of depression in the rat brain

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**Objective:** Agomelatine (AG) is an agonist of melatonin receptors and an antagonist of the 5-HT<sub>2C</sub>-receptor subtype. The chronobiotic properties of AG are potent interests due to disorganization of internal rhythms, which might have role in the pathophysiology of depression. The present study was designed to assess the effects of antidepressant-like activity of AG, a new antidepressant drug, on adult neurogenesis and apoptosis in the stress induced depression model of rat brain.

**Methods:** Thirty-six Sprague Dawley male rats 220 to 250 g were used for study. Experimental stress was generated by light exposure for 1 hour twice a day for 1 week. After 1-week exposition of light, AG treatment was initiated at a dose of 10 mg/kg and 40 mg/kg concomitant to light exposure in stress-induced groups for a subsequent period of 15 days. After the animals are sacrificed, tissue sections were obtained and stained immunohistochemically with anti-BrdU, Caspase-3, and Bcl-2 antibodies. Serum BDNF concentrations were measured biochemically by BDNF Elisa kit.

**Results:** Immunohistochemical analysis revealed that BrdU-positive cells counts were decreased in the hippocampus of stress-induced rats compared with control group. In addition, the treatment with low and high dose AG increased the BrdU-positive cell counts in the experimental stress exposed groups. In the pro-apoptotic caspase-3 analysis, there were more positive cells in the stress-exposed group compared with other groups. In addition, AG treatment decreased the caspase-3 immune positive cell counts. In anti-apoptotic Bcl-2 staining, although there were fewer immunologically positive cell counts in the stress group. Biochemical analysis revealed the high concentration of BDNF in the serum of stress-exposed group, but the concentration of BDNF was decreased in the AG treated groups. There were statistically significant difference between no-stress groups treated with AG and control group ( $p < 0.05$ ).

**Conclusion:** The results of the study demonstrated that AG treatment ameliorated the hippocampal apoptotic cells and increase the hippocampal neurogenesis. Moreover, these results amplify the possible relationship between depression and adult neurogenesis, which must be further study.

**Keywords:** agomelatine, depression, hippocampus

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### [PP-374] *Mood disorders*

## Bipolar disorder first presented with catatonia: a case report

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Catatonia is first described by Kahlbaum in 1874 as a syndrome of abnormal movement and emotion. Catatonia is defined as a separate diagnostic entity in DSM-5. According to DSM-5, catatonia is dominated by least three of these symptoms: stupor, catalepsy, waxy flexibility, mutism, negativism, posturing, mannerism, stereotypy, agitation, grimacing, echolalia and echopraxia. Its incidence differs ranging from 0.6 to 1.7%. It can occur within patients associated psychiatric (e.g. bipolar disorder, psychotic disorder, autism spectrum disorder), medical or neurologic conditions. Prevalence studies showed that it was frequently seen together with depressive or bipolar disorders. In this case, we report an adolescent, who first presented with catatonia and after diagnosed with bipolar disorders and discuss the clinical characteristics of catatonia in this population.

A 17-year-old male patient, who was admitted to our department with catatonic presentation that includes complaints of refusal of eating, mutism, directing the gaze at a certain point, fearfulness after a stressor. On psychiatric assessment, he was conscious, but not cooperating and orientation is not evaluated. Mood was depressive, affection was limited. Patient had an apathic appearance. His psychomotor activity was severely decreased.

He was hospitalized for a month in the child and adolescent inpatient clinic. He was initially tried on a low dose of lorazepam (up to 1 mg twice daily), which was switched to olanzapine (15 mg once daily). The patient improved on these medications and was discharged in a stable state on olanzapine (15 mg once daily). He was diagnosed with psychotic disorder.

After discharge, he did well for 4 to 5 months. The patient had been treated with olanzapine and low dose sertraline for depression. The medication was discontinued by the patient following successful treatment. He was brought to our clinic due to complaints of aggression, rapid speech, reduced sleep, talking too much, increasing energy, motor hyperactivity, leaving home without notice. On psychiatric assessment, patient was conscious, cooperating and oriented. Mood was irritable. Affection was appropriate to his mood. Rate of speech was increased and associations were loosened. Thought content indicated persecutory delusions. Visual and auditory hallucinations were noted. His psychomotor activity was increased. He had no insight. According to clinical evaluation of the patient based on DSM V diagnostic criteria, he was diagnosed as having bipolar disorder with psychotic features.

Catatonia is not rare and must be kept in mind in the differential diagnosis in children and adolescents with affective, psychotic, autistic, developmental, and medical conditions. Our case is considerable because evolution of catatonia in adolescents is important to diagnose the underlying cause and to follow up probably the associated mood disorders.

**Keywords:** catatonia, bipolar disorder, adolescent

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**[PP-375] Schizophrenia and other psychotic disorders****Cardiometabolic risk in Turkish patients with first episode schizophrenia**Yasemin Uz<sup>1</sup>, Huseyin Gulec<sup>2</sup><sup>1</sup>Pendik State Hospital, Department of Psychiatry, Istanbul-Turkey<sup>2</sup>Erenkoy Mental Health and Neurology Training and Research Hospital, Department of Psychiatry, Istanbul-Turkey

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**Objective:** Studies in first episode schizophrenia samples about status of cardiovascular risk and prevalence of metabolic syndrome have demonstrated inconsistent results. We aimed to determine the Framingham cardiovascular risk profile and prevalence of metabolic syndrome in patients with first-episode schizophrenia.

**Methods:** Between 04.2012 and 03.2013, our study was carried out with participants, who met clinical and DSM-IV criteria for schizophrenia, for the diagnosis of first episode schizophrenia, was conducted in Erenkoy Mental and Neurological Diseases Training and Research Hospital, 48 patients who agreed to participate in the study, and, 48 healthy people with no known psychiatric disorders as a control group, were included in the study. Cardiovascular risk was rated with the Framingham Risk Scoring (FRS) system. According to the degree of risk, patients were classified as <10%, 10-20% and >20%, respectively, in the form of low risk, medium risk and high risk groups. The presence of the metabolic syndrome was examined. To determine the level of physical activity, the International Physical Activity Questionnaire Short Form-seven days, 'the Turkish version was used. Dietary habits were evaluated by the 'Simplified fat screener and Simplified fiber/fruit/vegetable screener' scales were used.

**Results:** Mean age was 31.4±9.6 years in patients with first-episode schizophrenia (n=48), 31.3±9.4 in the control group (n=48) (p>0.05). The average age of onset of first-episode schizophrenia was 28.9±9.2 years, mean disease duration was 2.73±3.3, treatment time was 2.6±3.4 years. Framingham risk score in the patient group was 1.60±1.3, and 1.95±3.8 in the control group. There was no significant difference. Fat-rich diet prevalence was 29.2% in patients and 50% in the control group. The difference was significant ( $\chi^2$ :4.356, p=0.037). Physical activity levels in patients were 35.4% with mild activity, 64.6% with moderate activity, and 0% with intense activity. In the control group, mild activity prevalence was 62.5% while moderate activity was 2.1% and intensive activity was 35.4%. The difference was statistically significant ( $\chi^2$ :8.679, p=0.013).

Prevalence of metabolic syndrome; according to ATP-III, was 2.1% in patients group and 8.3% in the control group. There was no significant difference between groups in terms of ATP-IIIa. ATP-IIIa was 8.3% in patient group and 10.4% in control group.

**Conclusion:** These findings suggest that in patients with first-episode schizophrenia, the prevalence rate of metabolic syndrome and ratio of cardiovascular risk appeared to be no higher than that of the healthy population.

**Keywords:** first-episode schizophrenia, cardiovascular risk, metabolic syndrome

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**[PP-376] Addictions and related disorders****Could olanzapine be a new choice for the treatment of opioid withdrawal?**

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Opioid withdrawal is a clinical presentation with mental and physical symptoms. There are two pharmacological approaches to opioid dependence treatment; those based on opioid withdrawal and those based on agonist maintenance. Effective treatment of withdrawal symptoms is important for long-term outcome of detoxification. Opioid full agonists and partial agonists are drugs that are widely used in treatment of opioid withdrawal.  $\alpha_2$ -agonists such as clonidine and lofexidine are non-opioid drugs used for withdrawal situated in the literature. In recent years, there are studies aiming to investigate direct and indirect effects on the symptoms of opioid withdrawal of other psychotropic medications that effects via receptor systems like serotonin, norepinephrine, histamine, acetylcholine, dopamine, GABA, glutamate. Olanzapine is an atypical antipsychotic that blocks dopaminergic, serotonergic, adrenergic, histaminergic, and muscarinic receptors. It is widely used in various psychiatric emergencies for the treatment of irritability and psychomotor agitation.

In both cases presented here, it was observed that olanzapine, which was given due to agitation, reduced withdrawal symptoms.

**Case 1:** A 20 years old male patient that had been using 1 g of heroin per day since one year, was admitted to our clinic upon his will to end his opioid addiction. The patient was hospitalized with the diagnosis of opioid addiction. Buprenorphine/naloxane administration was planned as induction therapy. Nonsteroidal analgesics were given to the patient, who showed early withdrawal symptoms. Adequate amount of time that is suggested for safe administration of buprenorphine had not been passed. 10 mg of olanzapine was injected to the patient since his withdrawal symptoms did not regress and showed agitation. Regression of the agitation and also objective and subjective withdrawal symptoms were observed clinically.

**Case 2:** A 25 years old male patient that had been using 1 g of heroin per day since two years was admitted to our clinic with the diagnosis of opioid addiction. Buprenorphine / naloxane administration was planned as induction therapy. The patient showed early withdrawal symptoms before the adequate amount of time that is suggested for safe administration of buprenorphine had not been passed. 10 mg of olanzapine was injected to the patient because he showed agitation. Regression of the agitation and objective and subjective withdrawal symptoms was observed clinically.

Available data indicate that activation of the noradrenergic cells in the locus ceruleus played an important role in the symptoms of opiate withdrawal. An animal study indicates the possible involvement of the  $\alpha_2$ -adrenoreceptors in olanzapine antinociception.

There are two clinical studies in the literature that showed efficacy of olanzapine on the withdrawal symptoms. Olanzapine compared to chlorpromazine in a 21-day study, was more effective in appetite, sleep, restlessness, agitation and craving. The opioid dependent patients with antisocial personality disorder in the one month follow-up results of a comparative study, irritability, verbal and physical hostility, restlessness has shown to reduce in the 10-30 mg/day of olanzapine in the treatment. Olanzapine could be an alternative in the treatment of opioid withdrawal.

**Keywords:** olanzapine, opioid addiction, withdrawal

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### [PP-377] Addictions

## A retrospective study of the sociodemographic and clinic attributes of alcohol and substance addiction patients in an addiction treatment center in its first year

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**Objective:** The incidence of substance abuse and related disorders is increasing in the world and in our country. Studies in patients, who were admitted/hospitalized in psychiatry clinics or Alcohol and Substance Abuse Disorders Treatment Centers show that the incidence of the substance abuse related disorders is increasing in our country in time.

**Method:** In this study, tracking patient charts retrospectively, identifying patients sociodemographic data, finding out the patterns of alcohol/substance use, the accompanying psychiatric diseases, implemented treatments and the way of discharging were covered, in the patients who were hospitalized in Erenkoy Mental Health and Research Hospital AMATEM Clinic between 2013 and 2014.

**Results:** 507 patients' data were evaluated in this study. The average beginning age for regular use of substance was  $22.03 \pm 7.62$  and the mean time of regular substance usage was  $11.87 \pm 10.99$  years. 180 patients (35.5%) were primarily using alcohol; 196 patients (38.7%) were using heroin, 91 patients (17.9%) were using synthetic cannabinoids and 17 patients (3.4%) were using marihuana. 103 of the heroin patients (51.2%) were using heroin through nasal route and 95 patients (47.2%) were using intravenously.

243 patients (47.9%) were using only one substance, whereas 78 patients (15.4%) were using more than one. Number of the patients, who were admitted voluntarily was 338 (66.7%). 60 patients (11.8%) were admitted because of family demand and 15 patients (3%) were admitted due to legal reasons.

373 patients (73.6%) didn't have any accompanying diagnoses. 71 patients (14%) had mood disorder, 28 patients (28%) had anxiety disorder and 13 patients (2.6%) have psychotic disorder diagnoses. 16 patients (3.2%) were diagnosed delirium tremens at that time.

Number of the patients, who were using suboxone was 150 (29.6%). The average suboxone dose was  $8.87 \pm 3.12$ .

273 patients (53.8%) were discharged from hospital after being fully cured. 179 patients (35.3%) were discharged by their own decision before completing the 21-day treatment program. 48 patients (9.5%) were discharged because of the violation of rules.

**Conclusions:** It was found that in Istanbul AMATEM clinic between 1998 and 2002, big majority of the patients were male; female patients preferred heroin, meperidine, and benzodiazepines unlike male patients, who preferred marihuana and volatile substances. It was found

that female patients prefer heroin usage by IV administration, and its incidence is more than that of male patients. A study of 258 patients, who were hospitalized at AMATEM in Elazig during one year time, have shown that most of the patients were admitted to the hospital by probation system; most of the patients usually have only first and secondary education and have low-middle income. The high prevalence of marihuana usage thought to be associated with probation system. There are significant improvements in recent years in the field of addiction in our country. Probation system and buprenorphine/naloxone usage in the treatment of opioid addiction are some of these improvements. These improvements thought to affect the profile of the patients, who are hospitalized in addiction centers. New studies in this field may contribute to present knowledge.

**Keywords:** alcohol, substance, sociodemographic

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### [PP-378] *Anxiety disorders*

## Panic disorder patient whose symptoms begin with allergic rhinitis: case report

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Panic disorder is a psychiatric disease characterized by unexpected panic attacks, anticipatory anxiety and changes in behavior such as avoiding. It may be accompanied by numerous somatic pathologies and it can imitate plenty of other somatic pathologies. In this case report, a patient with panic disorder began in the form of allergic rhinitis was evaluated.

A 40-year-old married male patient has-been receiving treatment for allergic rhinitis ongoing for nearly two years. He was admitted to the outpatient clinic of Otorhinolaryngology because of complaints such as difficulty in breathing, intense anxiety, restlessness, feeling like dying. He was operated with the diagnosis of nasal septum deviation. However, his complaints continued to increase and he was proposed to apply to the psychiatry polyclinic. The irregular treatment history because of similar complaints was learned in the patient's anamnesis. The physical neurologic examination was unremarkable. Biochemical tests (complete blood count, fasting blood glucose, thyroid function and sedimentation) were within normal limits. In the mental examination;

he was acting nervous in the communicating, speech and tone of voice was dysphoric, his affect was impaired in the style of distress, the ideas that he would die at any moment were dominant in the content of the thought. Neurovegetative symptoms like sweating and palpitations were present in the psychophysiological activities. After the psychiatric interviews, patient was diagnosed "panic disorder" according to DSM-IV. Hamilton Anxiety scale score was 26. Patient was using loratadine 10 mg/day since the beginning of the disease. Citalopram 20 mg/day treatment was begun gradually. The patient's symptoms had declined a month later. Hamilton Anxiety scale score was 10. Patient has been followed for six months and still he has been in remission with anti-allergy and psychiatric treatment.

Panic disorder which have a varied symptomatology such as palpitations, sweating, trembling, shortness of breath, feeling of choking, breathlessness, chest pain, chest discomfort, nausea, abdominal pain, dizziness, unsteadiness, drowsiness, derealization, depersonalization, fear of losing control, fear of death, paresthesias, hot flushes is a mental condition that should be taken into consideration in the differential diagnosis of various medical diseases. Onset form of the disease as allergic rhinitis and to accompany of panic attacks with rhinitis table were thought to be interesting in this case.

**Keywords:** allergic rhinitis, panic disorder

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**[PP-379] Mood disorders****Black cohosh induced mania in a recurrent depression patient**

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The herb named black cohosh, or *Actaea racemosa* (formerly named *Cimicifuga racemosa*), that is also known as black snakeroot, squawroot, rattle root, rattle weed, or bugbane is native to North America. The roots and rhizomes of this herb are frequently used in the treatment of menopausal symptoms and menstrual dysfunction. Many studies have demonstrated that this herbal drug, when standardized properly to its terpene glycoside fraction, is effective in alleviating menopausal symptoms. Adverse effects are extremely uncommon, and there are no known significant adverse drug interactions. Some investigators proposed that the mechanism of action of black cohosh might involve the serotonergic and dopaminergic pathways. We present a manic patient with psychotic and mixed features due to black cohosh use for her premenstrual symptoms.

