High-Dose Antipsychotic Medication; A Practical Pocket Checklist

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ABSTRACT: High-dose antipsychotic medication; a practical pocket checklist

There is evidence that a significant number of patients with schizophrenia and other chronic psychotic psychosis are prescribed high-dose antipsychotic drugs despite the fact that clinical guidelines recommend the routine use of a single antipsychotic drug in a standard dose. The prescriptions for high-dose and combined antipsychotic drugs are relatively common in clinical practice. This occurs despite the fact that results of published trials of high-dose antipsychotic drug treatment for schizophrenia provide little evidence to support effectiveness of using high-dose antipsychotic treatment and most importantly such strategy is not recommended. Moreover, there is mounting evidence of higher incidence of side effects and mortality associated with high dose antipsychotic treatment. Therefore we are presenting a practical pocket checklist which is aimed at minimizing predicted and unpredicted side effects during such treatments.

Key words: Antipsychotic medication, check-list, high dose

High-dose antipsychotic is defined as the total daily dose of a single antipsychotic which exceeds the upper limit stated in the summary of product characteristics or a total daily dose of two or more antipsychotics which exceeds the summary of product characteristics using the widely known percentage method related to chlorpromazine equivalents (1,2).

A significant number of patients with schizophrenia and other chronic psychosis syndromes are prescribed high dose antipsychotic treatments (HD-APT) despite the fact that clinical guidelines recommend the routine use of a single antipsychotic drug in a standard dose.

In fact, prescriptions for high-dose and combined antipsychotics are relatively common in clinical practice (3,4). However, the results of published trials of HD-APT for schizophrenia provide no evidence to support effectiveness of using HD-APT, and in general such a strategy is not recommended.

Moreover, there is mounting evidence of higher incidence rates of side effects and mortality associated with HD-APT (5). Therefore, in keeping with the 2006 Council Report of the Royal College of Psychiatrists, we are suggesting a mini-checklist which should be followed prior to the initiation of and during the follow-up of HD-APT if such treatment is clinically justified and required in certain adult patients.

This checklist is aimed at minimizing predicted or unpredicted side-effects, particularly those related to the cardiovascular system.

1. All clinicians should re-evaluate the diagnosis and assess compliance before starting HD-APT. Non-efﬁcacy due to poor compliance must be distinguished from real non-efﬁcacy.
2. Relevant education about HD-APT should be provided to the patient, care givers, and next of kin, and such education should involve a pharmacist, a patient advocate and a wider clinical team. Informed consent (ideally written) should be obtained from the patient.

3. The details of the HD-APT should be documented in the case notes, including risk and benefit assessments, aims and objectives and outcome assessments. Possible contraindications (i.e. medical/neurological illness, presence of medical/neurological high-risk factors, syncope or fits) and possible drug-drug and food-drug interactions with the HD-APT should be carefully considered. If at all possible, pharmacogenetics technology should be used to determine the activity of relevant cytochrome P450 (CYP) enzymes and the pharmaco-metabolic state of the patient.

4. Adequate service infrastructure and communication should be provided between the prescriber and the pharmacist, with regard to dispensing and administration of the medication.

5. Prior to the initiation of HD-APT, an ECG should be done to establish a baseline (in particular the QTc interval) and exclude cardiac contraindications and a long QT syndrome. An ECG should be repeated after a few days and then every 1-3 months in the early stages of HD-APT. Electrolytes, in particular K+, Ca++, and others which may contribute to cardiac arrhythmias, should be monitored. Liver enzymes should be monitored if there is a medical and/or pharmacokinetic concern. Renal function tests, including urea and creatinine, should be done in patients at risk for dehydration and such patients should be counselled about and monitored for rehydration. Although not standard practice, prolactin levels may be useful as a very rough yet practical indicator for dopamine-D2 receptor antagonism in the brain and as a rough guide for the state of blood brain barrier permeability. Full metabolic/endocrine investigations should also be carried out as appropriate.

6. Dose escalation should be in relatively small increments and allow adequate time for response.

7. The use of other “as required” (p.r.n) psychotropic medications should be minimized and monitored.

8. The care and management structure of the patient should be enhanced (i.e. including more frequent assessments and visits). The effectiveness of HD-APT should be regularly monitored and it should initially be prescribed on a trial basis up to 3 months (a time-limited trial) and continued only if clinically justified by a significant improvement.

9. The practice of HD-APT use should be regularly reviewed and audited with colleagues.

References:


