

Clinical Indications for Prescribing Antipsychotic Medication

Behaviours with limited/no known benefit from antipsychotic use: The following responsive behaviours are known **NOT** to be improved by the use of antipsychotic medications:

- Wandering / exit seeking
- Unsociability
- Poor self-care
- Impaired memory
- Fidgeting or nervousness
- Inappropriate voiding/elimination
- Restlessness or pacing
- Indifference to surroundings
- Repetitive vocalizations: calling, screaming
- Repetitive actions such as clapping
- Inappropriate dressing/undressing
- Pushing wheel-chair bound residents
- Eating inedible objects
- Hoarding / hiding items

Avoid use of antipsychotic medications to manage these behaviours. For further information, see the

- Alberta Health Services Guideline for Appropriate Use of Antipsychotics Medication
- AUA Toolkit sections on Responsive Behaviours
- British Columbia [Best Practice Guideline for Accommodating and Managing Behavioural and Psychological Symptoms of Dementia in Residential Care](#) (2012).

Symptoms that MAY respond to Antipsychotic Medications

1. Confirmed mental health diagnosis

Health Canada indications for antipsychotic treatment of chronic mental health conditions include:

- Schizophrenia & related disorders: aripiprazole; asenapine; clozapine; lurasidone; olanzapine; paliperidone; quetiapine; risperidone; ziprasidone
- Mania in Bipolar Disorder: aripiprazole; asenapine; olanzapine; quetiapine; risperidone; ziprasidone
- Adjunctive treatment of major depressive disorder, in adult patients with an inadequate response to prior antidepressant treatments in the current episode: aripiprazole

In these cases, life-long use of antipsychotics may be appropriate and necessary. Regular medication reviews to monitor and minimize side-effects are recommended, but the goal is not necessarily to discontinue their use. Documenting the mental health diagnosis on the health record is beneficial to the team to help ensure the monthly medication review is focused on monitoring and not discontinuation of the medication. A mental health diagnosis does not negate the benefits of person-centred care measures, or the importance of a monthly review. For further resources, see the [Canadian Coalition for Senior's Mental Health](#) and the [National Guidelines for Seniors' Mental Health](#).

2. Severe psychoses, delusions and hallucinations

“Severity is evaluated based on the degree of danger, suffering or excess disability.”ⁱ Hallucinations should be distinguished from language difficulties and visual or auditory misperceptions. A new onset of hallucinations (especially visual) or delusions should prompt the clinician to investigate the presence of delirium.

In delirium, short-term use of antipsychotics (e.g. one dose or for a few days) may be appropriate:

- Where the hallucinations or delusions are distressing to the person
- Where agitation or psychotic symptoms interfere with essential investigations or treatment
- To prevent delirious persons from endangering themselves or others

Aim for monotherapy, the lowest effective dose and tapering as soon as possibleⁱⁱ.

Antipsychotic medications themselves may cause a delirium and should be trialed with close observation and discontinued if new onset of behaviours is observed. “Regularly review the older person’s medication regimen in an attempt to simplify it by eliminating medications not needed. Avoid adding unnecessary medications.”ⁱⁱⁱ

Psychosis is also known to develop in individuals with chronic conditions such as dementia and Parkinsons. If these altered states of perception are disturbing to the person, consider a reduction in Parkinsons medications. Treatment with antipsychotic medication may be appropriate. Monthly re-evaluation of the need for these medications is required.

3. Behaviour that places the resident or others at risk of injury

Safety of all involved in the care of those with dementia is paramount. If the behaviour is likely to result in harm to either the person or others in the environment, short term antipsychotic medication may be necessary, though it is not always effective. Schneider, Dagerman and Insel (2006) found that for every 5 – 14 people treated for aggression associated with dementia over 3 months, only 1 improved with antipsychotics.^{iv} Risperidone is approved in Canada for “short-term symptomatic management of inappropriate behaviour due to aggression and/or psychosis in patients with severe dementia.”^v

It’s crucial to strike a balance between safety and over-sedation when using antipsychotic medication as a chemical restraint. Continue to explore reasons for the behaviour, as well as person-centred and non-pharmacological strategies:

- Agitation can be related to over-stimulation, loneliness, lack of meaningful activity and fatigue etc.
- There may be underlying pain, constipation or medical issues.
- Nursing staff may require additional dementia education such as Supportive Pathways to prevent resistance to personal care.