**Case:** A 36 years old female having a history of recurrent depression for 15 years was prescribed duloxetine 30 mg daily and modafinil 100 mg daily, by a psychiatrist 4 months ago. Her depressive complaints were partially improved in two months. Approximately 2 months after antidepressant administration, her gynecologist administered black cohosh to reduce her premenstrual symptoms. In ten days after black cohosh use, she felt well and stopped antidepressant medication, but kept using black cohosh. She developed manic symptoms in 3 weeks after her treatment with black cohosh was started. Her husband informed that the patient became restless, was talking excessively and started making plans for being a politician; however, she was being hopeless, depressive, and sad at times. A few days later, she became suspicious about her neighbors and her husband and she informed the police that her husband had plans to kill her. Thus, she has taken to our emergency service and hospitalized with the diagnosis of mania with psychotic and mixed features. Her affective and psychotic symptoms disappeared in one month with quetiapine XR 800 mg daily and valproic acid 100 mg daily. In summary, the mechanism of action of black cohosh has not been fully understood. It is likely involved with the nervous system through central nervous activity, serotonergic, or dopaminergic pathways. Our case with history of recurrent depressive episodes showed that pharmacological effects of black cohosh might induce a manic episode with psychotic features because of its pharmacological effects on central nervous system. It seems as an important issue to pay attention to use of black cohosh in patients with mood disorders.

**Keywords:** black cohosh, mania, mood disorders

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**[PP-380] Personality disorders****Digit ratio (D2:D4) in criminal antisocial personality disorder patients and its correlation with aggression**Abdullah Bolu<sup>1</sup>, Erdal Pan<sup>2</sup>, Suleyman Akarsu<sup>3</sup>

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**Objective:** According to the hypothesis, the ratio of second finger (D2) to the fourth finger (D4) is negative correlated with intrauterine testosterone exposure but it has a positive correlation with intrauterine estrogen exposure. It is known that antisocial and impulsive behaviors are related with free testosterone level. In this study, correlation between D2:D4 ratios of patients with criminal antisocial personality disorder and scores of aggression scale were analyzed.

**Methods:** In this broad participation study, criminal antisocial, who had compliance problems had been analyzed and preliminary information will be shared, which also includes control group. The data of 106 criminal antisocials will have been compared with control group (n=100).

**Results:** D2:D4 ratio was measured from right hand. Right hand D2:D4 ratio of antisocial personality disorder group was measured as  $0.97 \pm 0.04$  and it was measured as  $0.99 \pm 0.04$  for control group. There was statistically difference between two groups ( $p < 0.05$ ,  $t = 5.156$ ).

A negative correlation was determined between the hostility subscale scores of Buss-Perry Aggression Scale D2:D4 ratio of antisocial personality disorder group (for right hand  $r=-0.250$ ,  $p<0.05$ ), (for left hand  $r=-0.313$ ,  $p<0.05$ ).

**Conclusions:** As it is known, antisocial personality disorder is one of the psychiatric pathologies in which aggression is most apparent. Many studies have been carried on about correlations between antisocial personality disorder, testosterone and aggression. Particularly some studies in which there is no agreement on correlation between intrauterine testosterone exposure and aggression are still controversial. In studies related with this subject, lower D2:D4 ratio has been used as indicator of intrauterine testosterone. In some studies, a correlation was found between D2:D4 ratio and physical aggression but in some studies, it was not encountered a correlation like that. In our study, a negative correlation was found.

**Keywords:** digit ratio, antisocial personality disorder, aggression

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### [PP-381] *Forensic psychiatry*

## Factors that affect repetitive criminal behaviors' in criminal antisocial personality disorder

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**Objective:** When repetitive criminal behaviors have been mentioned; antisocial personality disorder (APD) has been regarded as a significant factor in this subject. In this study, we aimed to examine the factors, which affected criminal behaviors of patients with antisocial personality disorder.

**Methods:** A broad participation study has been carried on about antisocial personality disorder with compliance problems in our clinic. 70 of the antisocial personality disorder patients had committed more than one crime and 33 of them had committed one crime. Patients were divided into two groups: patients who had committed one crime and who had committed more than one. Significant sociodemographic and score of psychometric scales (HARE psychopathology scale, COPE scale) had been compared between each group.

**Results:** Each two groups (committed one crime and committed more than one) were similar from the many point of sociodemographic and psychometric features. However, there were some differences become prominent. There were statistically significant differences between the two groups in childhood trauma (APD patients who had committed one crime 51%, patients who had committed more than one 71%) HARE psychopathology scale scores (patients who had committed one crime  $17.21\pm4.07$ , patients who had committed more than one  $20.00\pm5.48$ ) educational level and substance use (patients who had committed one crime 45%, patients who had committed more than one 77%) ( $p<0.05$ ). Also there were statistically significant differences between the two groups in COPE subscale scores (Problem-Focused Coping, Acceptance)

**Conclusion:** The features of groups were similar from many points. When prominent different points had been evaluated, we had an interesting result related with education. In many studies about crime, lower education level and educational failure have been associated with tendency to violence. Moreover lower education level has been regarded as an important factor about bringing crime into a profession. However, in our study, education level of patients who had repetitive crime history was higher than the group with single crime. Removal point of psychopathy and impulsivity is thought to be important in explaining of this result. Indeed a similar situation is observed in cases of suicide. It is known that persons with lower education level are more impulsive and so that they often choose methods, which are difficult to repair again

**Keywords:** crime, antisocial personality

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**[PP-382] Psychosomatic medicine-liaison psychiatry****Morgellons disease: dermatologic or psychiatric**Ilknur Kivanc Altunay<sup>1</sup>, Selime Celik<sup>1</sup>, Ersin Aydin<sup>2</sup>, Cigdem Aydin<sup>1</sup>, Abdullah Bolu<sup>3</sup><sup>1</sup>Sisli Etfal Training and Research Hospital, Department of Psychodermatology, Istanbul-Turkey<sup>2</sup>Kasimpasa Military Hospital, Department of Dermatovenereology, Istanbul-Turkey<sup>3</sup>Turkish Air Force Aircrew's Health Research and Training Center, Eskisehir-Turkey

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Morgellons Disease (MD) is an unexplained syndrome presenting with cutaneous dysesthesias associated with foreign material like fibers or another inanimate objects. It is still controversial condition in medical community and some authors assume that it is simply a delusional infestation by another name while some suggest that it is a real infestation. Morgellons patients have a strong but false belief of being infested by these unexplained materials and claim to have observed that their skin exudes such fibers. Cutaneous dysesthesia is the main dermatological symptom and this causes patients to pick at their skin or itching and excoriations. In psychiatric domain, it is an example of delusional disorder, somatic type (also known as monosymptomatic hypochondrial psychosis). Also, depression, anxiety, cognitive decline, sleep disturbance and mood disorder may be associated with the dermatologic symptoms. Herein, we present a patient with MD and want to focus on the importance of a multidisciplinary approach to MD.

A 49 year-old female was admitted to our psychodermatology outpatient clinic with pruritus and stinging sensations on her body. An unbearable itching and burning were present. She described some material like threads protruding from the skin as she scratched it. After removal of materials from the skin, she relieved for a short time. Dermatological examination showed numerous excoriations and erosions on the skin due to scratching and picking. In psychiatric sessions, it was learned from her history that these symptoms started when she deceived by his husband six months before. She complained sleep disturbances and amnesia Hallucinations were not described by the patient. In the psychological interview, she did not tell any emotions associated with trauma. She was hospitalized. She was diagnosed depression and impulse control disorders not otherwise specified. Moreover, prescribed risperidone 0.5 mg/day and escitalopram 20 mg/day. After hospitalized she came psychotherapy once a week for three months. MD is a mysterious skin disorder that was first described more than 200 years ago. The disease is identified by fiber-like strands extruding from the skin in conjunction with various dermatologic and neuropsychiatric symptoms. The cause, transmission, and treatment are unknown. Physical stress is a common precursor. Full onset typically requires one to several months beginning from the first symptom. MD patients often go to many physicians, such as infectious disease specialists as well as dermatologists. Patients with MD generally lack insight into their disease and reject the need for psychiatric help, because they believe that their main problem is about the skin although many psychiatric disorders accompany. Thus, it is important to recognize these patients and to have an interdisciplinary collaboration for both dermatologists and mental health specialists. A multidisciplinary approach will clearly enhance the success and effectiveness of the treatment.

**Keywords:** Morgellons disease, treatment, psychodermatology**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S329****[PP-383] Sleep disorders****An adolescent suffering from Kleine-Levin Syndrome**Berna Polat<sup>1</sup>, Nuran Gozpinari<sup>1</sup>, Mustafa Serhan Sevim<sup>2</sup>, Veli Yildirim<sup>1</sup>, Ozalp Ekinci<sup>1</sup>, Fevziye Toros<sup>1</sup><sup>1</sup>Mersin University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Mersin-Turkey<sup>2</sup>Mersin University, Faculty of Medicine, Department of Neurology, Mersin-Turkey

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Kleine-Levin syndrome (KLS) is a rare disease, which progresses with episodes of hypersomnia, along with hyperphagia, hypersexuality, and cognitive impairment. The incidence of this disease is 1-5 per million individuals. Since it is a rare and often mistaken for other psychiatric disorders, it is important not to skip the patients who apply to child psychiatry with complaints of KLS-like symptoms. It is intended to emphasize the importance of multidisciplinary study with this patient whose process of diagnosis delayed. A fourteen-year-old male patient applied to our clinic with the complaints of oversleeping, overeating, hypersexuality and decrease in speech. He used to sleep about 16-18 hours of a day. This was happening from time to time, when he was asleep. These episodes lead to a week

and continuing over in the recent year as a few times a in a month. During these episodes irritability, overeating was going on at awake state. These periods were going on about a week and, they have been getting back to normal completely for two weeks and then the episodes were coming back again. These complaints started six months ago. He had been threatening with other different diagnosis except KLS, however his complaints went on. The neurology consultation was asked for. Borderline mental retardation and ADHD were considered as comorbid. The results of Polysomnography and Electroencephalography (EEG) were normal. The patient was assessed with neurology clinic and diagnosed as KLS. The treatment was started with Carbamazepine and methylphenidate. The reduction was observed in frequency and severity of episodes during follow up treatments. In order to diagnose of KLS, which is entirely clinical and similar to several other conditions like narcolepsy, bipolar disorder, it is needed to eliminate several other conditions. Because of the similarity with other symptoms, KLS disease can be mistaken for different psychiatric disorders. Our case had been also followed up with depression, sinusitis diagnosis from other clinics. KLS was diagnosed by assessing of patient with the neurology clinic and the treatment was started immediately. The patient has benefited from this treatment. In conclusion, this disease has ambiguous symptoms, which is hard to diagnose, require multidisciplinary approach.

**Keywords:** Kleine Levin syndrome, hypersomnia, multidisciplinary approach

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### [PP-384] *Psychosomatic medicine-liaison psychiatry*

## An unusual patient with lichen sclerosis et atrophicus associated with psychiatry

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Lichen sclerosis et atrophicus (LSA) is a chronic inflammatory dermatosis that is an uncommon but distinctive chronic cutaneous disease of unknown origin. LSA is characterized by white, flat papules with an erythematous halo and black, hard follicular plugs. The trunk and extremities may be affected; the disease has predilection for the vulva, perianal area and groin. The primary signs of vulvar dystrophy are likely to be one or more patches of thick and dry skin; often accompanied by resistant itching Koebner phenomenon was suggested to be associated with LSA. Thus, itch may be a causal factor of LSA. Particularly in genital LSA, local urogenital irritants may be modified with psychological factors leading to resistant itching on the genital area. On the other hand, itch can be associated with libidinal impulses. This is called cutaneous orgasm. A 64 year-old female was admitted to our dermatology outpatient clinic with pruritus and stinging sensations on her anogenital regions 5 years ago for the first time. In dermatologic examination showed a whitish area on the vulvar area. LSA prediagnosis was made and it was confirmed by skin biopsy. The patient was treated with various dermatologic medications for LSA. However, she did not respond to therapies completely and each time only temporary relief was obtained. She was hospitalized for 3 times. We observed that lesions were exacerbated with severe and uncontrollable itch each time. Psychological status was evaluated then and in her history, it is learned that she was given up for adoption by her parents when she was 4 years old, and was raped when she was 19. Afterwards, with an unwanted marriage, she had two daughters and now she lives alone after her husband's death. On clinical observation, the patient had difficulty in setting boundary at sharing her disease with other patients and she exhibited her body easily. Hysterical expression and focus on phallic objects in the Rorschach test were quite remarkable. In this period, the patient was started SSRI drugs for her anxiety symptoms due to forbearing herself from scratching. Although partial improvement was obtained, there was no complete remission. After 2 years with a diagnosis of vulvar SCC patients were surgically. After vulvectomy itch has spread to other parts of the patient's body and anal region. The patient complained about sleep disturbance and anxiety symptoms due to her elevated libido. This time sulphiride 50 mg/day started and psychotherapies continued. Two months after patient's symptoms eased and sleep was improved. The common idea of SCC is that it is caused by chronic tissue damage from itching and starching. Although itching does not alone cause to SCC but it accelerate chronic inflammation and may make easier the occurrence of SCC. There are many biological factors that affect chronic evolution and prognosis of the skin diseases. Doctors can particularly consider metabolic, infectious, nutritional and immunological effects and may ignore the possible psychological factors. This situation can lead to a misperception of any disease to be incurable. Therefore, it is important to evaluate patients in all aspects to make any therapy more effective.

**Keywords:** Lichen Sclerosis, psychiatry

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**[PP-385] Autism****Autism spectrum disorder first presented with catatonia: a case report**

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Catatonia is a syndrome characterized by motor abnormalities that include excessive movements, reduced mobility, abnormal movements, reduced or other abnormalities of speech, reduced functioning, negativism, and reduced food or fluid intake. Catatonia is hardly recognized in child medicine. In fact, the catatonia syndrome is not rare, but it is covered under many guises. Its incidence in the adolescent psychiatric populations estimated in the range of 12 to 17%. It was reported in children and adolescents within autism spectrum disorders especially in those patients with self-injurious behaviors, and the repetitive behaviors in adolescents. Here we report an adolescent, who first presented catatonia and after diagnosed with autism spectrum disorder and discuss the clinical characteristics of catatonia in this population.

The case was a 13-year-old female, who was brought to our department with complaints of refusal to eat, weight loss and social detachment for ten days. She had history of dyslexia and scoliosis. Family history was negative for any psychiatric disorder. At her first psychiatric assessment, it was observed that her self-care was poor and she was apathic in appearance. She was conscious, cooperating and oriented. Her mood was depressive and she had a limited affect. She was answering the questions by short sentences. She did not describe any delusions, hallucinations or illusions. Her psychomotor activity was severely decreased. Her parents reported that she did not eat anything and lost 6 kilograms in the last ten days and for the last month she spoke incessantly, expressing a few monotonous phrases had hand-washing behavior in a repetitive manner. Her physical examination and vital signs were in normal range. Complete blood count, electrolytes, as well as hepatic and renal function tests were in normal range except low potassium level. Extensive neurological examination, electroencephalogram and magnetic resonance imaging of the brain revealed no abnormalities. She had marked social deficits since early school years but this was the first time for the parents for seeking any psychiatric help. She was later diagnosed with autism spectrum disorder according to DSM-V.

Autism spectrum disorder should be borne in mind in adolescents who have social deficits and refer with catatonia symptoms. To diagnose the underlying autism spectrum disorder is important for the treatment strategies and prognosis during follow up.

**Keywords:** autism spectrum disorder, catatonia, adult

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**[PP-386] Others****Impact of hyperbaric oxygen therapy on cognitive functions of cases**Suleyman Metin<sup>1</sup>, Abdullah Bolu<sup>2</sup>, Sedat Develi<sup>3</sup>

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**Objective:** Sudden hearing loss is considered to be an urgent ENT problem due to its diagnosis and treatment with often unknown etiology. In experimental animal studies, damage of hair cells of the inner ear with noise, viruses, autotoxic agents and hypoxia has been shown to play role in the etiology. Hyperbaric oxygen therapy is used in the treatment of sudden hearing loss by restoring the reduced oxygen pressure in the cochlea. In this study, it was aimed to detect the impact of hyperbaric oxygen therapy on cognitive functions of cases.

**Method:** Sudden hearing loss patients with no other medical problems and treated with HBO were included in the study. Pure tone audiometry tests and psychometric measurement tests (Serial Digit Learning Test, The State-Trait Anxiety Inventory) of patients were performed three times; before treatment, after 10<sup>th</sup> and 20<sup>th</sup> HBO sessions.

**Results:** Twenty sessions of HBO treatment with 2.4 ATA pressure lasting 120 minutes (25 minutes 100% oxygen and 5 minutes air breathing in each session, three times) was applied to two male and one female patient with age of 48, 53 and 37, respectively. Pure tone

audiometry and psychometric test results of patients according to the HBO sessions were evaluated in Table 1.

**Conclusion:** Summing up these cases, improvement in cognitive parameters were observed in two cases, one case showed no change. Many studies revealed that HBO treatment improves cognitive functions and quality of life especially in patients with traumatic brain injury. This effect is not known exactly but it is thought that HBO regulates brain metabolism especially it is effective on glial cells. It may not be correct to suggest that this situation alone may be effective in improving cognitive function. On the other hand, there are opinions that this treatment increases neuroplasticity, and even create new synapses and axonal connections.

