Australian Government
Department of Veterans' Affairs

Veterans' MATES

Therapeutic Brief

www.veteransmates.net.au

August 2016

Antipsychotic use in BPSD: limited benefits, high risks

Behavioural and psychological symptoms of dementia (BPSD), often referred to as 'behaviours of concern', are common in people with dementia.[1-3] They can be distressing and difficult to manage.

Common behaviours of concern that respond poorly to treatment with an antipsychotic include verbal disruptions, disinhibited behaviours, wandering, pacing, sleep disturbances and repetitive behaviours.[1, 3] Despite their limited benefits and potential to cause significant harm, antipsychotics are being used for these wider behaviours of concern. An antipsychotic is only indicated for psychotic symptoms or severe and persistent agitation or aggression that is unresponsive to non-pharmacological interventions in people with Alzheimer's dementia.[3-7]

Debilitating effects of antipsychotic use can include increased sedation and confusion, cognitive decline, constipation, urinary retention, hypotension and extrapyramidal effects including parkinsonism.[8] Older people with dementia are particularly at an increased risk of falls and hip fracture, pneumonia, transient ischaemic attacks and stroke.[8-11] Antipsychotic use is also associated with an increased risk of death with long-term use in people with dementia.[10]

This therapeutic brief highlights the importance of:

- addressing environmental, physical and psychosocial factors to reduce BPSD before considering an antipsychotic
- initiating an antipsychotic only in select patients after a risk/benefit analysis has been undertaken and
- limiting the duration of an antipsychotic, with a plan to cease as soon as is clinically appropriate.

The Therapeutic Goods Administration, in August 2015, limited the indication of risperidone to 'treatment up to 12 weeks of psychotic symptoms, or persistent agitation or aggression unresponsive to non-pharmacological approaches in people with moderate to severe dementia of the Alzheimer's type' because of the increased risk of cerebrovascular adverse events, especially in patients with vascular or mixed dementia. Risperidone is no longer indicated for vascular or mixed dementia.[4] None of the other antipsychotics have indications for use in dementia.[8]

Inside

Key points

- Personalise care and utilise non-pharmacological approaches to prevent or minimise BPSD
- Avoid using an antipsychotic as a first-line treatment for BPSD except in circumstances of severe distress or risk of self-harm
- Consider each person's individual circumstances, including risks in relation to benefits, before prescribing an antipsychotic for BPSD
- In consultation with your patient (if possible), family, carers and staff establish a safe way to taper and cease the antipsychotic

Ways to manage behaviours of concern

Behaviours of concern are often provoked by unmet needs such as inadequate pain relief or an unrecognised urinary tract infection and a continuing decline in cognitive function.[1] Some medicines can at times worsen behaviours and increase or cause a range of adverse effects.[3]

Behaviours may be intermittent and resolve spontaneously or worsen as the disease progresses, and any intervention may only partially reduce the frequency or impact of the behaviours of concern.[1, 3, 12] Watchful waiting and simple non-pharmacological interventions, including music, massage and touch or reminiscence therapy may be effective if the behaviour is not particularly problematic and there is no underlying treatable cause.[2, 13]

A comprehensive medical assessment and early identification of environmental, physical and psychosocial factors can often be more useful than pharmacological interventions in reducing BPSD.[14] Working closely with carers, family and staff will help you to better understand the patient, their behaviours and care environment.[1, 14]

Before trialling an antipsychotic

If you suspect pain as a contributing factor to BPSD, consider a trial of regular paracetamol, 1g given orally three to four times a day (maximum dose of 4g a day).[15]

To diffuse an acute and distressing episode of anxiety or agitation where there is no underlying treatable cause and non-pharmacological interventions have failed, consider a benzodiazepine, for example oxazepam 7.5mg to 15mg, given orally as a single dose or up to three times in 24 hours.[15,16] Always limit use to less than two weeks and monitor closely as benzodiazepines can exacerbate cognitive impairment and increase the risk of falls in older people.[16]

Encourage personalised care

- Putting interventions in place that are related to your patient's social history, work life, hobbies, family and friends, environment, religious beliefs, and likes and dislikes can often help minimise difficult behaviours.[2, 13]

Review your patient's medicines

- Sometimes BPSD can be made worse by medicines in older people.[3] Commonly dispensed medicines that can have a negative impact on emotional and cognitive function include those with anticholinergic properties.[2, 3] These effects may be exacerbated in a person with dementia.[3] For a list of medicines with anticholinergic properties, go to: www.veteransmates.net.au/TB_anticholinergic
- A Home Medicines Review or a Residential Medication Management Review (if your patient is a resident in an aged-care facility) by an accredited pharmacist can be useful.