Many resources are available to prevent and manage responsive behaviours and implement person-centred care alternatives. The AHS Restraint Policy and accompanying Procedures regarding Restraint use in Older Adults/Seniors also provides direction, alternatives and resources to consider.

Please note that the Resident Assessment Instrument (RAI) 2.0 descriptor for appropriate use of antipsychotics measures only the following clinical conditions: schizophrenia; Huntington's chorea, delusions and hallucinations.

Efficacy of Antipsychotic Medications in Dementia

A review of trials with 5,574 participants studied aripiprazole, olanzapine, risperidone and quetiapine. For aggression, only risperidone in a dose of up to 2 mg and olanzapine in a dose of up to 10 mg showed significant benefit. In psychosis, Risperidone in a dose of 1 mg and aripiprazole in a dose of up to 5 mg showed benefit. A significant increase in adverse events was seen versus placebo.^{vi}

However, Karlawish points out that many of these studies are sponsored by drug companies seeking an FDA label and have, by design, limited relevance to clinicians^{vii}. Schmidt et al notes that these trials don't account for the rates of discontinuation of antipsychotics (due to adverse effects), which ranged from 77 to 85% in four study groups.^{viii} Major drug companies have been fined for fraudulent marketing regarding atypical antipsychotic use in dementia.^{ix}

In addition, atypical antipsychotics worsen cognitive function at a magnitude consistent with one year's deterioration compared to placebo.^x

The AGS 2012 Beers Criteria Update Expert Panel, National Institute for Health and Clinical Excellence and Social Care Institute for Excellence have concluded that behaviours associated with dementia should be managed using non-pharmacological means in most circumstances.^{xi}

Steps to Follow when Prescribing Antipsychotics

1. Discuss the treatment plan with the person/family/alternate decision maker and obtain informed consent.

This discussion should be ongoing and prompted by the following events/activities:

- When responsive behaviours or the risk of delirium is first noted
- While assessing responsive behaviours to seek underlying causes
- To plan interventions to prevent or manage responsive behaviours
- In non-urgent situations when antipsychotic medications are being considered as part of the treatment plan.

Include the following in discussions about the initiation or continued use of an antipsychotic medication:

- Potential underlying causes.
- Care approaches that have been tried and the outcome of those interventions
- Potential side effects of antipsychotic medications such as over-sedation, insomnia, weight gain, dizziness, confusion, increased risk of falls, illogical thinking, blurred vision, delirium, constipation, urinary tract infections, rash, nausea and GI upset.^{xii xiii}
- Long term adverse effects: diabetes, severe muscle stiffness accompanied by shuffling gait, restlessness,^{xiv} muscle weakness, drooling and hypersalivation, lip-smacking and tremors.

- Risks of stroke, heart failure, sudden death or infections (mostly pneumonia). Ray et al found a two-fold increase in sudden death to be a dose-related drug effect, and that there was no significant increased risk of sudden death after the antipsychotic was stopped.^{xv}
- Intended treatment goal and potential benefits of treatment
- Review period (e.g. 2-4 weeks to assess benefit and side-effects)

Various family resources as well as staff resources available in the Appropriate Use of Antipsychotics Toolkit may assist with the development of alternative strategies for responsive behaviours.

The AHS consent policy provides direction regarding initiation of treatment in urgent situations (such as a person at risk of harming themselves or others). It directs the prescriber to seek out the family/alternate decision maker as soon as possible. Although documentation of verbal consent is a minimum expectation of the AUA Guideline, sites may elect to introduce written consent for the use of antipsychotic medications.

Determine the person with dementia's capacity to understand the implications of the treatment plan, including the risks and benefits of antipsychotic medications. Guidance for this assessment is found in the [Decision Making Capacity](#) resources. Involve the person to the extent they can participate to support their autonomy.

2. Interprofessional Consultation

Consider involving an available expert in dementia care such as a Geriatric Clinical Nurse Specialist, PIECES trained professional staff, Geriatrician or Nurse Practitioner.

3. Determine Goal of Therapy

It may be unrealistic to aim for complete elimination of the responsive behaviour, recognizing that responsive behaviours may be a significant method of communication for persons with dementia. Discuss the intended goal with the family/alternate decision maker and care team. Document the goal on the health record to guide monitoring and assessment.