**Keywords:** cognitive functions, hyperbaric oxygen

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### [PP-387] *Psychosomatic medicine-liaison psychiatry*

## Narcissistic personality disorder-psoriasis; two cases

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Psoriasis is a chronic, inflammatory disease which is characterized by exacerbations and remissions and seen 1-3% of the general population. The etiology of psoriasis is not clear. The close relationship of this disease with psychological factors indicates psychosomatic disorders. Although the relationships between patients with psoriasis and anxiety and depressive symptoms have been the subject of studies, personality pathology has been neglected in this regard. Two psoriasis patients with a diagnosis of narcissistic personality disorder were examined in this report. Perspectives to medical conditions and the possible effects of axis II diagnoses to the treatment success of the patients were discussed.

**Case A:** Forty-year-old male patient was admitted to the psychodermatology polyclinic with skin rash, flaking and itching complaints. Patient was treated and followed up with the diagnosis of psoriasis. The score of PASI (Psoriasis Area Severity Index) was 18.04 and DLQI (Dermatology Life Quality Index) was 8. A history of childhood trauma was detected in the anamnesis. Patient was enrolled in psychiatric interviews. As a result of the psychiatric interviews and psychometric evaluations (Rorschach Test, Rosenberg Self-Perception Test, SCID-II), narcissistic personality disorder was revealed in this patient.

**Case B:** Forty two-year-old male patient was admitted to the psychodermatology polyclinic with skin rash, flaking and itching complaints. According to the history, patients have received treatments for psoriasis. The scores of PASI and DLQI were calculated as 53.5 and 30. Psychiatric interview was requested due to the medical histories of psychiatric treatment and social resistance to the treatment. Rorschach Test, Rosenberg Self-Perception Test and SCID-II were administered to the patient. As a result of the psychiatric interviews and psychometric evaluations, this patient was diagnosed as narcissistic personality disorder.

Psoriasis is a psychosomatic skin disease that is frequently accompanied by psychiatric disorders. Although the role of normal and abnormal personality traits on the initiation and progression of disease could not be shown clearly in the limited number of studies investigating personality characteristics in patients with psoriasis, it has been suggested that these patients have conflictual-combative personality. Alexithymia, a personality trait, was shown to be relatively common in patients with psoriasis. According to Sifneos, patients with alexithymia frequently show narcissistic, psychosomatic, passive, aggressive personality traits. In addition, some researchers draw attention to the narcissistic injury in the formation of skin diseases.

**Keywords:** narcissistic personality disorder, psoriasis

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**[PP-388] Psychosomatic medicine-liaison psychiatry****Generalized anxiety disorder patients admitted with urticaria: two cases**Cigdem Aydin<sup>1</sup>, Ilknur Kivanc Altunay<sup>1</sup>, Selime Celik<sup>1</sup>, Ersin Aydin<sup>2</sup>, Abdullah Bolu<sup>3</sup><sup>1</sup>Sisli Etfal Training and Research Hospital, Department of Psychodermatology, Istanbul-Turkey<sup>2</sup>Kasimpasa Military Hospital, Department of Dermatovenereology, Istanbul-Turkey<sup>3</sup>Turkish Air Force Aircrew's Health Research and Training Center, Eskisehir-Turkey

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Chronic idiopathic urticaria is an allergic disease characterized by itchy rash and edematous papules- plaques that are ongoing at least six weeks. In addition, there are studies suggesting that psychosocial factors and emotional stress play a role in the development and exacerbation of disease. Urticaria is one of dermatological diseases which the psychiatric co-morbidity frequently seen. In these patients, depression, anxiety and somatoform disorders are thought to have increased prevalence and this situation has a serious impact on the quality of life. Emotional stress may even initiates or exacerbates urticaria. Two patients with first episode of urticaria during premenopause and diagnosed with anxiety disorder after the psychiatric examination were examined in this report.

**Case A:** Fifty-five year-old female patient was admitted to the psychodermatology polyclinic with itching in the hands and face, swelling and redness complaints. According to the medical history, complaints first initiated four years ago when the patient was in pre-menopausal period and had intense familial problems. Psychiatric consultation was requested due to the triggering of the disease by stress. After the psychiatric and dermatological interviews, this patient was diagnosed as "Chronic urticaria" and "generalized anxiety disorder". Patient was resistant to dermatological treatments. Sertraline 50 mg/day was added. Both psychiatric and dermatological complaints and findings (Beck Anxiety Inventory, State-Trait Anxiety Inventory, Urticaria Activity Score) had been found to decrease in the control examination after 6 weeks.

**Case B:** Fifty year-old female patient was admitted to the psychodermatology polyclinic with itching, swelling and redness on the body. Dermatologic complaints had been started simultaneously with the anxiety secondary to social issues in premenopausal period. Chronic urticaria was diagnosed to the patient after the dermatologic examination. Anti-allergic treatment was started and respond to this treatment was received. Psychiatric consultation was requested because of the anxiety of the patient during the examination. As a result of the psychiatric interviews and psychometric evaluations (SCID-I, Beck Anxiety Inventory, State-Trait Anxiety Inventory), this patient was diagnosed as generalized anxiety disorder and escitalopram 20 mg/day treatment was started. In the control examinations, decline in dermatological and psychiatric problems were observed.

Urticaria is known to be in close relationship with emotional state. These cases suggest that the close relationship between urticaria and emotional state may be much more important in premenopausal period. Consequently, consideration of psychological factors and emotional fluctuations brought about by the current period are expected to increase treatment success and patient satisfaction in the evaluation of patients with chronic urticaria.

**Keywords:** anxiety, urticaria, generalized anxiety disorder

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**[PP-389] Posttraumatic stress disorder****Posttraumatic stress disorder comorbid psychotic disorders: case series**Abdullah Bolu<sup>1</sup>, Taner Oznur<sup>2</sup>, Suleyman Akarsu<sup>3</sup><sup>1</sup>Turkish Air Force Aircrew's Health Research and Training Center, Eskisehir-Turkey<sup>2</sup>Gulhane Military Medical Faculty, Department of Psychiatry, Ankara-Turkey<sup>3</sup>Aksaz Naval Hospital, Mugla-Turkey

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Studies indicate that a high incidence of comorbidity between posttraumatic stress disorder (PTSD) and psychotic disorders. Although the case reports about this topic are more relevant, there are very few studies with large trials in terms of clinic of these patients. Clinical characteristics of case series who diagnosed PTSD comorbid psychotic disorders were aimed to discuss.

Ten PTSD patients with comorbid psychotic disorders were examined. Trauma of all of the cases was caused by armed conflict. Seven

patients had symptoms of paranoid delusions. All of the patients showed positive psychotic symptoms. Psychotic symptoms of five patients had begun 6 months-1 year later from the diagnosis of PTSD. Psychotic symptoms of four patients decreased with ECT and four patients had responded to risperidone. Half of the patients exhibited behavioral disorders in the form of self-mutilation. Trauma contents of all cases were about armed conflict. Considering the general characteristics of the patients, it can be seen that positive psychotic symptoms were prominent in the cases, the symptoms began approximately 1 year after the trauma (15 days-9 years), cases benefit from especially ECT and all cases had behavioral pathologies. It had been reported that 20-40% of combat related PTSD patients had psychotic symptoms. This prevalence is not as high in non-combat related PTSD patients. Successful results have been reported about using of ECT in PTSD comorbid psychotic disorders in the literature.

**Keywords:** PTSD, comorbidity

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**[PP-390] Posttraumatic stress disorder**

## The relationship between sleep quality and aggression in patients with posttraumatic stress disorder

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**Objective:** Aggression is a common behavioral problem in combat related post-traumatic stress disorder (PTSD). Sleep disturbances are important symptoms in the diagnostic criteria for PTSD. Sleep disturbances and aggression are two prominent reasons for applying of combat related PTSD patients to the hospital. The relationship between sleep quality and aggression in patients with posttraumatic stress disorder was aimed to investigate in this study.

**Methods:** Psychometric data of 68 patients, who have the diagnosis of PTSD according to DSM-IV diagnostic criteria were evaluated. Socio-demographic questionnaire, Buss-Perry Aggression Questionnaire (BPSQ) and the Pittsburgh Sleep Quality Index (PSQI) were administered to the all participants.

**Results:** PSQI scores of the patients were  $11.04 \pm 3.32$  and BPSQ scores were  $54.45 \pm 13.01$ . There was a positive correlation between PSQI scores and BPSQ scores ( $r:0.369$ ,  $p<0.05$ ).

**Conclusion:** Several studies were undertaken investigating the relationship between sleep quality and aggression, and positive correlations were detected in some of them. Sleep quality was associated with aggression scores (positive correlation) in the patients who have received a diagnosis of antisocial personality disorders. The data obtained as biological evidence on this issue is remarkable. Prefrontal cortex (PFC) is known to play a role both in maintaining sleep and in the regulation of behaviors. Especially in recent years, studies have been made about impaired PFC function of PTSD patients.

**Keywords:** aggression, posttraumatic stress disorder, sleep quality

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**[PP-391] Personality disorders****Childhood traumas and substance use in criminal antisocial personality disorder patients**Abdullah Bolu<sup>1</sup>, Erdal Pan<sup>2</sup><sup>1</sup>Turkish Air Force Aircrew's Health Research and Training Center, Eskisehir-Turkey<sup>2</sup>Eskisehir Military Hospital, Eskisehir-Turkey

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**Objective:** Antisocial personality disorder (APD) is a temptation personality pathology with symptoms of aggression, nervousness and behavior pathologies. Persons generally have compliance problems at this personality stage.

**Methods:** In our department, a broad participation study related with criminal APD patients with compliance problems has been carried on. Conspicuous preliminary information related with childhood traumas and substance use of these patients will be shared in this presentation.

**Results:** Patients' average education level was  $6.88 \pm 2.13$  years. 32% of them had finished five years education, 56% of them eight years and 5.8% of them twelve years. 7.8% of them had not finished five years education. Almost all (99.1%) were in medium economic level or lower than it. 4.8% of them had not been using substance and 95.1% of them had been using substance. 72.8% of them had multivariate substance use history. When substance feature is considered 12.6% of them had spirit use history. 19.4% of them had treatment history because of that substance use history. Half of the patients (49.5%) had alcohol problem. Parents of 66% of them had been living together. Parents of 16.5% of them had divorced and they were separate. Parents of 17.4% of them were separate because of death. 86.4% of the patients had self-mutilation behavior and 55.3% of them had suicide history. 60.2% of them had childhood trauma.

**Conclusion:** A study in which violent and nonviolent perpetrator of APD patients had been compared, substance use disorders (abusing + addiction) determined as 83.4% in perpetrator group. In another study, without perpetration feature this rate was determined 86% in lifelong period. Criminal feature of patients can be regarded as the reason why in our study this rate is very high. In studies, relationship between aggression level and domestic violence was presented. On the other hand, close link between APD etiology and childhood traumas has been tried to be presented. In study, in APD patients whose aggression level was high, childhood traumas were determined as a rate of 82.5%. When aggression level is associated with, potential of perpetration this rate was determined low in our study.

**Keywords:** childhood trauma, criminal antisocial, substance use

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**[PP-392] States associated with stress****Association of adjustment disorder with childhood trauma and symptom patterns**Abdullah Bolu<sup>1</sup>, Erdal Pan<sup>2</sup>, Suleyman Akarsu<sup>3</sup>, Taner Oznur<sup>4</sup>, Ozcan Uzun<sup>4</sup><sup>1</sup>Turkish Air Force Aircrew's Health Research and Training Center, Eskisehir-Turkey<sup>2</sup>Eskisehir Military Hospital, Eskisehir-Turkey<sup>3</sup>Aksaz Naval Hospital, Mugla-Turkey<sup>4</sup>Gulhane Military Medical Academy, Department of Forensic Medicine, Ankara-Turkey

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**Objective:** Adjustment disorder is described in "trauma and stressor associated disorders" in DSM-V. DSM-V includes no clear-cut definition for adjustment disorder and it is ambiguously defined as a manifest trouble disproportionate to the intensity of the stressor with resultant significant impairment in functionality.

**Methods:** Preliminary results of an ongoing large-scale study in our clinic including patients with adjustment disorder are partly presented. We compared the SCL-90 symptom evaluation list data between the patient group (n=113) and the control group (n=63). The patient group was divided into 2 groups regarding the childhood traumas and compared with each other using SCL-90 subscale scores.

**Results:** Compared to the control group, patients with adjustment disorder had significantly higher anxiety symptom scores ( $p=0.048$ ,  $t=1.994$ ) and phobic anxiety symptoms ( $p=0.001$ ,  $t=3.417$ ). 33% of the patients with adjustment disorder had childhood trauma. Except for the somatization and paranoid signs, all SCL-90 subscale scores were significantly higher in patients with adjustment disorder and childhood traumas compared to those without childhood traumas at subgroup analysis ( $p<0.05$ ).

**Conclusion:** Significantly higher anxiety symptom scores in the adjustment disorder patients compared to the control group may suggest the presence of a patient subgroup having adjustment disorder concurrent with anxiety symptoms. Nevertheless, the DSM definition “a manifest trouble disproportionate to the intensity of the stressor” may be insufficient to define the symptoms of patients with adjustment disorder. Childhood traumas have been associated with various psychopathologies, and this study revealed that patients with childhood traumas more intensely experienced the symptoms of adjustment disorder.

**Keywords:** adjustment disorder, childhood trauma

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**[PP-393] Others**

## Hospitalization durations and remission rates of patients in a psychiatry clinic

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**Objective:** The duration of hospitalization is related to many well-documented factors in literature. However, little is known about psychiatric patients and psychiatric service delivery in non-Western developing countries. It is supposed that major contributing factors in discharge are remission rates and functional levels. Therefore, this naturalistic preliminary study aimed at analyzing and describing the hospitalization duration and remission rates of a psychiatric population treated in the mental health inpatient facility.

**Methods:** A total of 88 male patients, who were hospitalized in a psychiatry clinic were included in the study. They were evaluated at admission and before discharge using the Brief Psychiatric Rating Scale (BPRS) and the Clinic Global Impression Scale (CGI). Other variables, including length of stay, number of previous admissions, demographic characteristics, and diagnosis were also assessed.

**Results:** Mean of the total scores on BPRS were declined from 24.95 to 13, and the mean CGI scores were declined from 3.85 to 2.04 during hospitalization period. Mean length of hospitalization was 7.91 days.

**Conclusion:** Our study shows that patients are discharged from the hospital with approximately 50% decrease in symptom severity. Such research can contribute to understand better, the needs of psychiatric patients, and help to develop continuously improved service delivery and optimize therapeutic options.

**Keywords:** psychiatry, inpatient, remission

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**[PP-394] States associated with stress**

## Anxiety levels and coping attitudes in patients with adjustment disorder

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**Objective:** Adjustment disorder is described in “trauma and stressor associated disorders” in DSM-V and presents with emotional and behavioral signs as a reaction against a defined stressor. Affected patients usually have poor capability of dealing with the stressors.

**Methods:** Preliminary results of an ongoing large-scale study in our clinic including patients with adjustment disorder are partly presented.

**Results:** Comparison of COPE scores between the patient group (n=121) and the control group (n=114) revealed higher dysfunctional coping attitudes scores and lower problem-based coping attitudes scores in the patient group, which was statistically significant (p<0.05). Healthy control group had significantly higher coping attitudes scores in active management, planning, staying back, useful social support usage, and suppressing other activities (p<0.05). Patient group had significantly higher dysfunctional coping attitudes scores in

focusing on problems, presenting emotions, and drug abuse ( $p < 0.05$ ). The most common coping attitudes in the patient group included focusing on problems and presenting emotions, and positive reinterpretation. Patients' childhood traumas, their relations with parents, educational level, number of siblings, anxiety level and aggression levels were assessed to determine the factors affecting the highest scores of the patient group in focusing on problems and presenting emotions, and educational level was found to be the most significant factor ( $p < 0.05$ ,  $r = -0.324$ ).

**Conclusion:** Adjustment is an entity associated with mature management capabilities of the affected patient as well as with stressors. That is the reason for different reactions of patients to the environment in identical conditions.

**Keywords:** adjustment disorder, anxiety, coping

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### [PP-395] Others

## Rates of carrying a firearm during the admission to a neuropsychiatry hospital

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**Objective:** Most suicides and homicides are reported to be committed with firearms. Psychiatrists may be in a strategic position to reduce firearm morbidity and mortality. The aim of this study was to assess the demographic characteristics and psychiatric diagnostic profiles of the subjects admitting to a psychiatric hospital while carrying a gun.

**Methods:** Data were pooled from the hospital databases to evaluate the admissions to a neuropsychiatry hospital with a firearm ( $n = 86$ ) between January 2012 and December 2013.

**Results:** Eighty-six (0.36%) of 23840 admissions were found to carry firearm with them at the admission to hospital. A vast majority of the firearmed admissions were males (97.7%,  $n = 84$ ). The diagnosis of the firearmed admissions were as follows: anxiety disorders 32.5% ( $n = 28$ ), major depressive disorder 17.4% ( $n = 15$ ), alcohol and substance related disorder 13.9% ( $n = 12$ ), schizophrenia 10.4% ( $n = 9$ ), bipolar disorder 8.14% ( $n = 7$ ), other disorders 5.8% ( $n = 5$ ). Also 8.14% ( $n = 7$ ) of the fire armed admissions were recorded as a visitor of an inpatient.

**Conclusions:** It is concluded that a more detailed psychiatric assessment must be considered in weapon license applications. Strategies must be developed on implementing effective gun owning prevention without exacerbating stigma or discouraging people from seeking treatment.

**Keywords:** firearm, gun, mental illness

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### [PP-396] Psychopharmacology

## Effects of risperidone treatment on prolactin, vitamin B12, thyroid hormones levels in child and adolescents: a preliminary study

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**Objective:** Atypical antipsychotics are used in the gradually increasing rates in the administration of various disorders in the child and adolescent psychiatry. The risperidone that is of the oldest atypical antipsychotics in the usage has been studied much more in the child and adolescents when compared to the other atypical antipsychotics. There are studies, which notify benefits with the short and long-term risperidone treatment in the child and adolescents both showing normal cognitive development and having mental retardation. The data at hand regarding the effects of the atypical antipsychotics on the metabolic parameters in the children and adolescents are yet limited. Therefore, in this research, the relations between the doses that a group of patients, who is followed with risperidone treatment

and with various diagnoses in a Department of Child and Adolescent Psychiatry (DCAP) polyclinics and the prolactin and thyroxin values have been evaluated.

**Method:** The patients followed within the year of 2013 in the Abant İzzet Baysal University Medicine Faculty DCAP have formed the population of this cross-sectional retrospective research. Nineteen patients from the cases whose file data is complete and whose prolactin and thyroxin data can be accessed have been taken to the research. The data has been recorded to a database prepared with the program of SPSS 16.0, and it has been evaluated with the definitive statistics and non-parametric tests. P has been taken as 0.05.

**Results:** 68.4% of the sample is girl, the age median of the patients has been found as 11.5 (Range 11.0). The diagnosis median has been determined as 2.0 (Range 1.0). The most frequent diagnoses are mental retardation (57.9%), Disruptive Behavior Disorders (47.4%), Mood Disorders (26.3%) and Autistic Spectrum Disorder (21.1%). The median of the risperidone dose, which is prescribed for the treatment, is 1.5 (Range 0.5) mg/ day. The T4, TSH, Prolactin and Vitamin B12 levels medians have been determined as; respectively 1.1 (Range 0.7), 2.5 (Range 0.6), 35.0 (117.6) and 479.4 (1369.0). In the binary correlations, the relationship between the risperidone dose and metabolic measurements has not been determined. With the Mann-Whitney U test, the significant difference has been determined only in terms of the TSH values of the girl and boy patients ( $Z=-2.1$ ,  $p=0.04$ ). The significant difference has not been determined in terms of the risperidone dose and metabolic measurements between the child (younger than 12 years-old, 52.6%) and adolescent (age of 12 and over, 47.4%) patients. The number of diagnosis and the dose of risperidone did not show relation.

**Conclusion:** In this initial research, in a heterogeneous sample having comorbid diagnoses, the relation between the risperidone dose and metabolic measurements has not been determined, only the TSH values of the girl and boy patients have showed significant differences. Our results can depend on the scarcity in the sample size, size of the data loss or the Type II error. It is required that our findings should be supported with the researches to be executed prospectively over wider samples.

**Keywords:** vitamin B12, thyroid hormone levels, prolactin risperidone treatment

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#### [PP-397] Others

### Are there any gender differences in marriage and spousal support among psychiatric inpatients?

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**Objective:** The high rates of spousal incompatibility, separation and divorce have been reported and certain social skills have been disturbed among patients, who have psychiatric disorders. This is associated with low rates of marriage and high frequency of marital maladjustment. It is stated that marital satisfaction is significantly reduced in recurrent depressive disorders. Marriages resulting in separation and divorce are frequently seen among the individuals with bipolar disorder. Studies have shown that in married women are exposed to more stress than men are exposed, depending on psychological, social and biological factors such as pregnancy, childbirth, motherhood and familial responsibilities. Considering both the burden of marriage to females and negative effects of psychiatric disorders to marriage, we compared our male and female patients based on the hypothesis that, in female patients, who are hospitalized in psychiatry clinics, divorce rates would become higher and the spousal support would become lower than male patients would.

**Methods:** Male and female inpatients that are currently married or had a history of marriage have consequently been administered sociodemographic data form that questions a detailed marriage history. Insight and functionality was also assessed.

**Results:** 96 of the patients were female, 111 were male. The diagnoses of the total sample were as follows: 41.1% were schizophrenia, 26.1% were bipolar disorder, 11.5% were psychotic disorder NOS, 9.2% were depression. Others were schizoaffective disorder, delusional disorder, anxiety disorders, adjustment disorders and personality disorders.

The mean ages for males were  $46.8 \pm 12.0$ , for females were  $40 \pm 10.9$  ( $p=0.00$ ). The duration of illness in men was:  $13.1 \pm 10.3$ , in women:  $10.3 \pm 8.6$  ( $p=0.04$ ). Separation was significantly higher in women ( $p=0.04$ ). Spousal violence was significantly higher in female patients ( $p=0.00$ ). The history of alcohol and substance use disorder was significantly higher in male patients ( $p=0.003$ ,  $p=0.02$ ). Global assessments of functioning (GAF) scores were higher in women than in men. Among schizophrenia group, the rates of separation and divorce were significantly higher in female patients, whose duration of illness was above 10 years ( $p=0.02$ ,  $p=0.04$ ). Among male patients with schizophrenia, no significant differences were found in terms of duration of illness. It was not different for patients with affective disorder.

**Conclusion:** The finding that GAF scores were higher in women than in men could be explained by lower mean age and shorter duration

of illness in women. Female patients married or with a history of marriage are younger than male patients. It may be explained by common earlier marriages among women in our society. The rates of spousal violence and separation were higher among female patients. This may support our hypothesis that spousal support is lower among female patients. Duration of illness was positively associated with the rates of separation/divorce among female patients with schizophrenia. This may be associated with stigmatization of mentally ill women. Among affective disorders, separation and divorce rates have not showed any differences according to gender. Affective disorders may affect social functioning less.

**Keywords:** marriage, divorce, mental health

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### [PP-398] *Others*

## A review of literature with a case of Prader Willi Syndrome

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Prader–Willi syndrome (PWS) is a neurodevelopmental disorder caused by a genomic imprinting with deficiency of paternally expressed gene or genes in the chromosome 15q11-13 region. Its estimated prevalence is 1:10,000 to 1:30,000. The clinical characteristics of the syndrome are infantile hypotonia, short stature, characteristic facial features, intellectual disabilities, hyperphagia and increased risk for obesity. Psychiatric disturbances such as cognitive impairment and maladaptive behaviors including hyperphagia and non-food compulsive behaviors are well described in PWS patients. Also according to the recent knowledge, there is an increased risk of affective and psychotic disorders. In this report, we aimed to present a patient with a delayed diagnosis of a Prader Willi syndrome and to note the importance of early detection. A 41-year-old female applied to our emergency clinic with suicidal ideation, impulsivity and aggressive behaviors. In her mental examination, borderline intellectual functioning was predicted and in her physical appearance central obesity, short stature, specific facial features was observed. During inpatient follow up, genetic consultation revealed “abnormal methylation in SNRPN gene” consistent with Prader Willi syndrome. In this case, not only delayed diagnosis of the syndrome but also the medications prescribed so far may aggravate the core clinical symptoms such as obesity and behavioral problems.

**Keywords:** Prader Willi syndrome, early diagnosis, psychiatry

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### [PP-399] *Psychopharmacology*

## Tinnitus related to bupropion treatment: a case report

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Tinnitus is perception of sound in the absence of acoustic stimulation. (ICD-10 code, H93.1) Tinnitus perception and the dopaminergic pathway represent the same cerebral structures with the same functions. Dopamine is present in the first synapse of the auditory pathway; therefore, it is believed dopamine modules all processes, from the first synaptic complex in the cochlea to the pyramidal cells of the cortex, passing through limbic system.

A 41-year-old male, married, laborer, lives with his family in Istanbul has been on a regimen of sertraline 50 mg/day for recurrent depressive episodes since 2 years. Bupropion XL 150 mg/day was added for augmentation. However, after 3 weeks of treatment, patient noticed a subacute onset of bilateral tinnitus. He denied hearing loss, dizziness, vertigo, feeling of fullness in the ears, double vision, and hoarseness. Mental state examination was normal except depressive mood. The patient was referred to general otorhinolaryngologic consultation. Audiometry with tympanometry was done. Otologic problems, Ménière’s disease, external ear infection or acoustic neuroma was not recorded. In addition, neurological examination was normal. Drug usage such as analgesics, antibiotics, chemotherapy, antiviral drugs,

loop diuretics wasn't mentioned. Metabolic disorders (thyroid disorder, hyperlipidemia, vitamin B12 deficiency, iron deficiency, anemia) were not identified. The tinnitus in this case was attributed to bupropion.

Tinnitus-generating antidepressants are tricyclic antidepressants, mianserin, trazodone, citalopram, venlafaxine, bupropion. Bupropion is dopamine and noradrenaline reuptake inhibitor. Tinnitus caused by bupropion is most likely due to dopaminergic enhancement. Tinnitus perception is processed in the prefrontal, primary temporal, and temporoparietal associative areas, as well as in the limbic system that overlaps cerebral dopaminergic projections. It is well known that dopaminergic pathways can successfully be modulated by agonists and antagonists.

The dopamine concept of tinnitus perception opened new possibilities for dopamine supplementation and/or dopamine receptor modulators in the treatment of tinnitus. The dopaminergic pathway can be modulated and the perception of tinnitus can be reduced, by agonists and antagonists of their receptors such as sulphiride, amisulpride, olanzapine, quetiapine, ziprasidone, zuclopenthixol, aripiprazole and melatonin. Antidepressants are used to attenuate tinnitus perception. Limited-sample reports (only two) indicated bupropion's potential induction of tinnitus. This study aims to underlie that bupropion(dopamine agonist-antagonist) can cause tinnitus. The dopaminergic pathway is proposed as the structure that supports the functional neuroanatomy of tinnitus perception. The dopaminergic pathway opens new therapeutic fields for tinnitus in terms of agonism and antagonism of the different dopamine receptors and with the attenuation of subcortical areas.

**Keywords:** tinnitus, bupropion, antidepressants

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### [PP-400] Perinatal psychiatry

## Why ECT in pregnancy?

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**Objective:** It is well known that untreated psychiatric illnesses could lead to serious outcomes for both the mother and fetus. In treatment of pregnant patients with mental illnesses, psychiatrists face the complex dilemma of indication, whether giving medication or using another method. Potential adverse effects of psychotropic drugs increase the attractiveness of Electroconvulsive Treatment (ECT). As many literatures express the safety and efficacy of ECT during pregnancy the indications for using ECT in pregnant psychiatric population still seems to be fluctuating due to different cases in daily practice. What makes the clinician divert to the idea of ECT is controversial. We planned to answer the question to why pregnant patients receive ECT in our country and made an attempt to study this in a psychiatric setting in Turkey.

**Methods:** We reviewed the hospital records of all pregnant inpatients from March 2006 to January 2014 retrospectively, and compared two groups, who received ECT (n: 36) to the ones who did not had ECT and just had psychiatric medication (n:44), at Bakirkoy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery.

**Results:** Between pregnant patients whom ECT was applied and only medication was preferred; mother's age during hospitalization, mother's duration of education, number of children, the number of hospitalizations before and during pregnancy and total duration of disease ( $p>0.05$ ) did not differ. In ECT group, the mean age ( $28.9\pm 4.7$  years) and gestational age ( $14.9\pm 7.0$  weeks) was higher ( $p<0.05$ ). Substance abuse rates, resistance to treatment before and during hospitalization, catatonic table ( $p>0.05$ ) did not differ between groups. Rate of suicidal thoughts in the mother, delusions and hallucination ( $p>0.05$ ) did not differ. Distribution of the severity of depression ( $p>0.05$ ) did not differ between ECT and non-ECT group. Rejection of oral intake as well as physical restraint was significantly ( $p<0.05$ ) higher in ECT group. More ECT patients were needed to have immediate injection of psychotropics because of excitation ( $p<0.05$ ). Medication compliance was lower in ECT group. There was no difference between groups in case of accompanying obsessive symptoms ( $p>0.05$ ).

**Conclusion:** When it is the psychiatrists' option to choose ECT as a solution for the pregnant women admitted to hospital; it comes out that excitation, rejection to oral intake, incompliance to medicine as well as state of catatonia diverts the professionals to ECT. The severity of existing depressive state or even psychotic features like hallucinations and delusions do not seem to be exact reasons for them to decide for ECT.

**Keywords:** pregnancy, electroconvulsive treatment, perinatal psychiatry

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S340**

**[PP-401] Psychopharmacology****Topiramate induced myopic shift and the imaging of choroidal effusion by ultrasonographic biomicroscopy: a case report**Onat Yilmaz<sup>1</sup>, Akin Cakir<sup>2</sup>, Serkan Demir<sup>3</sup>, Yildiray Yildirim<sup>4</sup><sup>1</sup>Golcuk Military Hospital, Department of Psychiatry, Kocaeli-Turkey<sup>2</sup>Golcuk Military Hospital, Department of Ophthalmology, Kocaeli-Turkey<sup>3</sup>Gulhane Military Medical Academy, Haydarpasa Training Hospital, Department of Neurology, Istanbul-Turkey<sup>4</sup>Gulhane Military Medical Academy Haydarpasa Training Hospital, Department of Ophthalmology, Istanbul-Turkey

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As a sulfamate-substituted monosaccharide, Topiramate is mainly used in the treatment of epilepsy, prophylaxis of migraine, bipolar affective disorder, and eating disorders. Even though some side effects of topiramate has been reported in the literature, it is the first case of a patient developing high angle myopia without angle-closure glaucoma, due to use of topiramate.

A 22-year-old female patient complained of sudden onset of blurred vision for two days. Oral topiramate treatment had been commenced for migraine prophylaxis 7 days prior to her complaints. On ophthalmologic examination, her visual acuity was noted as -10.00 with myopic correction 6/10 for the right eye and -9.00 with myopic correction 6/10 for the left eye. She had no refraction abnormalities or complaints before the treatment. With the Ultrasonographic Biomicroscopy suprachoroidal effusion was observed at ora serrata and under silier body. Following the second day of the discontinuation of the drug, all symptoms and complaints resolved.

Ocular side effects of topiramate have been reported in the literature but it is the first time ultrasonographic biomicroscopy is used in order to understand the underlying mechanism. Because discontinuation of topiramate is enough in order to relieve rapidly onset of visual loss, clinicians should be aware of this side effect of topiramate.

**Keywords:** topiramate, myopic shift, choroidal effusion, biomicroscopy

**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S341**

**[PP-402] Attention deficit-hyperactivity disorder****Resting metabolic rate and body composition in children with ADHD**Ahmet Hamdi Alpaslan<sup>1</sup>, Kagan Uco<sup>2</sup>, Kerem Senol Coskun<sup>3</sup>, Abdurrahman Genc<sup>2</sup>, Halil Ibrahim Guzel<sup>3</sup>, Omer Ozbulut<sup>3</sup>, Hatice Karabacak<sup>2</sup>, Cansu Cobanoglu<sup>1</sup><sup>1</sup>Afyon Kocatepe University, Faculty of Medicine Department of Child and Adolescent Psychiatry, Afyonkarahisar-Turkey<sup>2</sup>Afyon Kocatepe University, Faculty of Medicine, Department of Physiology, Afyonkarahisar-Turkey<sup>3</sup>Afyon Kocatepe University, Faculty of Medicine, Department of Psychiatry, Afyonkarahisar-Turkey

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**Objectives:** Attention deficit hyperactivity disorder (ADHD) is among the most common neurobehavioral problems afflicting children between 6 and 17 years of age; its prevalence in the United States is believed to range from 2% to 18% in this age group. ADHD is considered to be a heritable, chronic, neurobehavioral disorder that is characterized by hyperactivity, inattention, and impulsivity. In children with ADHD appear some differences in physique, growth and development. There is not enough evidence in the scientific literature to establish clear conclusions on pulmonary functions, resting metabolic rate and body composition in children with ADHD. The aim of this study was to compare pulmonary functions, resting metabolic rate (RMR), and body composition parameters in patients with ADHD and healthy controls.

**Methods:** The study involved eighty (n=80) children between the ages of 8 and 12 (mean age 9.6 years). The ADHD group included respectively 30 boys and 10 girls, while the control group comprised 40 age and gender-matched children without any other physical or chronic mental diseases. In this cross-sectional study, RMR was measured by indirect calorimeter. Anthropomorphic measurements including BMI, neck, shoulder, chest, waist, hip and abdomen circumferences were measured for all of the participants. Parents completed Conners' Parent Rating Scale and The Pediatric Quality of Life Inventory (PedsQL) for their children; teachers completed Conners' Teacher Rating Scale and all of the participants were administered to PedsQL for themselves. Differences were considered significant if the p values were less than 0.05.

**Results:** There were no significant differences between groups for socio-demographical features (age, BMI, age and education level of parents, number of sibling;  $p>0.05$ ). ADHD group has higher scores on Conners' Rating Scales compared with Control group ( $p<0.05$ ). Additionally it was found that quality of life of ADHD group is worse than control group ( $p<0.05$ ). When the ADHD and Control groups were compared with respect to resting metabolic rate, and body composition parameters there were no significant differences abdomen circumference, waist/hip ratio and resting metabolic rate between the groups ( $p>0.05$ ).

**Conclusions:** Functional neuroimaging and electro-physiologic studies revealed biological differences between children with and without ADHD, and together with the heritable nature and the strong genetic background. To our knowledge, this is the first study in our country, which has investigated a possible association between ADHD, RMR and body composition. The comparison of ADHD (newly diagnosed) and healthy control groups included in the current study show similar RMR and body composition parameters. Furthermore, we suggest long-term studies, which are needed to test how the investigated parameters change over the span of life in subjects with ADHD.

**Keywords:** attention deficit hyperactivity disorder, body composition, resting metabolic rate

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#### [PP-403] Others

### Clinical and socio-demographic features of cases receiving treatment in inpatient service of child and adolescent psychiatry: our first findings

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**Objective:** Children and adolescents with severe mental problems to the extent not to be treated under polyclinic conditions may require to be hospitalized and evaluated in detail while under supervision, have an arranged treatment, get the side effects of drugs observed and have an opportunity to advanced examination and treatment. Turkey has a limited number of inpatient psychiatry services aimed at children and adolescents. The purpose of this article was to share the first 9-month data of our inpatient psychiatry service that has just been opened for children and adolescents.

**Method:** Files of 68 patients (42 girls, 26 boys), who were hospitalized and treated in the inpatient service of Inonu University Turgut Ozal Medical Center Child and Adolescent Psychiatry for 9 months, were examined retrospectively. SPSS for Windows 16 software was used to conduct the statistics of the study.

**Results:** The age average of cases was determined as  $15.15\pm 2.53$  (min:3.70, max:17.80). The disease group causing the most frequent hospitalization was psychotic disorders (12 schizophrenia, 4 brief psychotic disorder, 2 schizopreni form disorder) with a rate of 26.5% ( $n=18$ ) and depression disorders with a rate of 26.5% ( $n=18$ ). The average hospitalization duration of cases was  $25.02\pm 1.87$  days. The disorder causing the longest hospitalization duration was Bipolar Affective Disorder. It was determined that while 60.3% ( $n=41$ ) of patients received pharmacotherapy and psychotherapy, 36.8% ( $n=25$ ) received only pharmacotherapy as treatment. Multiple drugs were used in 64.7% ( $n=44$ ) of cases. The most frequently used drug group was antipsychotic drugs.

**Conclusion:** Turkey has not still had a sufficient number of inpatient services of child and adolescent psychiatry. Thus, we think that the increase of studies on the clinical and socio-demographic features of children and adolescents receiving treatment in these services, as well as sharing the experiences will significantly contribute to literature and clinical practices.

**Keywords:** child, adolescent, inpatient

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**[PP-404] Mood disorders****Effective treatment of early onset rapid cycling bipolar disorder with olanzapine monotherapy**Canan Tanidir<sup>1</sup>, Ozden Sukran Uneri<sup>2</sup><sup>1</sup>Bakirkoy Prof. Dr. Mazhar Osman Research and Training Hospital, Department of Child and Adolescent Psychiatry, Istanbul-Turkey<sup>2</sup>Ankara Training and Research Hospital for Pediatric Hematology and Oncology, Department of Child and Adolescent Psychiatry, Ankara-Turkey

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Although historically considered rare, childhood onset bipolar disorder is now being diagnosed much more commonly. The course of bipolar disorder in adolescents appears to be more chronic and refractory to treatment than adult onset. A pattern of illness of very rapid, brief, recurrent episodes is common. According to DSM-IV-TR 'rapid cycling' is defined as the occurrence of at least four mood episodes in 1 year. Traditional mood stabilizers like lithium and valproate or atypical antipsychotic medications are the primary treatment options. Olanzapine, risperidone, and quetiapine are the FDA approved monotherapy options for the treatment of adults with bipolar disorder and recent open-label studies documented the effectiveness and tolerability of these agents in the management of youth with bipolar disorder. Here we report a 16 years-old adolescent with rapid cycling bipolar disorder who responded well to olanzapine monotherapy both at acute manic phase and during maintenance.

He was a 16 years-old male adolescent, who was referred to our inpatient clinic with the symptoms of decrease in sleep, physically restlessness, irritability, increase in self-esteem, going away from home, spending the night at nightclubs and using illicit drugs. These symptoms were present for ten days and familiar for the parents. Parents told that for the last four years their son was depressed and withdrawn for 13-15 days and after then he quickly changed to a different personality and became restless, spending night out with friends and using some drugs, going far away from home and lost and every time found by the help of police. And after 12-13 days his energy level decreased and again he quickly turned to depressive-withdrawn phase. He was using effective dose of valproate and aripiprazole for the last three years but there was no decrease in the frequency or severity of his mood episodes. Olanzapine 5 mg/day was started and increased to 15 mg/day in our inpatient unit. Approximately in three weeks there was a marked decrease in his manic symptoms. He was discharged from the inpatient unit on olanzapine 15 mg/day treatment. The parents were told to make a life chart for mood changes to characterize the course of illness and patterns of episodes. During the follow-up for four months he was stable, he had no major mood episodes except two times of hypomania symptoms lasting two days, and once mild depressive symptoms lasting two days not filling the full criteria for hypomania or depression.

Open-label trials and retrospective chart reviews support the effectiveness of olanzapine, risperidone, quetiapine and aripiprazole for pediatric bipolar disorder. However, the clinicians should be careful about the adverse effects of these agents such as significant weight gain and other metabolic problems. The development of bipolar disorder during childhood or adolescence disrupts ongoing developmental processes, including academic, social, and family functioning. Therefore, a comprehensive, multimodal treatment approach that combines psychopharmacology with adjunctive psychosocial therapies is almost always indicated for early onset bipolar disorder.

**Keywords:** bipolar disorder, olanzapine, adolescent**Bulletin of Clinical Psychopharmacology 2014;24(Suppl. 1):S343**

**[PP-405] Mood disorders****Defining remission in depression: comparison of depression rating scales with remission from depression questionnaire**Erkut Zamki<sup>1</sup>, Akfer Karaoglan Kahilogullari<sup>2</sup>, Aysegul Kart<sup>3</sup>, Sibel Orsel<sup>1</sup><sup>1</sup>Ankara Diskapi Yildirim Beyazit Research and Training Hospital, Ankara-Turkey<sup>2</sup>World Health Organization Turkey Office, Ankara-Turkey<sup>3</sup>Nigde State Hospital, Nigde-Turkey

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**Objective:** The main aim of treating patients with major depressive disorder (MDD) is to achieve remission. Symptom-based definition of remission may not adequately meet depressed patients' treatment expectations. "Remission from Depression Questionnaire" (RDQ) evaluates not only symptoms of depression but also other psychiatric symptoms of patients beside positive mental health, functionality, perception of well-being, coping and life satisfaction. The aim of this study is to compare remission definition and assessment criteria in depression using RDQ and other common clinical assessment tools as well as assessing the reliability and validity of RDQ-Turkish version.

**Method:** Demographic and clinical data of 106 patients meeting diagnostic criteria of MDD were collected prospectively. "RDQ", "Hamilton Depression Rating Scale" (HDRS), "Beck Depression Inventory" (BDI), "Beck Anxiety Inventory" (BAI) and World Health Organization Quality of Life Questionnaire Brief Form (WHOQoL BREF) were administered.

**Results:** Chronbach's  $\alpha$  and the test-retest reliability of the Turkish version of the RDQ were 0.945 and 0.908, respectively. The Turkish version of the overall RDQ scores and subscales were significantly correlated with HDRS, BDI, BAI and WHOQoL-BREF. The total RDQ scores and RDQ subscales scores of patients in remission (HDRS $\leq$ 7) were significantly lower than the patients who were not in remission (HDRS $>$ 7). When a cutoff value 43 for RDQ was used in comparison to the cutoff value 7 of HDRS, sensitivity was found as 86.7% and specificity was found as 73.5%.

**Conclusion:** Our findings showed the reliability and validity of the Turkish version of RDQ, which may be an alternative tool in assessing remission in MDD.

**Keywords:** major depressive disorder, remission from depression questionnaire, reliability, validity

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**[PP-406] Psychosomatic medicine-liaison psychiatry****A case report: organic affective disorder caused by Cushing's Syndrome**Esra Aydin Sunbul<sup>1</sup>, Fatma Fariha Cengiz<sup>2</sup>, Selcen Dogru Kosker<sup>1</sup>, Yusuf Ozay Ozdemir<sup>1</sup><sup>1</sup>Erenkoy Mental Health and Neurology Training & Research Hospital, Istanbul-Turkey<sup>2</sup>Artvin State Hospital, Artvin-Turkey

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Cushing syndrome (CS) is the condition of cortisol dysregulation, and cortisol dysregulation is the prototypic finding in affective disorders. In CS, chronic, stress-level concentrations of cortisol lead to melancholic or psychotic or mixed bipolar features, vegetative symptoms, abnormal sleep profiles and cognitive dysfunction, especially in memory. In addition, there is evidence of reduced regional brain volumes in the hippocampus, as well as decreased glucose utilization during active hypercortisolism.

N.T. 35-year old woman, was admitted to the hospital with thoughts of guilt and failure, forgetfulness, inability to house and care for their child, unhappiness, loss of appetite. Cushing's symptoms had begun five years ago and after detection of an adenoma, she has been operated 4 years ago. She could not adequately deal with her children, forgetfulness, hearing voices, seeing images, feeling to tap one her body has begun. She has been hospitalized in a foreign center and diagnosed with depression, atypical psychosis and severe depression with psychotic symptoms. After two months of remission, complaints started again. She tried to suicide 3 times. Her husband abandoned 3 years ago then thoughts of failure developed. Due to the improper conducts like beggary by throwing herself in front of car and suicidal thoughts, she was admitted to our hospital and treated sertraline 50 mg/day. Alexander IQ test was 87. She could not adapt to the Rorschach, was identified paranoid features in MMPI. In neurocognitive battery, site and time orientation was poor, executive functions and reasoning skills-interpret was good, arithmetic skills was inadequate, components of attention, logical memory, verbal and

visual memory was weak. She was treated with 9 sessions of ECT. Because the disappearance of suicidal idea and the mood was euthymic, she was discharged with a diagnosis of Mood Disorder Due to the General Medical Condition. Because she did not use her drugs regularly, she admitted to the polyclinic with depressive symptoms.

In endocrine disorders, psychiatric symptoms are seen often. In the differential diagnosis of psychiatric disorders that should be considered. Because of more responsive and comprehensive imaging and blood tests, mental disorders caused by organic feature can be diagnosed earlier and more accurate. On the other hand, it is also important for the treated patients in section of endocrinology to be evaluated in psychiatric aspect.

**Keywords:** affective disorder, cushing syndrome

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#### [PP-407] Anxiety disorders

### Trauma and trauma-related symptomatology in patients with respiratory subtype of panic disorder

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**Objective:** Panic disorder (PD) is severe anxiety disorder characterized by sudden attacks of immediate physical discomfort and losing control or fear of dying. Due to differences in drug response, and in order to show the dispersion of somatic symptom, the subtyping studies were performed. Respiratory subtypes is one of the deemed worthy to investigate.

PD has been linked to respiratory abnormalities such as chronic hyperventilation associated with hypocapnia related to hypersensitive respiratory control system. Disordered breathing plays very important role in the pathophysiology of PD. The studies indicated that PD patients have greater respiratory disorders than controls. Evidence of higher variability and irregularity in respiratory patterns of PD patients was found but it could not explain the reason of respiratory abnormalities in PD. It is frequently and mutually reported that trauma and dissociative symptomatology were associated with PD. Trauma and its modification, which has been associated with PD and dissociative symptoms due to emotional processing of the information related to the trauma. Such a strategy existence of dissociation suggests to avoid trauma related aversive emotions/memories. The aim of this study was to investigate the presence of trauma history and clinical features of the respiratory subtype of panic disorder (PD) versus the non-respiratory subtype.

**Method:** The participants diagnosed as panic disorder according to DSM-IV diagnostic criteria, who applied to Polyclinic of Psychiatry of Erenkoy Mental and Neurological Disease Training and Research Hospital, were divided into two subtypes according to the respiratory dimension. The Patient Health Questionnaire Somatization/ Anxiety/ Depression (PHQ-SADS), the Traumatic Experiences Checklist (TEC), and the Dissociative Experience Scale (DES) were used.

**Results:** Somatization, anxiety, depression, and dissociation in the respiratory subtype had not a significantly higher than those in the non-respiratory subtype. Traumatic experiences were shown to be different in patients with PD, although this difference was not statistically significant.

**Conclusion:** Childhood maltreatment and subsequent psychiatric manifestations in panic disorder with or without respiratory were not seen that the differentiation. To demonstrate these differences studies should be conducted with a large sample and different clinical populations. In addition, there is a need for research on genetic influences on PD.

**Keywords:** Panic disorder, respiratory subtype, maltreatment, dissociation

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**[PP-408] Forensic psychiatry****Psychiatric disorders in sexually abused children and adolescents**Ahmet Hamdi Alpaslan<sup>1</sup>, Kerem Senol Coskun<sup>2</sup>, Halil Ibrahim Guzel<sup>2</sup>, Ugur Kocak<sup>3</sup>, Omer Ozbulut<sup>2</sup>, Cansu Cobanoglu<sup>1</sup><sup>1</sup>Afyon Kocatepe University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Afyonkarahisar-Turkey<sup>2</sup>Afyon Kocatepe University, Faculty of Medicine, Department of Psychiatry, Afyonkarahisar-Turkey<sup>3</sup>Afyon Kocatepe University, Faculty of Medicine, Department of Forensic Medicine, Afyonkarahisar-Turkey

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**Objectives:** Child sexual abuse (CSA) is defined "as the involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared, or else that violates the laws or social taboos of society. Children can be sexually abused by both adults and other children who are by virtue of their age or stage of development in a position of responsibility, trust or power over the victim". The prevalence of CSA is alarmingly high. Statistical data in USA indicate that 10–34% of all girls and 3–18% of all boys are subjected to sexual abuse before the age of 18. In a study carried out in Turkey on female high school students, it was reported that 13.4% of girls are exposed to sexual abuse. CSA has received considerable attention since the late 1970's from medical, mental health, legislative, judicial, and law enforcement professionals, as well as the media and lay public, making it the most researched form of child maltreatment. This is due to clinical and research findings that indicate considerable short and long-term consequences of CSA on mental and physical health. The aim of this study is to investigate the sexually abused cases, which are directed to our polyclinic by the judicial authorities in order to regulate the reports.

**Methods:** We investigated for this study, 58 cases between ages of 8–17, who were exposed to sexual abuse and, for the preparation of a forensic medicine report. The investigators retrospectively examined case files, social services investigation reports and forensic reports. Sociodemographic characteristics of the cases, the diagnosis of psychiatric disorder were evaluated by keeping a separate record for each case.

**Results:** Overall 58 cases between the ages of 8–17 (14.59±1.93), 54 of whom are girls (93.1%) and four of whom are boys (6.9%) were included in the study. Psychiatric diagnoses which were determined in cases that were sexually abused are post-traumatic stress disorder (10.3%), acute stress disorder (19.0%) and depressive disorders (25.9%). 55.2% (n=32) of victims displayed at least one Axis I psychopathology. In 10.3% (n=6) of the cases comorbid psychiatric disorder was present. The level of intelligence was rated as normal in 82.8% of the cases and mental retardation in 17.8% of the cases was recorded.

**Conclusions:** In various studies, it was observed that depressive and anxiety disorders were the most frequent psychiatric disorders in child and adolescents exposed to sexual abuse. In the present study, consistent with the literature, psychiatric disorders were found in 55.2% of victims, with depressive and anxiety disorders being the most frequent diagnoses. Our results emphasize need of comprehensive screening, assessment and treatment of mental disorders for those children and adolescents who were exposed to sexual abuse. It is important to educate all child and adolescents about sexual abuse and to make special centers for them to report the abuse.

**Keywords:** child, sexual abuse, forensic

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**[PP-409] Psychopharmacology****Parkinsonism with lithium and valproic acid treatment**

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Medication-induced Parkinsonism occurs frequently in patients using antipsychotic medication, but is a rare complication in patients receiving long-term treatment with mood stabilizers. A patient with the diagnosis of bipolar disorder admitted to neurology clinic due to severe Parkinsonism symptoms of rigidity, tremor and altered gait. Parkinson's disease was the diagnosis and various anti parkinsonian medications were started. He was also consulted to psychiatry due to comorbid diagnosis of bipolar disorder. He had been treated with lithium for nine months. The Parkinsonism symptoms had been aggravated after valproic acid addition. He was hospitalized during the clinical course, anti parkinsonian drugs, lithium and valproic acid were tapered down slowly and ceased. Almost all Parkinsonism symptoms were recovered in a few weeks. As a conclusion, drug induced Parkinsonism with mood stabilizers should be considered before

the diagnosis of Parkinson's disease.

