

Antipsychotic Medication Reviews and Monitoring in Primary Care and Care Home Residents

Background

This document is intended to be used as a resource, highlighting important factors to consider when reviewing and monitoring antipsychotics in patients living with dementia. It is not intended to be formal guidance or replace your current processes.

Antipsychotic medications are used in care home residents who have chronic mental health conditions, acute delirium and behaviour that challenges in dementia. Most antipsychotic medication should be initiated under specialist supervision, monitored until stable and then handed to primary care where appropriate.

The Network DES 'Structured Medication Reviews (SMR) and Medicine Optimisation' service requirements include identifying patients who would benefit from an SMR, including those in care homes. The Network DES 'Enhanced Health in Care Homes' service requirements include an MDT approach to each resident's personalised care and support plan (PCSP) which should include a medication review. PCN Clinical Pharmacists carry out SMRs and so it is important that they are confident to incorporate an antipsychotic review as part of this process.

Please see local guidance on the use of medication for the management of behaviour that challenges in dementia:



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Commonly Prescribed Antipsychotics in Care Homes

Other than Haloperidol in acute delirium, first generation antipsychotics are less commonly prescribed. Second generation (atypical antipsychotics) commonly seen include Risperidone, Quetiapine, Olanzapine and Aripiprazole. Clozapine use will always be under CMHT.

Side Effects of Antipsychotics

Sound knowledge of the side effects of antipsychotics leads to a clearer understanding of the history needed at review, alongside monitoring investigations and observations.

- **Extrapyramidal** more common with 1st generation antipsychotics. Dyskinesia/dystonic reactions (involuntary movements of face and body), pseudoparkinsonism (tremor, bradykinesia, rigidity), akathisia (motor restlessness), tardive dyskinesia (with prolonged use rhythmical involuntary movement eg lip smacking or tongue rotating which may get worse with withdrawal of drug).
- **Weight gain** more common in atypical antipsychotics especially clozapine and olanzapine.
- **Dyslipidaemia** seen more with olanzapine, quetiapine, risperidone, clozapine and phenothiazines.
- **Hyperprolactinaemia** unlikely with normal doses of olanzapine, quetiapine, aripiprazole and clozapine.
- **Sedation**
- **Headache**
- **Sleep apnoea** reported with quetiapine therefore use with caution in those with PMH or at risk of OSA or those receiving concomitant central nervous system depressants.
- **Anticholinergic** such as dry mouth, blurred vision, urinary retention, constipation and cutaneous flushing. Caution using quetiapine alongside other drugs with anticholinergic effects.

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- **Postural hypotension** more common with quetiapine, risperidone, clozapine.
- **Hypertension** with clozapine and less so with aripiprazole, olanzapine, quetiapine and risperidone.
- **Reduced seizure threshold** higher the dose greater the risk.
- **Impaired glucose tolerance** and sometimes diabetes with clozapine, olanzapine, risperidone and quetiapine.
- **QT interval prolongation** so avoid co-prescribing with other drugs known to prolong QT interval.
- **Stroke risk** increase associated with olanzapine and risperidone in elderly patients with dementia. Therefore, short term use of risperidone for acute psychotic conditions under CMHT advice.
- **VTE** increased risk with all antipsychotics.
- **Neuroleptic malignant syndrome** rare but potentially fatal with all antipsychotics. Fever, increased sweating, rigidity, confusion, fluctuating consciousness, fluctuating BP, tachycardia, raised CK, leucocytosis, abnormal lfts.
- **Pneumonia**
- **Neutropenia** needs drug cessation if neutrophils <1.5.
- **Abnormal lfts** needs advice if transaminases rise to x3 normal and stop drug.
- **Photosensitivity** common with chlorpromazine.
- **Skin and subcutaneous tissue disorders** – olanzapine associated with DRESS (drug reaction with eosinophilia and systemic symptoms) and quetiapine reported to cause extensive rash, exfoliative dermatitis, fever, lymphadenopathy and eosinophilia. Stop drug. May be Stevens-Johnson syndrome.
- **Diplopia** uncommon report with aripiprazole.
- **Misuse and abuse** reported with quetiapine.
- **Restless Legs Syndrome** rarely.

Use of Ardens Template for Antipsychotic Monitoring and Review

The Ardens Template promotes a thorough and appropriate review of antipsychotic medication.

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Frequency of Antipsychotic Reviews

- **Chronic mental health conditions** initially managed by CMHT, stabilised and handed to primary care, require an **annual** antipsychotic review. This may be part of a SMI (serious mental illness) health check.
- **Acute delirium** may require off license low dose haloperidol and ideally limited to use for less than a week. If used for beyond a week an antipsychotic review is required **weekly** to reduce and discontinue as soon as possible. If confusion persists, review of underlying causes needs reassessment.
- **Behaviours that challenge in dementia** requires non-pharmacological interventions first and foremost. See Dorset Healthcare BSPD guidance pdf above for more detail. Pharmacological intervention may need advice from the Older Person's CMHT. Risperidone is licensed for 6 weeks so review is essential at **4-6 weeks** with a view to reducing the dose or stopping. Other antipsychotic medication such as olanzapine or quetiapine may be used off license. Seek specialist advice for neuropsychiatric symptoms in Parkinson's disease or Lewy Body Dementia. If reduction or cessation of antipsychotic fails and continued benefit of use outweighs risks, a review is needed at **3 months and then every 6 months**.

