ANTIPSYCHOTICS IN DEMENTIA

BEST PRACTICE GUIDE
Acknowledgements

This Best Practice Guide is based on clinical recommendations for “The Use of Antipsychotics in Residential Aged Care” published by the Royal Australian and New Zealand College of Psychiatrists (RANZCP), Faculty of Psychiatry of Old Age (New Zealand).

Antipsychotics for Dementia Best Practice Guide

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Introduction

This Best Practice Guide focuses on the rational and safe use of antipsychotics in people with dementia. Their place in therapy for symptoms associated with dementia is very limited and use is short-term for most people.

The focus of this guide is on the treatment of behavioural and psychological symptoms of dementia (BPSD). These prescribing principles are common to all indications for the use of antipsychotics.

This guide is intended as a resource for all those involved in the care of patients with dementia. It reflects the important culture of shared care and decision making involving doctors, nurses, pharmacists, caregivers, relatives and the patient. This multidisciplinary educational resource is supported by additional material on the BPAC web site: www.bpac.org.nz/a4d

Contents

5  Rationale and Key Points
This guide has been produced in response to increasing concerns about the safety and, at times, inappropriate use of antipsychotics in people in residential care facilities, particularly for symptoms associated with dementia.

6  Behavioural and Psychological Symptoms of Dementia (BPSD)
These are the often distressing non-cognitive symptoms of dementia. The term covers a wide range of symptoms and behaviours including wandering, agitation and aggression. BPSD are very common and appropriate management can significantly improve quality of life.

7  Assessment of patients with BPSD
It is important to distinguish dementia from depression or delirium which may co-exist.

If a person with dementia develops distressing non-cognitive symptoms of dementia he or she should be assessed to identify possible contributing factors, triggers or unmet needs.

Specific symptoms and behaviours need to be defined as “target problems” in order to plan the best approach to treatment.

12 Non-pharmacological treatment of BPSD
Non-pharmacological treatment should be trialed initially before considering drug therapy. Interventions should be tailored to the individual and the impact carefully monitored.
13 **Pharmacological treatment of BPSD**
Antipsychotics are only indicated as a "last resort" if aggression, agitation or psychotic symptoms cause severe distress or an immediate risk of harm to the patient or others. Even for these indications they are only moderately effective. Before an antipsychotic is prescribed the benefits and risks of treatment should be assessed.

18 **Adverse effects of antipsychotics**
Both typical and atypical antipsychotics are associated with increased stroke risk and increased overall mortality in people with dementia. They also pose numerous other risks, especially in the elderly. Common side effects include sedation, dizziness, postural hypotension and confusion which can all increase the risk of falls.

19 **Dementia with Lewy Bodies (DLB)**
Typical antipsychotics such as haloperidol can cause dangerous extrapyramidal symptoms in people with DLB. People with Parkinson's disease, Parkinson's-like syndromes and the various dementias associated with these conditions also have an increased sensitivity to the adverse effects of antipsychotic medication. Atypical antipsychotics are also best avoided in these conditions but they may be used cautiously if there are definite indications for their use.

20 **Other medicines for BPSD**
The indications for cholinesterase inhibitors, benzodiazepines and other drugs are very limited.

21 **Treatment of comorbid conditions in patients with dementia.**
In the treatment of comorbid conditions in people with dementia, the potential for drug interactions, adverse reactions and aggravation of the underlying condition must be considered.

23 **Appendix**
Best practice prescribing of antipsychotics for elders in residential care (algorithm)
Rationale for this guide

This guide has been produced in response to increasing concerns about the safety and, at times, inappropriate use of antipsychotics in people in residential care facilities, particularly for symptoms associated with dementia.

Traditionally, the medicines most often used for these indications were the older or conventional (“typical”) antipsychotics such as haloperidol, chlorpromazine and thioridazine. In the 1990s the newer, atypical antipsychotics (e.g. risperidone, olanzapine) were introduced. These became widely prescribed because they were considered less likely to cause adverse reactions resembling symptoms of Parkinson’s disease (extrapyramidal effects). Research reports indicate that atypical antipsychotics are effective for some of the BPSD but that they are also associated with some potentially serious adverse outcomes.

In 2004 the UK Committee on the Safety of Medicines issued a warning that atypical antipsychotics were associated with an increased risk of stroke in people with dementia and advised against their use in that setting. In 2005 the US Food and Drug Administration warned of an increased risk of death in people with dementia treated with atypical antipsychotics. However, subsequent research has indicated that for people with dementia, typical antipsychotics may be at least as strongly associated with these adverse events as atypical antipsychotics.

It is now generally accepted that all antipsychotics, whether typical or atypical, are associated with increased morbidity and mortality in people with dementia. Two recent international communications, an All Party Parliamentary Report from the UK\(^1\) and a directive from the Food and Drug Administration in the USA\(^2\) have corroborated the need to review prescribing practices for these medicines. Both reports emphasise the limited value of antipsychotics for BPSD and the requirement for a careful benefit:risk analysis before prescribing.

In addition to safety issues there are significant concerns in society, shared by some doctors and organisations such as Alzheimer’s disease associations, that antipsychotics and similar medications are being over-prescribed to people with dementia as an inappropriate first-line means of achieving behavioural control.

Summary

- Most BPSD are transient and respond to non-pharmacological treatment which should be trialled before drug treatment is considered
- Antipsychotics are not effective in treating most BPSD and they are reserved for specific indications after careful consideration of the risks and benefits of treatment.
- Antipsychotics are only indicated as a “last resort” if aggression, agitation or psychotic symptoms cause severe distress or an immediate risk of harm to the patient or others. Even for these indications they are only moderately effective.
All antipsychotics are associated with increased morbidity and mortality in people with dementia. During treatment closely monitor all patients for adverse effects.

Antipsychotics should only be prescribed for specific problem behaviours and the response to treatment should be closely monitored. If treatment is ineffective the antipsychotic should be withdrawn.

### Behavioural and Psychological Symptoms of Dementia

Behavioural and psychological symptoms of dementia are usually transient and often respond to simple changes in the environment or removal of an aggravating factor.

**What are BPSD?**

Behavioural and psychological symptoms of dementia (BPSD) refer to the often distressing non-cognitive symptoms of dementia and include agitation and aggressive behaviour. BPSD have been defined as symptoms of disturbed perception, thought content, mood or behaviour, frequently occurring in patients with dementia. Other common terms in use for these symptoms include neuropsychiatric symptoms of dementia, behaviour that challenges or non-cognitive symptoms of dementia.

The spectrum of BPSD includes: (Adapted from)

- Aggression
- Agitation or restlessness; screaming
- Anxiety
- Depression
- Psychosis, delusions, hallucinations
- Repetitive vocalisation, cursing and swearing
- Sleep disturbance
- Shadowing (following the carer closely)
- Sundowning (behaviour worsens after 5pm)
- Wandering
- Non-specific behaviour disturbance e.g. hoarding
How common are BPSD?

BPSD of varying degrees of severity are present in more than 80% of patients with dementia. An estimate of the prevalence of BPSD in the community comes from the USA Cache County Study. This study reported that 61% of patients had one or more BPSD and in over half of these cases the symptoms were rated as severe. The most common individual symptoms were apathy 27%, depression 20%, irritability 20%, aggression/agitation 24% and delusions 19%.

These symptoms may also be responsible for more institutionalisation, caregiver stress and use of health care resources than cognitive symptoms. As there is no cure for dementia, the appropriate treatment of BPSD can have a significant impact on the quality of life of both patient and caregiver.

It is poorly recognised that BPSD are usually transient and often respond to simple changes in the environment or removal of an aggravating factor.

Assessment of patients with BPSD

Differential Diagnosis

It is often useful to take a step back to ascertain if the person actually has a confirmed diagnosis of dementia, because several conditions can present with dementia-like symptoms. It is important to distinguish dementia from depression or delirium. These three conditions (sometimes referred to as the 3Ds) often co-exist but severe depression can present as a dementia-like illness (pseudodementia) and delirium can be caused by infections, drug toxicity, alcohol withdrawal and metabolic disturbances. Differential features of the 3Ds are presented in Table 1 but there is considerable overlap. The important issue is to attempt to identify the symptoms of depression or delirium, as distinct from dementia, in order to select the appropriate treatment, which may involve the removal of a precipitating factor.