**Keywords:** lithium, valproic acid, parkinsonism

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**[PP-410] Attention deficit-hyperactivity disorder**

## Atomoxetine induced suicidal ideation: case report

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Atomoxetine (ATX), a specific noradrenaline reuptake inhibitor (SNRI), is one of the first line for treatment options for Attention deficit hyperactivity disorder (ADHD). It is proposed as a safe alternative for ADHD patients with co-morbid Anxiety or Tic Disorders. The most commonly reported side effects are decreased appetite, dizziness, fatigue, nausea and vomiting, which can be easily managed. Rarely, ATX can cause serious side effects, including hepatotoxicity and suicidal thoughts/actions. In this paper, our aim is to present a case with ADHD and comorbid Post Traumatic Stress Disorder (PTSD) who developed suicidal ideation during ATX treatment.

Typically grown 16-year-old teenage girl, was consulted to our department from another mental healthcare center. She had been suffering from inattention, self-organization and time management problems. In addition, she had experienced sexual abuse by her cousin, when she was 15 years old. She had flashbacks, avoidance behaviors, insomnia, nightmares and mood lability since then, but never had a plan or intent of suicide. ATX 18 mg/day was started and titrated to 36 mg/day a week later. At the 8th day of the treatment, her mother realized that she developed suicidal thoughts, saying "I want to die", "I will cut myself" for the first time, and ATX treatment was stopped by her mother at day 10. No suicide attempt occurred, and suicidal ideations vanished just after her mother has discontinued the drug. After a while, she applied to our clinic and she was diagnosed as having ADHD-inattention subtype and PTSD. DSM-IV Criteria, K-SADS, Conners Rating Scale for Parents, Stroop Test TBAG Form tools were used to diagnose. Total blood count, hepatic and thyroid functions, anti streptolysin-O, electrocardiograms were found to be normal. Aripiprazole 2.5 mg was begun and titrated to 5 mg in a week. At the end of first month, she began to feel, and sleep well; her mood was slightly regulated. On the other hand, ADHD symptoms and related impairments persisted. After 3 months of Aripiprazole treatment, OROS Methylphenidate 54 mg/day was added on the treatment. Her inattention problem and school performance improved hastily. Significant improvement for performance on the Stroop World-Color Test was observed. She never had suicidal ideation after our combination treatment since 5 months.

ATX is announced to be safe in general; rare but a very serious adverse effect of the medication is suicidality. FDA has issued a black box warning for suicidal behavior/ideation of ATX in children in 2005. Adolescents diagnosed with ADHD and/or PTSD tend to commit suicide more frequently compared to healthy population, however in our case the absence of suicide attempts or thoughts prior to ATX treatment supports the idea that this treatment might induce it. Family history should be questioned specifically for suicide or any affective disorders including bipolar or depression. ATX can be useful in treating ADHD and comorbid anxiety symptoms, but clinicians should be careful about suicidal ideations or unusual behaviors at the beginning of treatment. It is also important that parents should be informed about these.

**Keywords:** atomoxetine, suicidal ideation, attention deficit hyperactivity disorder

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**[PP-411] Attention deficit-hyperactivity disorder**

## Impairments in social skills in Attention deficit hyperactivity disorder-a case report

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In Attention deficit hyperactivity disorder (ADHD), the symptoms of attention deficit, hyperactivity and impulsivity occur and it is thought that this disorder influences the school age children at a rate of 3-5% throughout the world. ADHD leads to loss of functioning in cognitive,

academic, family and professional areas. Another area impaired in ADHD is social functioning. Impairment in social functionality mostly emerges in the form of refusal by peers and having conflicts with other children and adults. In addition, impairment in social functioning is important for short and long-term unfavorable prognosis of ADHD. 5 year old boy were referred to a child and adolescent psychiatry clinic in 2009 with the symptoms of hyperactivity, temper tantrums, acting as the opposite sex, and impairments in social skills. He was assessed by a semi-structured interview based on DSM-IV criteria, and diagnosed as ADHD-combined subtype. The impairments in social functioning and the treatment modalities between 2009 and 2014 will be discussed in this section.

The implementation of interventional programs in the involved areas such as early social skill training for preventing impairment in social functioning may help to alleviate the effect of disorder in adulthood. The efficiency of family training, judicious drug treatment and intervention programs should be increased. In interventions, comorbid disorders as well as ADHD should be taken into account and if necessary, supplementary treatment directed to these disorders should be added to the program.

**Keywords:** attention deficit hyperactivity disorder, child, social problems

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### [PP-412] *Psychopharmacology*

## Differential diagnosis of neuroleptic malignant syndrome: a case report

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Neuroleptic malignant syndrome (NMS) is a potentially fatal adverse reaction to neuroleptic or antipsychotic drugs. As differential diagnosis of NMS from some certain organic and other psychiatric disorders (like delirium) is usually not easy, sometimes NMS and sometimes other etiologic organic disorders may not be noticed. Therefore, diagnostic findings must be analyzed regarding all possible disorders. In this case report we aimed to emphasize the importance of differential diagnose through a case; an adolescent with mental retardation using antipsychotic treatment for behavioral problems and hospitalized with a pre-diagnosis of NMS. The case is 15 years old male with severe mental retardation. For the last 10 months insomnia, irritability and self-destructive behavior has showed up and a startup dose of 1 mg/day risperidone treatment was given. However, because of exacerbation of irritability and self-destructive behaviors other antipsychotic options are given consecutively (quetiapine up to 600 mg/day, olanzapine up to 10 mg/day). Even though with high doses of antipsychotics, self-destructive behaviors could not be contained and reached to life threatening level. While he was taking 10 mg/day olanzapine, he was referred to child psychiatry clinic due to oculogyric crisis, clouding of consciousness, lack of food and fluid intake and hyperthermia. He was hospitalized in the intensive care unit of department of pediatrics with a pre-diagnosis of NMS. Physical examination results; the patient's conscious level was confusing, fever (38.4°C), hypotension (90/60 mmHg), tachycardia (144 beats per minute), and tachypnea were present but there was no muscular rigidity and no extrapyramidal symptoms except oculogyric crisis. Laboratory data showed elevated white blood cell count (16/ mm<sup>3</sup>), elevated creatinine phosphokinase (3431 U/l), detectable liver function test results (aspartate aminotransferase, 106 IU/L; alanine aminotransferase, 191 IU/L). Myoglobinuria, blood urea nitrogen and creatinine levels were normal. Chest X-ray, EEG and brain computed tomography revealed no abnormalities.

Antipsychotic treatment had been stopped and the patient was monitored. Midazolam treatment was given for agitation and biperiden treatment (4 mg/day) was given for oculogyric crisis. As the etiologic factor of the reason the effect of high dose antipsychotic treatment was still unclear, additional investigation had been made and pericardial effusion was found. Empiric antibiotherapy had been started. After two weeks, CK and liver function test results regressed to normal levels, and impairment of consciousness and pericardial effusion got better. Beside these improvements, interestingly his agitation decreased and self-destructive behaviors disappeared. NMS may show up in any period of the antipsychotic treatment. But mostly shows tendency to be seen during early periods of the treatment. In this case the patient was taking antipsychotic treatment for years. Beside there was no muscle rigidity, which is one of the criteria of the tetrad of NMS. Nevertheless, pericardial effusion was explaining the hyperthermia, elevation of CK levels, and self-destructive behavior and the agitation of the patient with severe mental retardation due to pain. In conclusion, before making diagnosis of NMS an attentive and elaborated differential diagnosis considering all medical conditions without being limited with only neuropsychiatric disorders is suggested.

**Keywords:** neuroleptic malignant syndrome, mental retardation, differential diagnosis

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**[PP-413] Addictions****Retrospective evaluation of sociodemographic and clinical features of the patients who were referred to an addiction center by probation system**

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**Objective:** Probation system is an alternative punishment method that involves all kinds of services, programs and resources needed to control and rehabilitate a sentenced person without isolation from the community. In this study, it is aimed to evaluate sociodemographic and clinic features of the substance abuse patients that were referred by probation system.

**Method:** Records of the patients, who were referred to Erenkoy Mental Health and Neurology Training and Research Hospital probation system polyclinics in between 2013 January and 2014 January are evaluated in this study. Each patient's first referral is taken into consideration. Data marked as "unknown" are excluded from the study.

**Results:** In the pre-assessment of the data, it was found that there was 4006 patients referred to our probation system polyclinics in one year. 3948 of these patients were male (98.5%), 58 patients were female (1.4%). Median age was 27 and the range was between 14-80. 67% of these patients were single (n=1736), 29% married (n=766) and 4% divorced (n=96). 1881 patients (75%) had a regular or irregular job, 620 patients (25%) have been jobless. 63% of the patients (n=1449) have had social insurance. 41% of the patients' (n=1660) choice was marihuana (n=1660; 41%), a percentage of 33% (n=1301) have been using other substances including synthetic cannabinoids (n=1301, 33%) and 2% of the patients (n=65) have been using heroin. The rate of person who said to be substance free at the time of referral was 24% (n=980). 1325 patients were daily smokers (91%) and mean age of starting smoking was found to be 15 (range=9-25). 1222 of the patients (92%) have had no family history of substance abuse. The rate of patients who have had substance abuse history in their first degree relatives were 6%(n=79) and second degree relatives were 2% (n=21). 89% of the patients (n=1193) have had a prior treatment attempt; 7% (n=89) have tried outpatient treatment programs; 4% (n=53) have had an inpatient treatment history. With regard to the clinical and laboratory assessments, it is concluded that 1631 referrer (60%) does not need any treatment. 1085 patients (40%) were taken to the addiction program which have six sessions. At the end of the addiction program 296 patients (53%) discontinued the treatment program, 244 patients (44%) completed the program successfully, 17 patients (3%) was admitted to the hospital.

**Conclusion:** We could not find any study in this subject done in Istanbul, which has the biggest population of the probation system associated patients. Erenkoy Mental Health and Neurology Training and Research Hospital is the second biggest center in Istanbul that practice in this field; and evaluation of the sociodemographic and clinic characteristics of these patients should contribute to the available data.

**Keywords:** probation, addiction, substance

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**[PP-414] Others****Lucid Dreaming in Psychiatric Outpatient Clinics: Preliminary Results**

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**Objective:** Lucid dreaming is defined as a rare but robust awareness while dreaming and awareness of not real awake in that dreaming state. Although it is widely accepted as a REM sleep phenomenon, it may also exist during NREM sleep. Lucid dreaming might be a hybrid state between non-lucid dreaming and wakefulness that is proposed as an intermediate stage between psychotic like non-lucid dreaming and non-psychotic wakefulness. The prevalence of lucid dreaming in healthy population has been informed between 26-51% in several countries (Rolim et al., 2013). However, there is no lucid dreaming study in psychiatry outpatient clinics. Thus, we aimed to investigate the

lucid dreaming features with a questionnaire based design in outpatients who applied to psychiatry clinics.

**Methods:** There are 74 patients (male: 23, female 51) whose average age was  $32.48 \pm 8.69$  years. Twenty one (28.4%) out patients had some lucid dreaming features while the rest were non-lucid dreaming (n=53, 71.6%) according to lucid dreaming questionnaire.

**Results:** The diagnoses in patients were as followings: depression (n=18, 24.7%), any anxiety disorder (n=35, 47.9%) and others (n=20, 27.4%). In this study, for the first time, we investigated the phenomenology of lucid dreaming in psychiatric outpatients.

**Conclusion:** Namely, patients have some features as insight, thought control and dissociation in lucid dreaming which may help our understandings of nightmares, dissociation, impaired insight in patients who are psychiatrically ill.

**Keywords:** lucid dreaming, psychiatry, sleep

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### [PP-415] *Psychopharmacology*

## Supplementation of vitamin E and N-acetylcysteine with quetiapine in tardive dyskinesia: a case report

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Antipsychotics are widely used to treat several psychiatric disorders in child and adolescent populations with schizophrenia, bipolar disorders, pervasive developmental disorders and conduct disorders. The most common side effects associated with atypical antipsychotics are weight gain, diabetes and movement disorders. Antipsychotic induced movement disorders, especially tardive dyskinesia (TD), may be related to patient characteristics such as age, gender, prior exposure to medications, neuroanatomical and genetic variations. The theories about TD pathogenesis are D2 receptor up regulation with postsynaptic dopamine receptor super sensitivity, GABAergic hypo function and maladaptive synaptic plasticity hypothesis.

In this paper, we present an adolescent patient with tardive dyskinesia who responds to supplementation vitamin E and N-acetylcysteine and quetiapine.

A 15-year-old boy with schizophrenia was referred to our outpatient clinic for aggression, social isolation, persecution delusions, talking himself, involuntary movements including grimacing, smacking, pursing, sticking out the tongue, eye blinking and rapid movements of the arms. According to his parents, psychotic symptoms had started four years ago, but involuntary movements had occurred two months before his access to our clinic. Four years ago, "Risperidone 2 mg" and "Biperidene 1 mg" were started; one year ago "citalopram 20 mg" was added to Risperidone by another outpatient clinic.

According to DSM-IV criteria, his movement disorder was diagnosed as tardive dyskinesia. This adverse effect was thought to be due to treatment with antipsychotic medications, including Risperidone and haloperidol, since the age of eleven. Initially, Risperidone and Citalopram were stopped and Quetiapine 50 mg/day was started and titrated up to 500 mg/day in two weeks. After two weeks, vitamin E 300 IU/ day and N-acetylcysteine 1200 mg/day were added to quetiapine due to persistence of tardive dyskinesia symptoms. After one month, his involuntary movements gradually decreased, and within 2 months, his tardive dyskinesia was fully improved.

The movement disorders associated with antipsychotics are disabling and distressing issues for parents as well. It is recommended that all patients should be examined for movement disorders before the initiation of antipsychotic drug treatment under regular monitorization. In this case, quetiapine with vitamin E and N-acetylcysteine supplementation appears to be effective in reducing symptoms of TD although the mechanism stays unclear. Chronic neuroleptic exposure increases dopamine turnover in the brain with production of cytotoxic-free radicals. In accordance with this, antioxidant efficacy of vitamin E and N-acetylcysteine may be responsible for improving tardive symptoms besides of Risperidone and citalopram discontinuation. However, it must be considered that most drug-induced movement disorders in childhood are known to be reversible. Consequently, children and adolescents with chronic psychiatric conditions who have been treated with neuroleptic both typical and atypical should be followed up regularly for early intervention and prevention of adverse effects of these drugs.

**Keywords:** N-acetylcysteine, quetiapine, tardive dyskinesia, vitamin E

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**[PP-416] States associated with stress****Gender dysphoria and autoscopic hallucinations: a case report**

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Autoscopic phenomena refer to a cluster of reduplicative visual illusions concerning one's own body and self. In autoscopic hallucination or autoscopia, patients perceive a replica of themselves within space from an internal point of view as in a mirror. Here, we report the case of a female patient with gender dysphoria; experiencing frequent autoscopic hallucinations, which she describes as her own dead body violently mutilated in several ways. The case has been found noteworthy in terms of the probable relationship between the presentation of autoscopic hallucinations and unrevealed gender dysphoria.

A 18-year-old female patient was admitted to our clinic by the chief complaints of seeing the image of her own dead body in external space and a chronic sense of meaninglessness. This image had first appeared three months ago, at a time when she began to live separately from her family and she broke up with her significant other. She stated that this image looked like a copy of herself in the current state; a pale dead body in the same clothes but covered with blood, with wrists cut, sitting still in a corner of the room. This image had not disappeared for about twenty minutes and was still there even she looked elsewhere and turned back her gaze upon it. Within time, she had begun to see this frightening image of her own dead body in different forms (hanged on a tree, stabbed, etc.) and public situations (dining with friends, travelling on a bus etc.). She reported once that, when the image appeared; she decided to touch it in order to check its reality, and became extremely frightened as she felt its coldness on the tips of her fingers. Suddenly, she convinced by the idea that seeing this image required her death; yet she attempted suicide by taking medication. After discharge from emergency room, the patient was admitted to psychiatry outpatient unit and was medicated with risperidone and clonazepam combination. The patient's visual hallucinations disappeared within days. Following hospitalization, detailed physical examination and laboratory tests including EEG, cranial CT and psychoactive drug screening were performed to rule out epilepsy and other medical conditions. As the clinical interviews advanced, it has been understood that the patient suffered from an unrevealed gender identity disorder, so that she felt herself belonging to the opposite sex since childhood; she had been embarrassed about physical changes on her body during adolescence and had tried to obtain a masculine appearance by masking her secondary sex characteristics in several ways. She stated that she felt simply stuck in the wrong body and avoided looking in the mirror, when naked because of her disgust against it.

We hypothesized that gender dysphoria which remained hidden due to patient's socio-cultural limitations may have triggered episodes of depression; based on feelings of helplessness. Moreover, feelings of anger and aversion towards her own body causing avoidance of mirrors may have prepared the ground for these autoscopic hallucinations as well.