Conduct a medical assessment

- An abrupt appearance of BPSD might be triggered by a physical problem while persistent and long standing symptoms might be linked to depression or anxiety.[13] Common causes of agitation and aggression include pain (up to 79% of residents in aged-care facilities reportedly experience chronic pain),[17] respiratory or urinary tract infections, dehydration, constipation or faecal impaction, urinary retention or malnourishment.[13]

Note: do not use antimicrobials to treat bacteriuria in older people where there are no specific urinary tract symptoms as they are not effective and contribute to antibiotic resistance.[18]

Rule out delirium

- Consider delirium in your older patient with new or worsening confusion or behavioural change. Diagnosis and treatment of delirium is crucial as it can significantly impact on the health of your patient and limit the effectiveness of any management strategies instigated to reduce BPSD.[3] Common causes of delirium in the elderly include skin, respiratory or urinary tract infections, hypnotics and a high anticholinergic drug load often caused by the administration of more than one medicine with anticholinergic effects.[2] For advice on how to reduce the anticholinergic load, go to: www.veteransmates.net.au/TB_anticholinergic

Recognise triggers and early signs and symptoms

Look for:

- discomfort or boredom
- stressful situations or mood disturbances
- patterns of behaviour, for example, the time of day, frequency, duration and onset of symptoms
- abuse or neglect.[14]

Other factors that can contribute to BPSD include a mismatch between your patient and their environment.[3] Sometimes a change in their carers' actions or the environment can result in substantial improvement in your patient's behaviour.[2] A change may be as simple as ensuring privacy for someone when they are changing their clothes, showering in the evening instead of the morning or having assistive clothing for people with incontinence problems. Refer to the insert of the Carers brochure to find out how writing practical tips down can help carers and staff working with people who have dementia. This form is based on the TOP5 program which encourages health professionals to engage with carers asking them to record their top five strategies to help personalise care and improve communication between the

patient, their carers and the healthcare team. TOP5 was implemented and evaluated in 21 NSW hospitals with results indicating clinicians had increased confidence in caring for patients with dementia, carers were more satisfied and felt the program had benefited the patient and there was evidence of a reduction in the use of physical and chemical restraint.[19]

For further information about TOP5 go to: www.cec.health.nsw.gov.au/improve-quality/teamwork-culture-pcc/person-centred-care/dementia-care

The majority of people with dementia live in the community. Approximately 70% are currently managed in their homes, many with support from family, friends or formal carers. Of those living at home, an estimated 20% live alone.[20] Refer your patient with dementia living at home to the *Aged Care Assessment Team (ACAT)* for an assessment of their home environment and their physical, emotional and social needs. ACAT (or ACAS in Victoria) is a free Australian national government funded service that can be accessed at: www.agedcareguide.com.au/acats

The Dementia Behaviour Management Advisory Services (DBMAS) is a free Australian government funded dementia care service that covers acute and primary care settings and assists carers and healthcare professionals to manage people with BPSD.

To make a referral to DBMAS, contact the helpline on 1800 699 799 (24 hours a day) or access the website at: www.dementia.com.au/

GP and residential aged-care facility (RACF) staff resources for the assessment and management of BPSD

- ReBOC: Reducing Behaviours of Concern. A Hands on Guide available at: www.dementia.com.au/resources/library
- The Clinician's Field Guide to Good Practice: Managing Behavioural and Psychological Symptoms of Dementia available at: www.dementia.com.au/resources/library
- NHMRC Clinical Practice Guidelines and Principles of Care for People with Dementia available at: https://cdpc.sydney.edu.au/research/clinical-guidelines-for-dementia/

Use non-pharmacological interventions for behaviours of concern

Non-pharmacological interventions, tailored to your patient's needs, tend to be the most effective in minimising BPSD, and are recommended as first line treatments where possible.[14] Use non-pharmacological interventions even when using medicines to treat BPSD.