Examples:

A person with dementia presents with a sudden onset of worsening confusion and delirium.

Rule out underlying infection (e.g. UTI) or medicines’ adverse effects, especially anticholinergic. It is important to consider all medicines that could be contributing anticholinergic effects and causing confusion (e.g. amitriptyline, ranitidine, diuretics).
Table 1. Some differential features of the 3Ds; Delirium; Depression and Dementia

<table>
<thead>
<tr>
<th>Feature</th>
<th>Delirium</th>
<th>Dementia</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onset</td>
<td>Usually sudden. Often at twilight.</td>
<td>Chronic and generally insidious.</td>
<td>Often abrupt and coinciding with life changes.</td>
</tr>
<tr>
<td>Duration</td>
<td>Hours to &lt; one month. Rarely longer</td>
<td>Months to years.</td>
<td>Months to years.</td>
</tr>
<tr>
<td>Progression</td>
<td>Abrupt</td>
<td>Slow but even</td>
<td>Variable and uneven</td>
</tr>
<tr>
<td>Memory</td>
<td>Impaired. Sudden *immediate memory loss may be noticeable.</td>
<td>Impaired</td>
<td>Selective or patchy</td>
</tr>
<tr>
<td>Thinking</td>
<td>Disorganised, slow, incoherent.</td>
<td>Scarcity of thought, poor judgement; words hard to find.</td>
<td>Intact with themes of hopelessness.</td>
</tr>
<tr>
<td>Sleep</td>
<td>Nocturnal confusion.</td>
<td>Often disturbed; nocturnal wandering</td>
<td>Early morning wakening.</td>
</tr>
<tr>
<td>Awareness</td>
<td>Reduced</td>
<td>Clear</td>
<td>Clear</td>
</tr>
<tr>
<td>Alertness</td>
<td>Fluctuates; lethargic or hypervigilant</td>
<td>Generally normal</td>
<td>Normal</td>
</tr>
<tr>
<td>Attention</td>
<td>Impaired, fluctuates</td>
<td>Generally normal</td>
<td>Minimal impairment but easily distracted.</td>
</tr>
</tbody>
</table>

Adapted from NZGG, 1997

*Memory, Immediate – The ability to recall numbers, pictures, or words immediately following presentation. Patients with immediate memory problems have difficulty learning new tasks because they cannot remember instructions. Relies upon concentration and attention.

Examples (continued):

An elderly man presents with dementia-like symptoms following the death of his partner of 60 years. He also has a previous history of depressive illness.

Carefully assess the person for depression before considering a diagnosis of dementia.

Consider contributing factors or triggers

If a person with dementia develops distressing non-cognitive symptoms of dementia they should be assessed to identify possible contributing factors, triggers or unmet needs. (Refer also to Table 2 and Table 3)
Assessment includes:

- Physical health
- Unrecognised or sub-optimally treated pain or discomfort
- Side effects of medication (e.g. constipation, confusion)
- Psychosocial factors
- Physical environmental factors
- Depression
- Behavioural and functional relationships with carers and care workers

Removal, treatment or modification of these factors may reduce or resolve non-cognitive symptoms.
### Table 3. Factors that may contribute to or worsen BPSD

<table>
<thead>
<tr>
<th>Factor</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrecognised infections</td>
<td>Especially urinary tract infections</td>
</tr>
<tr>
<td>Medication regimen</td>
<td>Check for drugs that may cause or aggravate symptoms (see Table 2)</td>
</tr>
<tr>
<td>Electrolyte disturbances</td>
<td>Hyponatraemia and dehydration may cause confusion/delirium. Can be drug induced e.g. antidepressants, diuretics.</td>
</tr>
<tr>
<td>Constipation</td>
<td>Pain and discomfort due to untreated constipation may cause distress. Check underlying cause including drugs.</td>
</tr>
<tr>
<td>Pain</td>
<td>Unrecognised or untreated pain is common in the elderly and is often difficult to identify and assess in a person with dementia.</td>
</tr>
<tr>
<td>Hearing or vision problems</td>
<td>Make regular assessment of sensory function</td>
</tr>
<tr>
<td>Environmental factors</td>
<td>Noise, poor lighting, frustration finding facilities (e.g.toilet/bathroom) can cause distress</td>
</tr>
<tr>
<td>Co-morbid psychiatric diagnoses</td>
<td>E.g. depression, anxiety</td>
</tr>
</tbody>
</table>