**Keywords:** autoscopic hallucinations, gender dysphoria

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**[PP-417] Psychopharmacology****A rare side effect of escitalopram: bilateral peripheral edema**Bengu Altunay Tuman<sup>1</sup>, Taha Can Tuman<sup>2</sup>, Nefise Kayka<sup>2</sup>, Ugur Cakir<sup>2</sup>, Osman Yildirim<sup>2</sup>

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In elderly patients, bilateral peripheral edema is an important health problem. When a patient presents with bilateral peripheral edema; first, clinicians should consider systemic diseases such as cardiac, endocrine, renal and metabolic problems. Routine blood tests and urinalysis should be studied. Patient's medication history should be evaluated. Here we report a case of bilateral peripheral edema due to use of escitalopram. A 71-year-old woman was presented with a three months history of lack of energy, loss of interest, hypersomnia, malaise and anxiety. We diagnosed major depression to the patient according to the DSM-IV criteria and we started escitalopram 10 mg/day as an antidepressant medication. She was admitted to dermatology policlinics with bilateral lower extremity edema of 7 days duration after escitalopram started. On dermatological examination, there was swelling knee high in both legs. Cellulite was not considered. There

was no change of skin redness, ulceration and color. Results of renal function tests, thyroid function tests and liver function tests were within the normal limits. Blood electrolyte levels were normal. Echocardiogram and ECG findings were normal. There was no reason that could be found for edema. Escitalopram was reduced and stopped. After discontinuation of escitalopram, edema decreased. After 12 days, patient's legs were back to normal. In literature, there were two patients developing edema with escitalopram monotherapy. One of them was associating with escitalopram monotherapy (30 mg/day) with bilateral ankle edema in a 69-year-old depressed woman and the other was a 71-year-old woman presented with bilateral pedal edema associating with escitalopram 10 mg/day. In our patient edema developed progressively (after a week) and knee high and a lower dose as a 71-year-old woman patient. In psychiatric patients, edema was reported with antidepressant drugs such as mirtazapine and trazodone and antipsychotic drugs such as risperidone, olanzapine and quetiapine. Peripheral edema, a rare side effect due to escitalopram is reversible and may be the strong serotonergic effect of this drug. The normal results of laboratory tests excluded renal impairment and sodium overload. The possible etiology of edema due to escitalopram is increase in vascular permeability. Clinicians should be careful when investigating the etiology of edema; especially if patients are using SSRIs.

**Keywords:** elderly patients, edema, escitalopram

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### [PP-418] *Schizophrenia and other psychotic disorders*

## Sexual energy radiating face: an unusual delusional disorder case

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Delusional Disorder is a rare syndrome mainly characterized by the presence of non-bizarre delusions (prevalence 0.03%). The somatic subtype, in which delusions are based on the presence of a physical disease, is also known as monosymptomatic hypochondriacal psychosis. These cases reported have been found interesting because of unusual nature of their somatic delusion and significant improvement provided by treatment; and is discussed in terms of similarity with Olfactory Reference Syndrome (ORS) and differential diagnosis.

Mrs. T. was 37-year-old, divorced, housewife with two children. Patient claimed that she felt embarrassed due to the involuntary sexual impression radiated from her face, especially her cheek. Since she was not able to look directly at someone without shame, she started wearing hijab to conceal her face and alienated herself from her social environment.

While she was facing financial problems, her problems emerged immediately after she had exploding cucumber (*Ecballium elaterium*) for the treatment of her sinusitis. She suggested that aspirating this material from her nose resulted in poisoning her brain. Subsequently, her nerves have been out of control, she claimed, and this material could still emit from her sweat. She mentioned the sexual impression emitted from her face had led people to condemn her. Her sister, unlike her, could not detect the alteration in her face when the sexual impression was in motion. She told that her relatives were fed up with her problems.

She claimed this situation has lasted all day long and less problematic while she was alone. However, she could hardly sleep and she covered her face in order not to seduce someone in her sleep. Although she was treated with a number of antipsychotic and antidepressant drugs earlier, she was not on medication nor having remission phases.

Being diagnosed with delusional disorder (somatic type), she was medicated with aripiprazole 15 mg/day and venlafaxine 37.5 mg/day. Doses of the drugs were incrementally increased to 30 mg/day for the former and 150 mg/day for the latter. Within two months, there has been significant decrease in her avoidance related to delusions and embarrassment whereas insight about her situation was not developed. BPRS scores were 25, 13 and 6.

ORS, which is characterized by delusions of emitting unpleasant odors may also cause feelings of intense shame and therefore lead to avoidance from social interaction similar to this case; but the delusional content described by this patient is far of being the same. Delusional disorder of somatic subtype is to be distinguished by the clinician from other psychiatric conditions such as body dysmorphic disorder, hypochondriasis, overvalued ideas and obsessions. In treatment, pimozide and some other antipsychotics appear to show strongest evidence of good results and SSRIs seem effective for accompanying depressive symptoms. In our case, a significant clinical improvement has been provided within a few months by the combination of venlafaxine and aripiprazole.

**Keywords:** ecballium elaterium, olfactory reference syndrome, delusional disorder

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**[PP-419] Autism****Autism spectrum disorder and comorbid bipolar disorder: a case report**

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High rates of aggressive behaviors and severe mood disturbances are documented in children with autism spectrum disorders (ASD) and limited literature documented the presence of bipolar disorder (BPD) comorbidity in ASD populations. Besides, there is a high incidence of BPD in family members of children with ASD. Munesue et al. speculated that the major comorbid mood disorder in individuals with high functioning ASD is BPD and referred that both disorders may share certain common vulnerability genes. Here we report an adolescent case with autism, which later diagnosed as having bipolar disorder in our clinic and discuss the clinical characteristics and bipolar symptomatology in this population.

A 14-year-old boy was brought to our clinic by his parents with complaints of expansiveness, laughing excessively, singing constantly and insomnia. His symptoms had started two weeks before their referral. His parents' first admission to a psychiatrist was at the age of nine with complaints of aggressiveness, self-injury, lack of eye contact, delay in language development and repetitive behaviors and he was diagnosed with autism. Although there was a considerable time lag between his parents' recognition of the symptoms and their first referral; his autistic features were remarkable. The eye contact was poor, his spoken language was restricted and he had echolalia. He did not show interest in social interaction and had stereotypic hand movements. His medical history revealed epilepsy and he was using 1000 mg/day sodium valproate. His family history was insignificant except having a brother with epilepsy. About three months ago, he was seen by another psychiatrist for symptoms including irritability, being withdrawn and crying spells. He was diagnosed with depression and 2 mg/day risperidone and 20 mg/day fluoxetine were prescribed. Eight weeks later, above-mentioned symptoms started. His mood was elevated and irritable, his psychomotor activity was increased and he had insomnia. A manic shift was suspected. Fluoxetine treatment was ceased and risperidone was increased up to 3 mg. In the mean time, he was receiving 1500 mg/day sodium valproate for his seizures. The manic symptoms were successfully treated with 3 mg/day risperidone and 1500 mg/day sodium valproate combination in a few weeks but he had another manic episode two months later. A diagnosis of bipolar disorder was made and he had four mood episodes within the following 12 months period. The patient is still being monitored for ASD and comorbid rapid cycling bipolar disorder. The actual incidence of BPD in youth with ASD is probably underestimated. BPD should be borne in mind if a child with ASD refers with episodic irritability and aggressive attacks and have a family history of BPD.

**Keywords:** autism, bipolar disorder, children, adolescents

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**[PP-420] Autism****Effective use of clozapine for the treatment of disruptive behaviors in an adolescent with autism**

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Autism spectrum disorder (ASD) is a serious childhood-onset disorder with a significant impairment in social and language development. Behavioral symptoms including aggression and self-injury are common among this population. The only second-generation antipsychotic drugs, which are proved to be effective in the treatment of disruptive behaviors in children and adolescents with ASD are risperidone and aripiprazole. Clozapine had little attention although its high anti-aggressive effect in autism has been showed by open-label reports. Here we present a case with ASD and severe disruptive behaviors and successful treatment of disruptive behaviors with clozapine. X was a 10 years old boy when he was first admitted to our outpatient clinic with complaints of aggressive outbursts destroying household objects and harming his mother. He was diagnosed with autism at the age of three. At the time of the referral he had few meaningful words, he was screaming constantly and doing some stereotypic movements. He was not responding his name or initiating any social contact. He also had obsessive-compulsive symptoms. For the last three years, he has received mirtazapine, fluoxetine, sodium valproate, quetiapine, olanzapine, aripiprazole,

risperidone, haloperidol, chlorpromazine, clonazepam, either alone or in combination, for his aggressive behaviors with no significant effect. He was hospitalized for severe disruptive behaviors and after getting his legal guardian's consent he was started on clozapine and the dose was gradually increased to 300 mg daily and 500 mg/day sodium valproate was added for potential seizures. His aggressiveness and disruptive behaviors markedly improved within two weeks after the target dose for clozapine (300 mg/day) was reached. His global improvement rating on Clinical Global Impression–Improvement Scale (CGI-I) was 2 (much improved). His aggressive outbursts remained decreased for the following six months. Clozapine was well tolerated by the patient except slight increase in obsessive-compulsive features.

Clozapine can be well tolerated by adolescents with ASD and it may help improving severe disruptive behaviors not responding first-line antipsychotics. There is a need for further research on the effectiveness and safety of clozapine in the treatment of children and adolescents with ASD accompanied by disruptive behaviors.

**Keywords:** autism, clozapine, disruptive behavior

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### [PP-421] *Schizophrenia and other psychotic disorders*

## The antipsychotic effect of omega-3 fatty acids in rats

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**Objective:** Even though oxidative stress is not the main reason of schizophrenia, it is accepted as having an important role in pathophysiology of schizophrenia. Oxidative products with their effects to cell membrane proteins can cause deterioration in functions of enzymes, neurotransmitters, receptor proteins, and it can break down integrity by reducing cell membrane permeability and fluidity. In human beings omega-3 fatty acids is necessary for cell membranes, brain functions and continuation of nerve transmission. When the animals are exposed to a new environment or an agent like apomorphine that makes an agonistic effect to D1 and D2 receptors is administered, the animals display rearing behavior and behavioral reactions like stereotypy. These reactions are arranged by multiple neurotransmitter system that includes many neurotransmitters like GABA A, opioid, and Dopamine D2 receptors. In these locomotor activity and stereotypic behaviors, mesolimbic and nigrostriatal dopaminergic pathways have a crucial role.

**Method:** 28 adult male Wistar rats (220–240 g) were used in the study. Novelty-induced rearing behavior is used to assess the central excitatory locomotor behavior in rodents. Four groups of rat (n=7) were administered Docosahexaenoic acid (DHA)+eicosapentaenoic acid (EPA) (300 mg/kg; DHA: 120 mg/kg + EPA: 180 mg/kg i.p.), DHA+EPA (150 mg/kg; DHA: 60 mg/kg + EPA: 90 mg/kg ip.), chlorpromazine (1 mg/kg; ip.), or isotonic NaCl (1 mL/kg, ip.). The rearing frequency was recorded for 10 min. Apomorphine-induced stereotypy is due to the stimulation of dopamine receptors and has been used as a convenient method for in vivo screening of dopamine agonists or antagonists and assessment of dopaminergic activity. Briefly, four groups of rat (n=7) were administered DHA+EPA (300 mg/kg; DHA: 120 mg/kg + EPA: 180 mg/kg ip.), DHA+EPA (150 mg/kg; DHA: 60 mg/kg + EPA: 90 mg/kg ip.), chlorpromazine (1 mg/kg, ip.), and isotonic saline (1 mL/kg, ip.). One hour later, apomorphine (2 mg/kg, sc.) was administered to each rat. After apomorphine administration, rats observed for stereotypy behavior. The stereotypy behavior was rated after each minute, and mean of 15 min period was calculated and recorded. Brain tissue malondialdehyde (MDA) and glutathione (GSH) levels were measured in each group.

**Results:** DHA+EPA (150 mg/kg), DHA+EPA (300 mg/kg) and chlorpromazine significantly decrease apomorphine induced stereotypy scores compared to control group (p<0.001). DHA+EPA (300 mg/kg) and chlorpromazine significantly decrease rearing behavior scores and brain MDA levels compared to control group (p<0.001). DHA+EPA (150 mg/kg) significantly decrease rearing behavior scores and brain MDA levels compared to control group (p<0.01). DHA+EPA (150 mg/kg) and chlorpromazine significantly increase brain GSH levels compared to control group (p<0.05). DHA+EPA (300 mg/kg) significantly increase brain GSH levels compared to control group (p<0.001).

**Conclusion:** In this study it is shown that, omega-3 fatty acids similar to antipsychotics, reversed the psychotic-like effects, increase of oxidants and decrease the level of antioxidants that are composed experimentally in rats. In conclusion, the application of omega-3 fatty acids are found to be having antipsychotic effect and arranging oxidative imbalance, and it is decided that omega-3 could be an alternative treatment that can provide the schizophrenic patients with additional benefit.

**Keywords:** omega-3 fatty acids, antipsychotic effect, oxidative stress, rat

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**[PP-422] Attention deficit hyperactivity disorder****13-year-old boy attempted suicide after switching 27 to 36 mg of OROS methylphenidate**Sebla Gokce<sup>1</sup>, Arzu Onal<sup>2</sup>, Canan Yusufoglu<sup>1</sup><sup>1</sup>Erenkoy Mental Health and Neurology Training and Research Hospital,, Istanbul-Turkey<sup>2</sup>Maslak Acibadem Hospital, Istanbul-Turkey

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Attention deficit hyperactivity disorder is a chronic childhood neuropsychiatric disorder in school-age population and methylphenidate is an effective treatment agent that is widely used for the pharmacological management of ADHD.

Extended-release methylphenidate tablets (18, 27, 36, and 54 mg, and others) are coated with immediate-release methylphenidate and contain an osmotic pump resulting in drug release over a 10-hour period. Insomnia, nervousness, irritability and anxiety are common side effects of methylphenidate. Other side effects are suicidal ideation and dysphoria, which are rare side effects, and suicide attempts are reported as very rare.

**Case:** In our report, we present a case of a 12-year-old boy with combined type ADHD. He was admitted to the pediatric emergency service because of suicide attempt with extended release methylphenidate (ERM) ingesting 10 tablets of 36 mg ERM. He had a history of aggressive behaviors and hyperactivity and started 27 mg ERM when he was 10-year-old. In the emergency room in his physical examination tachycardia and mildly increased blood pressure, respiration and heart rate had been determined. In his psychiatric examination his mood was depressed, and tendency to sleep. In laboratory tests, blood glucose level, blood urea nitrogen, creatinine, potassium (K), sodium (Na) and chloride (CL) were revealed normal. The electrocardiography (ECG) parameters such as QRS duration, QT interval, R wave and PR interval were normal, however the heart rate was elevated. There was no central nervous system finding except irritability and agitation.

**Keywords:** attention deficit hyperactivity disorder, methylphenidate, side effect, suicide

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**[PP-423] Forensic psychiatry****Teen dating violence among sexual abuse cases**Nagehan Ucok Demir<sup>1</sup>, Mustafa Yasin Irmak<sup>1</sup>, Duygu Murat<sup>1</sup>, Nilufer Subasi<sup>2</sup>, Nese Perdahli Fis<sup>1</sup><sup>1</sup>Marmara University, Faculty of Medicine, Department of Child and Adolescent Psychiatry, Istanbul-Turkey<sup>2</sup>Marmara University, Faculty of Medicine, Department of Psychiatry, Istanbul-Turkey

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**Objective:** Dating violence defined as physical, sexual or psychological/emotional violence within a dating relationship. Teen dating violence (TDV) is a prevalent form of youth violence that has gained increasing attention from researchers. Consequences identified from longitudinal studies include cigarette smoking, marijuana and other illicit substance use, antisocial behavior, depression, and suicide ideation and attempts. We aimed to examine the concept of teen dating violence within a group of forensic sexual abuse cases.

**Method:** The files of 222 child and adolescents aged 4-18 years, who had been referred to child psychiatry forensic outpatient clinic between September 2010 and December 2012 were examined retrospectively.

**Results:** Of 222 sexually abused cases, 76.6% were girls and 23.4% were boys. Mean age of girls (13.59±3.5 years) was significantly higher than the mean age of boys (10.54±3.6). All of the perpetrators were male. The percentage of the strangers, as perpetrators, was 88.5% for victim boys and 32.9% for victim girls. Among girls, 41% (n: 70) were abused by their dating partner. Those girls, who were subjected to dating violence, had significantly more alcohol and substance abuse and more suicidal act after trauma. Sexual abuse with penetration was significantly higher in this subgroup of girls.

**Conclusion:** The term "teen dating violence" has long been known in western countries and has been regarded as a serious public health problem. It is a relatively new term in our country. The present study has important implications since it emphasizes the serious consequences of teen dating violence, especially the suicidal ideation and alcohol and substance abuse.

**Keywords:** teen dating violence, sexual abuse

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**[PP-424] Attention deficit-hyperactivity disorder****Serum vitamin D levels in ADHD patients**

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**Objective:** ADHD is a common neuropsychiatric disorder in children and adolescents. Experimental data of Vitamin D demonstrate that vitamin D has a remarkable role in proliferation, differentiation, neurotrophism, neuroprotection, neurotransmission, and neuroplasticity. Low levels of vitamin D were associated with depression, seasonal affective disorder, and schizophrenia in adults, but little is known about vitamin D effect on mental health in the pediatric population. In this study, we aimed to investigate serum vitamin D levels in pediatric ADHD patients.

**Methods:** The study population included 20 females and 32 males aged 6 to 17 years were admitted to the outpatient clinic of the Child and Adolescent Psychiatry Department, between March 2013 and February 2014. Serum 25-OH vitamin D levels of participants were collected on routine admission laboratory testing. Vitamin D levels were classified as low and normal; depends on seasonal norms basis Vitamin D levels (lower limit; 20 ng/ml for the summer, in winter 10 ng/ml). Patients, who met the criteria of the Diagnostic and Statistical Manual of Mental Disorders for ADHD, were recruited. Conners Parent Rating Scale (CPRS) and Conners Teacher Rating Scale (CTRS) scores, which were kept in the files of ADHD patients were calculated. Socio-demographic information as well as environmental risk factors that may play a role in the etiology, which may be related physical illness, comorbid diagnoses, ADHD subtypes were examined and the obtained data investigated the correlation between with vitamin D levels. Stroop Color-Word Test (ST) was used to evaluate the attentional functions. Average performance on the Stroop test was calculated based on total test time (ST-T), total error rate (ST-E), and correct response (ST-C) incorrectness.

**Results:** This study was conducted on 52 children with ADHD (32 (61.5%) boys, and 20 (38.5%) girls), aged between 6 and 17 years (mean±SD: 11.4±3.0 years). The mean serum 25-OH-vitamin D level was 17.4±9.8 ng/ml (for boys: 19.4±11.3, for girls: 14.4±5.5 ng/ml; p=0.08). Subjects with a history of frequent infections were more likely to have low levels of 25-(OH) vitamin-D in comparison to those without this history (p=0.011). The ST-C scores of ADHD patients having low serum vitamin D levels were significantly higher than those, who had normal Vitamin D levels (respectively, 2.9±2.7, 5.2±2.8 ng/ml, p=0.025).

**Conclusion:** Vitamin D deficiency could be associated with a number of psychiatric and neurological conditions. Multiple studies demonstrated that reduced DA and/or NE function hypothesis in ADHD. Abnormal dopamine regulation in certain areas of the central nervous system might have a role in the etiology of ADHD. In our study, results from Stroop Test and frequency of infection history in patients having low vitamin D levels refers to possible relationship between immune dysfunction and 25-(OH) vitamin-D deficiency. It should be investigated further prospective and controlled studies.

**Keywords:** Vitamin D, attention deficit hyperactivity disorder, inattention, immune system

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**[PP-425] Others****Bipolar disorder or Kleine-Levin syndrome?: a case report**Duygu Murat<sup>1</sup>, Nagehan Ucok Demir<sup>1</sup>, Nilufer Subasi<sup>2</sup>, Nese Perdahlı Fis<sup>1</sup>

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Kleine-Levin Syndrome (KLS) is a rare disease characterized by recurrent episodes of hypersomnia associated with cognitive and behavioral disturbances, compulsive eating behavior and hypersexuality. Each episode lasts for one or two weeks, and affected people are entirely asymptomatic between episodes. We aimed to report a 13 year-old girl with a possible Kleine Levin Syndrome. She was admitted to emergency clinic, for her complaints of acute onset disorganized and inappropriate behavior and meaningless talking. Her mother acknowledged that the symptoms occur dafter tonsillitis. She experienced increased sleepiness (sleeping around 20 hours/day) and appetite, she was easily upset, she had excessive talking and rapid shifting of ideas and she began to have motor hyperactivity. In emergency room, her physical examination was normal, the laboratory findings, including complete blood count, hepatic and renal

functions, lumbar puncture, electroencephalography and cranial magnetic resonance imaging did not reveal any abnormality. During the psychiatric interview, she had a pressured and disorganized speech, she was anxious and uncooperative, her affect was tearful, she was crying intermittently. Her place and time orientation was poor. She had flight of ideas and was extremely fearful of dying and being separated from her parents. She did not have any known medical illness. Her previous psychiatric history was negative for traumatic or stressful life events or substance abuse. Her developmental milestones were in normal timeline. Her peer relationships were good; she had fairly good academic achievement. Her family history was positive for bipolar disorder; her two maternal uncles and grandmother had lithium responsive-bipolar disorder. The initial treatment included a combination of quetiapine (gradually increased up to 600 mg/day) and lorazepam (1 mg/day for 5 days). She responded considerably well to the initial treatment within a week; however, her symptoms tended to have an episodic manner. Her mental status examination was completely normal and she was functioning very well, without any psychiatric symptoms, between the episodes. Within 3-4 weeks, somehow overlapping with the last days of her menstrual cycle, her symptoms reappeared. The increment of quetiapine to 1200 mg/day led to a prominent decrease in the symptom intensity, however, the episodes persisted. By the 5<sup>th</sup> episode lithium was introduced. The treatment protocol including lithium (with a serum level of around 0.95 mEq/L) and quetiapine 200 mg/day resulted in more indistinct episodes, gradually. For the last 4 months, she has been free of any episodes. At the first glance, due to the clinical picture and the positive family history, the diagnosis of bipolar disorder seemed to be likely. When the symptoms of hyperphagia, hypersomnia, and the intense disorganized behavior were taken into account, we considered KLS as another possible diagnosis. KLS is a clinical diagnosis with no available definite laboratory test. In patients with relapsing-remitting episodes of severe hypersomnia, cognitive impairment, apathy, derealization, and psychiatric and behavioral disturbances, it should be considered as a possible diagnosis. Due to its episodic nature and clinical response to mood stabilizers, it should also be kept in mind as a criteria for differential diagnosis in adolescents with suspected bipolar disorder.

**Keywords:** bipolar disorder, Kleine Levine syndrome, differential diagnosis

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#### [PP-426] Others

### Postpartum Anti-N-Methyl-D-Aspartate (NMDA) receptor encephalitis presenting psychiatric symptoms

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Anti-N-Methyl-D-Aspartate (NMDA) receptor encephalitis is a severe form of autoimmune encephalitis associated with antibodies against subunits of the NMDA receptor. Most patients with anti-NMDA receptor encephalitis are admitted to hospital with symptoms progressing from psychiatric symptoms to memory disturbance, seizures, dyskinesia, and catatonia. Motor changes, autonomic dysfunction and impaired consciousness may occur. Between 20-57% of female patients with NMDA receptor antibody are thought to have underlying tumor, which is mostly ovarian teratoma. The cases may take place during pregnancy or postpartum during, when a differential diagnosis must be made from the other perinatal psychiatric cases. We present a postpartum patient with anti-NMDA receptor encephalitis who is misdiagnosed as neuroleptic malignant syndrome by neurologists.

A 23-year-old female, postpartum 4 months, with no psychiatric history was admitted to psychiatric unit after two weeks of progressive slurred speech, behavioral changes and psychotic features. There was waxy flexibility in extremities. WBC: 11200, AST: 165, ALT: 165 and was CK: 7936. Temperature was 37.3°C. EEG showed non-specific slowing. Catatonia, Neuroleptic Malignant Syndrome (NMS) and NMDA receptor encephalitis were thought in differential diagnosis.

Consultations did not show any pathology. Diagnosis made as catatonia and ECT was started. On the next day, she had a generalized tonic-clonic seizure. Diazepam 1mg was given and was referred to neurology. At that time, WBC count was 17000, temperature was 37.5°C. There was no infection sign on blood culture, urine examination and lumbar puncture material.

After ten hours follow up, she was re-admitted to psychiatry unit. Temperature was 37.9-38.1°C, confusion was apparent and general condition was poor. No specific reason was diagnosed. Haloperidol and biperidene were started. Because of increased CRP, infectious disease consultant started cephalosporin. Delirium symptoms were observed so NMDA Receptor encephalitis was reconsidered. On second day, patient was referred again to neurology. Diagnosis was made as NMS by neurologists and bromocriptine 5 mg/d and lorazepam 1-2 mg/d were given for 13 days. When she was moved back to psychiatry unit, delusions with disorientation were apparent. Aripiprazole 5mg/d was added to same treatment and awaited up to antibody results, which came out positive. The patient was

diagnosed as NMDA Receptor Antibody Encephalitis by psychiatrists and re-transferred to neurology for specific treatment. It is claimed that as the encephalitis start, 10 to 20 days later, patients develop a movement disorder, variations in blood pressure, heart rate and temperature and may become less conscious, which fits our case. Recovery is not always to the premorbid level; severe deficits may persist. Besides, improvement is often slowly. That is why some patients are now being treated after recognition of the clinical symptoms and signs, while the antibody result is awaited, to try to improve recovery. Psychiatrists should exclude autoimmune causes for acute psychosis in patients especially in the perinatal group.

**Keywords:** encephalitis, NMDA receptor, psychosis

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#### [PP-427] *Eating disorders*

### The relationship between weight change and C3 complement levels in patients with anorexia nervosa

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**Objective:** Anorexia Nervosa (AN) affects whole body with serious medical disturbances and has highest death rates of any psychiatric disorder. These medical abnormalities are reversible after gaining weight and resolution of the underlying anorectic state. The changes of complement system, especially C3 in anorexia nervosa remains poorly understood. This study was designed to evaluate the changes of complement C3 levels with body weight changes.

**Method:** 12 female patients with anorexia nervosa were included in the study. Data were obtained from psychiatry service notes and laboratory records. Serum samples were obtained in a biweekly manner, and weight recordings of patients. Each patient have four (beginning, second, fourth and sixth week) laboratory and weight results. Repeated measures of ANOVA was used to determine changes of body mass index (BMI) and complement levels.

**Results:** Beginning of treatment, mean of BMI of patients: 14.96 (SD=1.70) and C3 levels 0.88 g/lit (SD=0.19), at the second week of treatment average BMI: 16.01 (SD=1.76) and C3 levels 0,96 g/lit (SD=0.21 ), at the fourth week of treatment average BMI: 16.86 (SD=2.06) and C3 levels 1.03 g/lit (SD=0.33 ), at the end of treatment (sixth week) average BMI: 17.38 (SD=1.77) and C3 levels 1.16 g/lit (SD=0,31 ) of the twelve patients. There were a significant increasing of C3 levels of patients ( $p=0,042$ ) and BMI levels of patients ( $p=0,01$ ). Increasing of BMI was followed by C3 level increasing.

**Conclusion:** Complement 'C3' serum levels may represent a useful marker for determining and monitoring the severity of disease in AN. The findings of this study require further investigation in future prospective large-scale trials and replication.

**Keywords:** Anorexia nervosa, complement levels, weight change, body mass index

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#### [PP-428] *Others*

### Panax ginseng, sildenafil, and rasagiline induced psychiatric symptoms in patients with Parkinson's disease: two case reports

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Depression, anxiety disorder, or mania, are frequently related to dopamine replacement therapy in Parkinson's disease. Moreover, psychosis, Obsessive compulsive disorder, hypersexuality, levodopa addiction and pathologic gambling are considered as secondary to

the use of dopamimetic drugs.

In this case report, we report two patients with PD, the first who developed psychotic mania following administration of a combination of Panax ginseng and sildenafil, the second who manifested some compulsive behaviors during the treatment of rasagiline.

**Case 1:** A 70-year-old married man with a diagnosis of PD was admitted for counting compulsions and ritualistic behaviors. He was administered ropinirole 12 mg/day, and rasagiline 1 mg/day with a diagnosis of PD one and half year ago. Despite partial remission in his symptoms and functionality, the patient did not use rasagiline because of an erectile dysfunction for one year. Two months ago, rasagiline 1 mg/day was added again to ongoing 12 mg/day dose of ropinirole since his symptoms of PD worsened. A few days later, he began repeatedly to count the number set of 3,13,23 before performing specific actions throughout the day. At admission, The Hoehn and Yahr Scale revealed a stage 1.5 score for PD. He scored 18 on the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS). In addition to rasagiline treatment, sertraline was started at 25 mg/d and titrated up to 75 mg/day for his compulsive symptoms. At the end of fourth week, his Y-BOCS score was decreased to 13. **Case 2:** Mr. D was a 57-year-old, married male was admitted for paranoid thoughts and aggressive behaviors. He has been under treatment of pramipexole 1,5 mg/day, rasagiline mesylate 1 mg/day, and amantadine sulfate 200 mg/day for one year without any psychiatric symptoms. He was started sildenafil for his erectile dysfunction. A few days later, several manic and psychotic symptoms such as, euphoria, insomnia, anger attacks, jealousy and persecution delusions were observed. After sildenafil was stopped, he own began to use Panax ginseng which also contains sildenafil for his symptoms of PD. Within one month, his manic and paranoid symptoms worsened.

At admission, he scored 35 on the Young Mania Rating Scale (YMRS). His total Scale for Assessment of Positive Symptoms (SAPS) score was 9. The Hoehn and Yahr Scale revealed a stage 2 score for the PD. In addition to levodopa, carbidopa, and entacapone treatment, we administered aripiprazole 5 mg/day, quetiapine 75 mg/day and valproic acid 750 mg/day to manage his manic and psychotic symptoms. Four weeks later, his total scores of YMRS and SAPS were decreased to 8 and 2, respectively. His Hoehn and Yahr Scale scores remained unchanged.

**Keywords:** Panax ginseng, sildenafil, rasagiline, compulsion, psychotic mania, Parkinson's disease

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### [PP-429] Attention deficit-hyperactivity disorder

## A Case Comorbid with Attention Deficit Hyperactivity Disorder and Anxiety Disorder

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Attention Deficit Hyperactivity disorder (ADHD), is one of the most frequent psychiatric disorders in childhood. It has been reported that among children at school age, the prevalence of ADHD varies between 2% and 20% and prevalence of comorbidity is high. In children diagnosed with ADHD, the most common comorbid diagnosis after oppositional-defiant disease is anxiety disorder. Although ADHD is a frequently comorbid with anxiety disorders, factors associated with anxiety disorders in ADHD has not been addressed adequately. According to the results of clinical and epidemiological studies, there is a consistent and reciprocal relation between ADHD and anxiety disorders, and the rate of ADHD increases in the presence of anxiety disorders compared to community samples, and vice versa. It has also been suggested that there is an independent association between these two disorders.

**Case:** We will discuss diagnosis, treatment and prognosis of a 11 year old boy came to Erenkoy psychiatric and neurologic research and training hospital child and adolescent psychiatry clinic with academic problems, attention deficit, hyperactivity symptoms, free floating anxiety, obsessions and compulsions.

**Discussion:** It is surprising that although ADHD and anxiety disorders are frequently comorbid, there are a few studies on this issue of their coexistence. When the adverse effects of the coexistence of these two disorders on clinical practice, treatment options, course and prognosis are taken into consideration, it becomes evident that more structured and long terms studies are required on this issue.

**Keywords:** attention deficit hyperactivity disorder, anxiety, comorbidity

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**[PP-430] Mood disorders****10 year-old boy with obsessive compulsive disorder and bipolar disorder: a case report**

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The prevalence of Obsessive compulsive disorder among children and adolescents is in the range of 1% to 3%. Growing evidence documents the frequent co-morbidity between Obsessive Compulsive Disorder and Bipolar Disorder in adults. However, there has been limited research on anxiety in pediatric Bipolar Disorder.

EHC, a 10 year-old boy in the fourth grade was referred from his pediatrician. At the initial evaluation, he was very irritable and was walking the floor. He did not make eye contact and wanted to go outside. When he was speaking he was swallowing his saliva. When asked why he did this, he said he did not want to transform his saliva to the person in front of himself. Although EHC was a good student, he was currently having difficulty in school because of his OCD symptoms. Though his relationship with his friends was good, he was grown away from them. In addition, he supposed he was like Einstein. He did not eat and sleep enough some times during last 6 months. His parents said that he was always rigorous but also very nervous last 3 months. Fluoxetine 20-40 mg/day was initiated but two weeks later, he was very hyperactive, impulsive and irritable. Then fluoxetine was discontinued. Initially, a dose of 2.5 mg/day of aripiprazole was given and increased up to 10 mg/day. His symptoms were recovered 3 weeks later.

We present this case because this is a complicated case with multiple diagnoses: Obsessive compulsive disorder and bipolar disorder.

**Keywords:** children, obsessive compulsive disorder, bipolar disorder, comorbidity

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**[PP-431] Mood disorders****A case of quetiapine and valproate associated neutropenia**

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Bipolar disorder is a common psychiatric illness with a highly variable course and high rates of morbidity and mortality requiring lifelong treatment. It has an estimated prevalence of 1.6%–3.7%, and is an episodic illness interspersed with erratic cycles of mania and depression or mixed episodes.

Valproate and quetiapine are commonly prescribed mood-stabilizing agents in psychiatry. These drugs are sometimes prescribed alone or in combination for treatment of mood disorders.

Clozapine is one of the best known antipsychotic which has a risk of causing neutropenia, however the risk of neutropenia in newer atypical antipsychotics is less studied and relatively unknown.

Quetiapine is an atypical antipsychotic that is widely used in the treatment of schizophrenia and mood disorders. We report a patient who had a diagnosis of bipolar disorder with neutropenia when receiving combined treatment with quetiapine and valproate. During treatment regular white blood cell count is necessary in these high-risk populations. Double-blind placebo controlled studies are needed on this issue.

**Keywords:** neutropenia, quetiapine, valproate

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