4. Start with the Lowest Dose

The smallest recommended dose should be the starting point for any trial of an antipsychotic medication. The BC Best Practice Guideline for Behavioural and Psychological Symptoms of Dementia (BPSD) in Residential Care recommends 0.25 mg of risperidone daily at HS or twice daily, progressing slowly in increments of no more than 0.25 mg to a total daily dose of no more than 1 mg, to reduce the risk of motor and other side effects.^{xvi}

Allow 2 weeks between dose increases due to the very slow elimination of metabolites from the brain. Snoeck et al. measured the half-life of the risperidone metabolite in older adults at 25 hours^{xvii} but this refers to the rate of drug elimination from the plasma, not the brain, where the drug may linger longer.^{xviii} The brain is an especially sensitive drug target in old age; there is a 2-3 times higher rate of adverse drug effects in older adults than in adult patients younger than 30 years.^{xix}

5. Monitor and Evaluate Response to Therapy

Regular monitoring of the responsive behaviour is required, using a behaviour map. Watch for a change in frequency and intensity of the behaviours. Discuss response to treatment with the team and family.

Improvements may be seen up to 6 weeks after initiation of medications. Monitor behaviour for AT LEAST two weeks after initiation or dosage adjustments. If there is no improvement in the behaviour with antipsychotic treatment, discontinue the medication. Regularly re-assess (e.g. monthly) the need for the antipsychotic as behaviours may improve over time (disease progression, delirium resolved, adjustment to new environment, effective person-centred strategies). Behaviours may also worsen with long-term use of antipsychotics.

6. Monitor for adverse effects

If significant side effects develop, reduce dose and/or wean off the medication. A high incidence of serious side effects occurs in geriatric patients on long-term antipsychotic therapy^{xx}, including:

- Increased confusion and agitation, illogical thinking, increased sleepiness, difficulty falling or staying asleep, nervousness and restlessness, seizures, depression
- Difficulty breathing
- Blurred vision
- Drooling and spitting, lip-smacking, grimacing, rapid eye blinking, involuntary movements of the head, face, neck or tongue, rapid movement of the arms or legs
- Falls, tremors, jerky movements, orthostatic hypotension, fainting, reduced activity and mobility, muscle stiffness, shuffling gait, muscle weakness^{xxi}
- Pain in the arms, legs, back or joints
- Swelling of the extremities
- Dehydration, contributing to constipation, dry mouth and delirium
- Difficulty swallowing, nausea, heartburn and stomach pain^{xxii, xxiii}
- Skin rash, hives, dry or discolored skin, blisters, unusual bleeding or bruising
- Difficulty urinating, painful/lingering erection of the penis, breast enlargement or discharge
- Weight gain in the presence of diabetes
- Strokes
- Neuroleptic malignant syndrome: This life-threatening condition usually develops within the first 2 weeks of treatment but may develop at any time during therapy. Symptoms include:
 - Fever
 - Sweating
 - Unstable blood pressure
 - Stupor
 - Muscular rigidity
 - Autonomic Dysfunction

Side effects vary with different antipsychotic medications:

- [Risperidone \(Risperdal\)](#)
- [Quetiapine \(Seroquel\)](#)
- [Olanzapine \(Zyprexa\)](#)

Note that some of the side effects of the medication may be mistaken as a worsening of the responsive behaviour (e.g. restlessness and agitation). Clear descriptors of both the target responsive behaviour and the side effect profile can assist staff to accurately assess the behaviours observed.

7. Taper Treatment when Behaviours Stabilize

Attempt to wean/discontinue these medications (ideally within 3 months^{xxiv}) and continue to address the underlying reasons for the behaviour. There is no safe or approved length of treatment and risk of adverse events increase over time.^{xxv}

The U.K. 2011 Alzheimer's Society Best Practice Guide states that many people "will experience significant improvement or resolution of symptoms over a 4-6 week period" with psychosocial interventions and assessment of medical conditions and pain.^{xxvi}

A 2013 Cochrane review revealed that many older people with Alzheimer's dementia and neuropsychiatric symptoms in dementia can be withdrawn from chronic antipsychotic medication without detrimental effects on their behaviour.^{xxvii} Those who did have rebound aggression had responded well initially to treatment.

Residents who are started on antipsychotics after hours

If an antipsychotic is started after hours, review the following as soon as possible with the attending physician and care team:

- The circumstances that necessitated the order, and if an alternative approach may allow the discontinuation of the medication
- Possible causes of the responsive behaviour, including any required investigations such as blood work
- Medication is at lowest dose and frequency (e.g. prn)
- Intended review period

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^v Atypical Antipsychotic Drugs and Dementia – Advisories, Warnings and Recalls for Health Professionals, 2005 found at <http://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2005/14307a-eng.php> March 2016

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