### Table 4  Common target problems and behaviours observed in elderly people in residential care.

- calling out
- aggression
- agitation
- hallucinations and illusions
- delusions
- wandering
- depression
- elevated mood
- “sundowning”
- extreme anxiety
- resistance or unease towards carers
- intrusive behaviours
- inappropriate sexual behaviour
- inappropriate urination or defaecation
- other inappropriate social behaviours
- day / night reversal
- insomnia
- apathy / motivational failure

(adapted from RANZCP Clinical Recommendations, 2008)
Identify target problems.

There are a host of different challenging behaviours and symptoms that may present in association with various mental illnesses in people living in residential care (Table 4).

Frequently people may exhibit a combination of these behaviours. As different behaviours are often best approached using different non-pharmacological or pharmacological methods, it is critical for health professionals to first decide which behaviours are being targeted. Identifying target behaviours also allows the response to treatment to be monitored. Rating scales may be employed to identify and quantify behaviours and the response to treatment.

Specific symptoms and behaviours need to be defined as “target problems” in order to plan the best approach to treatment.

Record the target problems and the response to treatment clearly in the patient’s notes.

Formulating the target problem

**Why is the challenging behaviour or symptom occurring?**

Challenging behaviours and symptoms occurring in people in residential care are associated with suffering and can have serious consequences. It is important to try to understand why a particular symptom or behaviour is being experienced by a particular person at that particular time. This is called “formulating the problem”.

It is useful to consider the problem as an expression of unmet need – a communication that challenges others to understand.

It is then possible to ask if care staff, family or health professionals can assist the person to meet their particular need in a more appropriate or healthy way. For example, is their call for attention an expression of pain, boredom, sadness, anxiety or loneliness?
Non-pharmacological treatment of BPSD

Non-pharmacological treatment should be trialled initially before considering drug therapy. Non-pharmacological interventions should be tailored to the individual and the impact carefully monitored. A balance is necessary as excessive stimulation or over-activity may be counterproductive.

Most recommendations are based on best practice guidelines and institutional experience of what has been shown to work. A systematic literature review has provided evidence to support the effectiveness of activity programmes such as music, behaviour therapy and changes to the physical environment.9

Changes in environment can have a positive impact on symptoms of BPSD

People with dementia have memory and cognitive impairment, and problems in the design and configuration of residential facilities can cause or exacerbate restlessness, frustration, anxiety and disorientation. Simple changes in the environment can be beneficial. These include:

- Moderating noise and other levels of stimulation
- Increasing signage and access to toilets
- Ensuring the surroundings are well lit
- Improving time orientation (e.g. prominent calendar/clock)
- Making the environment as “homelike” and reassuring as possible
- Separating non-cognitively impaired residents from people with dementia
- Small scale group living
- Any measure to reduce stress levels
- If possible, consistency of staff and caregivers.

(adapted from SIGN, 2006)

Recreational activities may enhance quality of life and well being

Activities such as art, music, crafts, cooking, games and interaction with pets stimulate the person with dementia to become involved in a meaningful and enjoyable activity. Involvement in recreation may improve communication and self esteem.

Some useful activities for the management of BPSD

- Exercise
- Gardening
- Music
• Art
• Pet therapy
• Walking
• Group activities e.g. singing or craft
• Maintaining routine

Behavior management may improve symptoms of depression

Behaviour management is defined as a structured intervention usually carried out by caregivers under the supervision of a professional with expertise in this area. This might involve removing rewards for attention seeking behaviour or giving rewards for increased social activity. Behavioural management, involving pleasant events or problem solving, has been shown to improve symptoms of depression in people with dementia.

Pharmacological treatment of BPSD

Summary Points

• Antipsychotics have limited clinical effectiveness for most features of BPSD.
• Before an antipsychotic is prescribed the benefits and risks of treatment should be assessed. People must have the opportunity to make informed decisions about their care and treatment.
• An antipsychotic is only indicated if aggression, agitation or psychotic symptoms cause severe distress or an immediate risk of harm to the patient or others.
• Pharmacological treatment should be aimed at the modification of clearly identified and documented target behaviours.
• If a trial of one antipsychotic is ineffective another agent can be tried. Risperidone is often the first choice due to the lower risk of extrapyramidal effects especially with longer term treatment. Haloperidol may be useful for short-term treatment of delirium or psychoses associated with BPSD.
• Any medication that is given as required (PRN) needs to have a specific indication with a maximum dose. Treatment should be monitored and stopped as soon as possible.
• There is little evidence to support the use of drugs other than antipsychotics in the treatment of BPSD. Cholinesterase inhibitors (not funded) may be considered if antipsychotics are inappropriate or ineffective.
Avoid haloperidol and other typical antipsychotics in people with dementia with Lewy bodies and similar conditions. Quetiapine or risperidone may be tried cautiously.

Concurrent non-pharmacological measures should be employed along with drug treatment.

Start with the lowest possible dose, and if a dose increase is necessary titrate slowly to effect.

Regularly review the patient for clinical response and adverse effects.

Review the need for ongoing treatment with an antipsychotic after three months and regularly afterwards. Consider withdrawing the antipsychotic as symptoms may not recur.

Review the continued requirement for an antipsychotic if a person arrives in residential care already taking maintenance treatment.

**Indications for antipsychotics**

As described previously, BPSD refers to a spectrum of quite diverse symptoms which cannot be placed under the same treatment umbrella. The important message is that antipsychotics are not effective for all BPSD.

There is some evidence that typical (e.g. haloperidol) and atypical (e.g. risperidone, quetiapine) antipsychotics are effective for psychotic symptoms (e.g. delusions or hallucinations) associated with dementia, or for people who are aggressive or agitated without psychoses.

An antipsychotic is only indicated if aggression, agitation or psychotic symptoms cause severe distress or an immediate risk of harm to the patient or others. Unless immediate drug treatment is required, standard non-pharmacological measures should be tried first. A trial of drug treatment should be viewed as a short term strategy and reviewed at least every three months.

At best, the effectiveness of antipsychotics for BPSD is modest. For example, data from placebo-controlled trials involving risperidone and olanzapine suggest that 5 – 14 people need to be treated for 12 weeks for one additional person to show significant improvement in aggressive symptoms associated with dementia.¹¹

Symptoms that do not usually respond to an antipsychotic include wandering, social withdrawal, shouting, pacing, touching, cognitive defects and incontinence.¹² These symptoms may respond to interventions such as subtle changes to the environment.

It is important to realise that psychotic symptoms may be present without causing concern to the person or other people, and in this setting close observation and non-pharmacological management are appropriate.
Drug selection

Most experience is with haloperidol and risperidone and they do not differ significantly in clinical effectiveness. At low doses, and in short term use, there are no appreciable differences in extrapyramidal effects, but haloperidol is associated with greater risk of tardive dyskinesia.

Haloperidol is often suitable for the acute and short term treatment of delirium and the appropriate symptoms of BPSD, but for longer term treatment an atypical agent such as risperidone is preferred. However, it should be recognised that risperidone behaves like a typical antipsychotic at higher doses, with the associated increased risk of extrapyramidal effects. This emphasises the need to keep the dose as low as possible.

Olanzapine offers no clinical advantage over the other antipsychotics used for BPSD and has anticholinergic properties that can be particularly problematic in this population. It is often associated with rapid and significant weight gain.

Quetiapine appears to be increasingly widely used in elderly people but there is little evidence to support its effectiveness in BPSD and it can cause significant postural hypotension and sedation. It does not have an indication in New Zealand for the treatment of symptoms associated with dementia.

Consent to treatment

All residential care facilities should have clear policies and procedures for gaining and recording consent to treatment with any medicine, including antipsychotics. People should have the opportunity to make informed decisions about their care and treatment. When the person lacks competency to decide upon their own treatment, those involved should be given the relevant information in a form that they can understand. This ensures that the risks and benefits of potential treatments are clearly understood. The potential for stroke and increased risk of death should be discussed when these medicines are used in the context of dementia.

Start low and go slow

If a trial of antipsychotic treatment is considered necessary the starting dose should be as low as possible. This is particularly important for those people who are older, frail, cognitively impaired, or who carry a specific significant risk that the antipsychotic may increase, such as falling. The starting dose can be divided or timed according to the behaviour, for example a lunchtime dose for those patients exhibiting increased agitation towards the end of the day (“sundowning”).

Dose increments should be modest and occur at no less than weekly intervals depending on response. Prior to starting a treatment trial, it is advisable to estimate what will constitute a worthwhile clinical response, the duration
of treatment and the maximum dose. Avoid high doses or prolonged use of antipsychotics that have not significantly improved the target behaviour.

Recommended starting and maintenance doses are given in Table 5. Information on a complete range of potentially useful treatments is available from the RANZCP clinical recommendations.

Table 5. Recommended starting and maintenance doses for antipsychotics in the treatment of BPSD

<table>
<thead>
<tr>
<th>Drug</th>
<th>Initial Daily Dose</th>
<th>Maximum Daily Maintenance Dose</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haloperidol</td>
<td>0.25mg</td>
<td>Up to 2 mg twice daily.</td>
<td>Initial dose of 0.5 mg can be given at night</td>
</tr>
<tr>
<td>Risperidone</td>
<td>0.25- 0.5 mg</td>
<td>2 mg</td>
<td>In 1 or 2 divided doses</td>
</tr>
<tr>
<td>*Olanzapine</td>
<td>2.5 mg</td>
<td>10 mg</td>
<td>In 1 or 2 divided doses</td>
</tr>
<tr>
<td>*Quetiapine</td>
<td>12.5 mg</td>
<td>100 mg</td>
<td>Needs divided dosing</td>
</tr>
</tbody>
</table>

* Not approved in NZ for dementia related psychoses.

**Maintenance**

Treatment with an antipsychotic should be considered a trial to establish whether there is a reduction in the intensity and/or frequency of target behaviours. Carers must know what key side effects to monitor during treatment initiation and maintenance. Changing to an alternative strategy is preferable to ongoing dose increases which will only tend to worsen adverse effects.

Maintenance treatment may be appropriate for those who have demonstrated a clear benefit from antipsychotic treatment without undue adverse effects, and where a trial dose reduction has resulted in reappearance of the target problem. A formal monitoring plan to assess changes in response and the significance of adverse effects should be in place. The prescriber should review the target behaviour, changes in function and significance of adverse effects at least every three months.13

**Monitoring**

There should be routine monitoring for adverse effects such as constipation, sedation, postural hypotension and extrapyramidal side effects. Additional monitoring may be appropriate, e.g. blood glucose with olanzapine.
Withdrawal

BPSD are often temporary, so if symptoms are stable, gradual dose reduction and eventual withdrawal can be tried every three months. Studies have reported that most patients who are taken off an antipsychotic for treatment of BPSD showed no worsening of behavioural symptoms.14,15

Withdrawal of antipsychotics should be done gradually, e.g. by reducing the dose by 50% every two weeks then stopping after two weeks on the minimum dose, with monitoring for recurrence of target symptoms or behaviours or emergence of new ones.

The longer a medication has been prescribed, the slower the withdrawal, this will lessen the possibility of symptoms emerging related to drug withdrawal.

Challenging behaviours or symptoms may persist over time and not everyone on antipsychotics should have their medication changed or stopped. Reasons for continuing antipsychotics include:

- An assessment of high risk of adverse consequences if they are withdrawn, especially if treatment has only been partially effective or prior relapses have occurred.
- When the consequences of symptom relapse are deemed to be unacceptably severe.
- When no alternative treatment approaches have been possible or effective in the past.

Decisions to continue antipsychotics should be documented including the risks and benefits.

So did it work?
Prescribers should decide exactly what is being treated plus a time frame for review. Then they should answer the simple question “so did it work?” after discussion with nurses, the patient or carers where appropriate.
Antipsychotics in dementia

Adverse Effects of antipsychotics

Antipsychotics are associated with serious safety concerns and long term adverse effects. In March 2004, the Committee on Safety of Medicines (CSM) in the UK advised that olanzapine and risperidone should not be used for the treatment of BPSD, as there was clear evidence of an increased risk of stroke in elderly patients with dementia. The risk was considered to be sufficiently high to outweigh any likely benefits of treatment.

A subsequent analysis of four placebo-controlled trials in elderly patients with dementia found a three-fold increase in the risk of stroke or transient ischaemic attack (TIA) with risperidone. The CSM then advised that risperidone should be limited to short-term use for acute psychotic symptoms associated with dementia and only under specialist advice. It was recommended that patients already being treated with atypical antipsychotics have their treatment reviewed.

Atypical antipsychotics have also been associated with an increased death rate compared with placebo. A review by the European Pharmacovigilance Working Party concluded that the risk of cerebrovascular events associated with other antipsychotics, was not significantly different from that of olanzapine and risperidone. They advised including a warning about a possible risk of these events in the prescribing information for all typical and atypical antipsychotics.

The current evidence indicates that both typical and atypical antipsychotics are associated with increased risk of stroke and mortality in people with dementia.

All antipsychotics pose numerous other risks especially in the elderly. Common adverse side effects include sedation, dizziness, postural hypotension and confusion which can all increase the risk of falls. The anticholinergic properties of antipsychotics can worsen cognition or cause delirium. Many of these effects can be worsened by interactions with other medicines and co-morbid conditions.

Dose-related effects (Table 6) are immediately apparent and can be minimised by keeping the dose as low as possible.

Table 6. Common Dose Related Adverse Effects of Antipsychotics.

<table>
<thead>
<tr>
<th>Adverse antipsychotic side effect</th>
<th>Result</th>
<th>Potential aggravating factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticholinergic effects; reduced GI motility</td>
<td>Constipation, urinary retention</td>
<td>Other drugs with anticholinergic effects (e.g. tricyclic antidepressants), opioid analgesics</td>
</tr>
<tr>
<td>Postural hypotension.</td>
<td>Increased accident and fall risk</td>
<td>Antihypertensives Hyponatraemia (diuretics, SSRIs)</td>
</tr>
<tr>
<td>CNS depression</td>
<td>Sedation, drowsiness</td>
<td>Hypnotics (e.g. benzodiazepines), opioids, antihistamines, antidepressants</td>
</tr>
<tr>
<td></td>
<td>Increased confusion or cognitive impairment</td>
<td>Other psychotropics</td>
</tr>
</tbody>
</table>
Dementia with Lewy Bodies (DLB) is present in about 10% of people with dementia. It is diagnosed as dementia along with any two of the following symptoms: complex visual hallucinations, fluctuating cognitive impairment or spontaneous Parkinsonism (NPS, 2007).

Typical antipsychotics such as haloperidol can cause dangerous extrapyramidal symptoms in people with DLB and there is also an increased risk of neuroleptic malignant syndrome. People with Parkinson’s disease, Parkinson’s-like syndromes and the various dementias associated with these conditions also have an increased sensitivity to the adverse effects of antipsychotic medication.

Atypical antipsychotics are also best avoided in these conditions but they may be used cautiously if there are definite indications for their use. There is evidence supporting the role of clozapine for the treatment of psychotic symptoms in DLB but a prescription by a specialist psychiatrist is required. There is less evidence supporting quetiapine, but the lesser concerns about adverse effects and easier access to quetiapine, often means this is the preferred medication. Low doses and considerable caution are required and specialist advice should be sought sooner rather than later, especially if dopaminergic medicines (e.g. medicines for Parkinson’s Disease) are also being used. Risperidone has also been suggested as suitable treatment by some authorities. Olanzapine, ziprasidone and aripiprazole should not be used without specialist advice. Injectable antipsychotics should never be used for people with DLB.