Drug Interactions

- Drugs with sedative actions including alcohol enhanced sedative effects of antipsychotics.
- Drugs with hypotensive effect will enhance hypotensive effect of antipsychotics.
- Drugs that prolong the QT interval work synergistically with antipsychotics, therefore avoid co-prescribing.
- Diuretics may cause hypokalaemia and increase arrhythmias.
- Azole antifungals increase antipsychotic levels, especially itraconazole with aripiprazole and haloperidol.
- Carbamazepine reduces levels of antipsychotics and antipsychotics increase carbamazepine levels.
- SSRIs increase levels of some antipsychotics. Haloperidol increased by fluoxetine and fluvoxamine. Risperidone increased by fluoxetine, fluvoxamine and paroxetine. Clozapine increased by fluoxetine, fluvoxamine, paroxetine, sertraline and possibly citalopram.
- Smoking induces metabolism of olanzapine and clozapine, therefore if patient stops smoking, they may need a dose reduction.

Monitoring Antipsychotics

- **Baseline review and initiation** should be by CMHT or experienced GP.
 - **Baseline history:** PMH especially IHD, hyperlipidaemia, DM, seizures, movement disorders, anaemia or bone marrow suppression. FH especially premature IHD, long QT, premature death or seizures. DH especially drugs that may prolong the QT interval.
 - **Baseline observations:** weight, waist circumference, BP, pulse, ECG. Examine for pre-existing motor side effects or movement disorder.
 - **Baseline investigations:** fasting glucose, HbA1c, lipids, fbc, u&e, lft and prolactin if under 65yrs old.
- **4-6 week review:** antipsychotics initiated for behaviours that challenge in dementia should be reviewed and reduced or stopped where possible.
- **3-month review:** review of effectiveness, review side effects, consider dose reduction where possible, weight, waist, pulse, BP, fasting glucose, HbA1c, lipids.
- **Annual review:** review of effectiveness, review side effects, consider dose reduction where possible, weight, waist, BP, pulse, fasting glucose, HbA1c, lipids, fbc, u&e, lft.

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- **Specific Investigations**

- **ECG** at any time if indicated e.g. chest pain, syncope, palpitations, fatigue dyspnoea, PUO, tachypnoea or oedema.
- **EEG** at any time if indicated e.g. if seizures or suggestion of absences.
- **Fbc** at any time if indicated e.g. possible anaemia or bone suppression, SOB, palpitations, CCF, change in exercise tolerance, sore throat, PUO, stomatitis lymphadenopathy, tachycardia.
- **Prolactin** at any time if indicated e.g. if menstrual changes, libido changes, sexual dysfunction, galactorrhoea or gynaecomastia.
- **Glucose and HbA1c** at any time if symptoms suggestive of diabetes.
- **Creatinine Kinase** if neuroleptic syndromes suspected.
- **Pulse and BP** following dose increases.

Other Tips for Antipsychotic Reviews

- Baseline ECG is best practice and most important with Haloperidol. Baseline ECG important in residents with PMH of cardiac problems, taking other drugs that may prolong QT, or FH of premature death or congenital long QT. Need for further ECGs should be dictated by reported symptoms or clinical concern e.g. chest pain, syncope, palpitations, fatigue dyspnoea, PUO, tachypnoea or oedema. If an ECG is not possible (patient objecting or risk of harm due to aggression) antipsychotics can still be initiated and continued if felt to be in the patient's best interests.
- Hyperprolactinaemia most likely with Risperidone. Prolactin levels should be checked with any antipsychotic medication if a patient is symptomatic e.g. menstrual changes, libido changes, galactorrhoea or gynaecomastia. Routine check of prolactin in asymptomatic patients, whose antipsychotic medication is unlikely to be changed, is unnecessary especially in those aged over 65.
- Olanzapine most likely to cause weight gain, raise blood sugars and possibly hyperlipidaemia.

SystemOne Search Information

There are SystemOne searches to support these reviews and identify patients. They can be found:

Dorset SystemOne GPs > Medicines Optimisation > Mental Health

- Search 1: "APS1 Antipsychotic medication action group (Last 6 months) & Dementia Register". This searches for patients prescribed a medication within the SystemOne "Antipsychotic" action group (within the last 6 months) and that are listed on the SystemOne system wide Dementia register.
- Search 2: "APS2 Antipsychotic medication action group & Dementia medication action group (last 6 months)". This searches for patients prescribed a medication within the SystemOne "Antipsychotic" action group (within the last 6 months) and patients prescribed a medication within the SystemOne "Dementia" action group (within the last 6 months).

At practice level it is possible to overlap these searches and remove duplicated patients from the search. Please note, some patients may be treated as end of life and be prescribed antipsychotics such as haloperidol or levomepromazine and should be excluded.

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Information Sources and References

The information in this document has been amalgamated from the following sources:

<https://cks.nice.org.uk/topics/psychosis-schizophrenia/prescribing-information/available-antipsychotics/>

<https://www.nice.org.uk/guidance/ng97/chapter/Recommendations#managing-non-cognitive-symptoms>

Dorset Medicines Advisory Group: Shared care guidelines for prescribing atypical antipsychotics in adults and older persons in schizophrenia and related psychoses.

Dorset Medicines Advisory Group: Guidance on the Use of Antipsychotics for Conditions other than Schizophrenia

Dorset Medicines Advisory Group: QTc Prolongation: Guidance for Mental Health Prescribers (Dorset CCG, 2019)

Antipsychotics Chapter 04.02 of the [Dorset Formulary](#)

Oxford guidance on prolactin monitoring:

<http://www.oxfordhealthformulary.nhs.uk/docs/AntipsychoticinducedhyperprolactinaemiaguidelineJuly2015.pdf?UPLID=2082094120151222131512>

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