A particular primary care role may be coordinating communication between neurology / geriatric care and psychiatric care to ensure potentially dangerous treatment decisions are not made in isolation by one part of the secondary care service.
Other medicines for BPSD

Cholinesterase inhibitors
Cholinesterase inhibitors (e.g. donepezil, rivastigmine, galantamine) may be considered for the treatment of psychotic symptoms, agitation or aggression if a non-pharmacological approach is inappropriate or has been ineffective, and antipsychotics are inappropriate or have been ineffective.\(^{13}\)

Benzodiazepines (e.g. diazepam, lorazepam) and zopiclone
Generally these should be avoided as they can increase confusion, impair cognition and gait and cause sedation. The risk of a fall may be increased especially if combined with other medicines that cause sedation or postural hypotension. Benzodiazepines cause disinhibition and have the potential to worsen behavioural disturbances. If a benzodiazepine is considered necessary for severe agitation this should be reviewed and preferably stopped after a maximum of two weeks.\(^3\) Zopiclone may also be useful but carries the same prescribing precautions as the benzodiazepines. A meta-analysis of sedative use in older people with insomnia showed that the experience of an adverse effect was about twice as likely as an improvement in sleep quality.\(^{19}\)

Anticonvulsants
Sodium valproate and carbamazepine have been used for agitated behaviour associated with dementia but the supporting evidence is very weak. Both have a significant potential for serious adverse effects and drug interactions and are not generally recommended.
Treatment of comorbid conditions in patients with dementia.

In the treatment of comorbid conditions in people with dementia, the potential for drug interactions, adverse reactions and aggravation of the underlying condition must be considered. For example if a person on an antipsychotic for BPSD requires an opioid analgesic there will be an increased risk of sedation, dizziness and falls.

Symptoms of depression and anxiety are common in people with dementia and are sometimes difficult to distinguish. Clinical depression or anxiety requires treatment but drug selection requires careful consideration of possible adverse effects and drug interactions. Most antidepressants are effective for depressive and anxiety disorders, and choice should be based on safety profile as there is little evidence of the effectiveness of individual agents in people with dementia.

An SSRI (e.g. citalopram, paroxetine or fluoxetine) is preferred as they have less troublesome anticholinergic side effects (urinary retention, constipation, delirium) than tricyclic antidepressants such as amitriptyline or nortriptyline. The latter can also cause postural hypotension and sedation which may increase the risk of falls.

It should be noted that all antidepressants can cause hyponatraemia, especially in the elderly, and it is advisable to check the serum sodium periodically during the first few months of treatment. Increasing confusion is a common symptom of hyponatraemia in the elderly and diuretics may increase the risk.
References.


Appendix: Best practice prescribing of antipsychotics for elders in residential care (algorithm)

These recommendations represent the expert opinion and evidence-based knowledge of the RANZCP Faculty of Psychiatry of Old Age (New Zealand). Published clinical trial evidence relating to this area of prescribing is sometimes sparse, preliminary or even non-existent in respect of many of the issues covered. Pooled clinical expertise, relevant international guidelines and peer-reviewed research literature have been critical to developing these recommendations. The algorithm below summarises these recommendations.

Work on developing a shared culture of care that supports best-practice antipsychotic prescribing.

Identify the target problem. Record intensity, frequency and consequences.

Set a realistic treatment aim

Formulate the target problem

Manage any contributing medical or psychiatric conditions

Decide whether or not to trial an antipsychotic:
- Is the target problem likely to respond?
- Is the acuity high enough (in terms of suffering and risk)?
- Do the likely benefits outweigh the risks?
- Is non-pharmacological management effective on its own?

Initiate an antipsychotic trial:
- Choose an appropriate antipsychotic based on the person’s side effect risk profile
- Decide on the target dose and length of trial
- Educate staff on side effects of concern
- Decide on a monitoring plan

Gain appropriate consent given the circumstances

Titrate medicine up to target dose for length of treatment trial unless side effects or effectiveness occur earlier

Formally evaluate the trialled management

Initiate non-pharmacological management
- specific
- general
Continue in parallel with any pharmacological treatment.

Continue the medication and non-pharmacological approaches with regular review and consideration of dose adjustment and cessation

Carefully withdraw treatment and reconsider the problem and its management