Interventions that are most successful in reducing difficult behaviours include those that involve multiple components, engage the person and are tailored to their abilities and preferences.[14, 21]

All interventions listed in Table 1 demonstrated some beneficial effects in reducing BPSD.[14, 22]

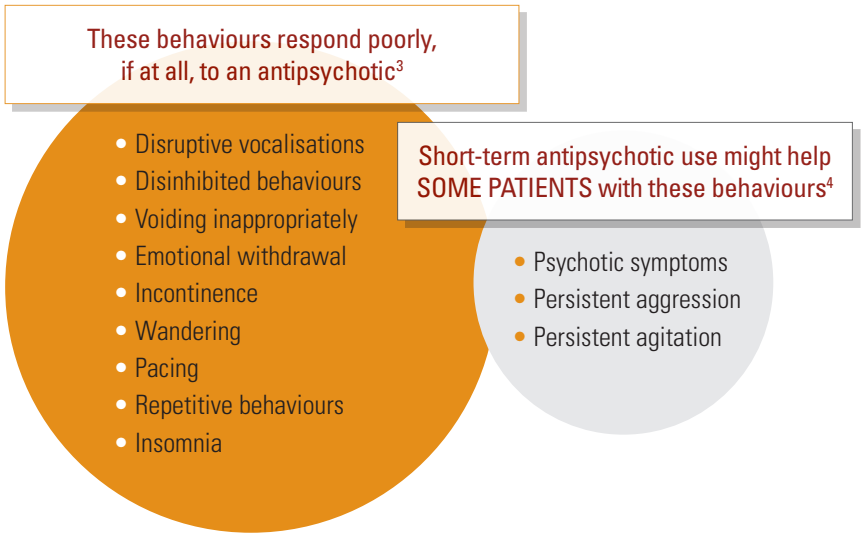
Further information about non-pharmacological interventions can be accessed in the *ReBOC: Reducing Behaviours of Concern. A Hands on Guide* available at: https://dementia.com.au/download/?fdid=D39A8E1321204AF2CEC3FC4E8360BF29

Table 1: Non-pharmacological interventions that may reduce behaviours of concern

Interventions[14, 21-23]	Beneficial effects observed[14, 21, 22]
Sensory interventions: • Music and dance • Aromatherapy • Massage and touch • Acupuncture • Pets • Social interactions	Reduced levels of agitation, depression and anxiety
Reminiscence and validation therapy	Reduced levels of depression and anxiety, especially if therapy is conducted in groups run by trained staff
Activities of daily living rehabilitation care	Increased ability to conduct daily activities
Recreation and physical activity, including walking and exercise programs	Reduced levels of apathy, anxiety and agitation in some trials
Psychotherapy	Increased quality of life and reduced levels of depression and anxiety
Patient behaviour interventions, orientation, reminders and cognitive stimulation	Increased orientation
Assistive or adaptive clothing	Increased independence (including an increased ability to dress and undress), comfort and dignity Increased quality of life and reduced anxiety and depression

The limited role antipsychotics play in BPSD

When considering an antipsychotic, identify and discuss possible risks in relation to benefits, including the risk of transient ischaemic attack and stroke, and possible adverse effects on cognition with your patient (if possible), their carers and family members before commencing treatment.[14]



Points to consider when prescribing an antipsychotic:

- It is best practice to obtain informed consent as administration of an antipsychotic is viewed as chemical restraint.[1]
- Limit the treatment period to a maximum of 12 weeks. Taper the dose and cease as soon as is clinically appropriate.[2] Ensure that your patient, family or carer is aware that only short-term treatment is intended.
- Risperidone is currently the only antipsychotic indicated for use in dementia in Australia.[8]
- Identify, quantify and document targeted symptoms.[14]
- Start with a low dose and increase slowly according to your patient's response. When commencing risperidone, start at 0.25mg once daily. If necessary, increase by 0.25mg daily every two or more days. Maximum dose should not exceed 2mg daily. Total daily dose can be given in one or two doses.[8]
- Monitor and document responses to the targeted problem behaviours at least weekly, especially in the first few weeks of treatment. Observe for adverse effects including sedation, postural hypotension and extrapyramidal and anticholinergic effects.[2] Parkinsonism may develop after weeks or months of antipsychotic treatment and may only become evident when the patient falls.[2, 8]
- Continue with non-pharmacological therapies alongside the antipsychotic.[3]
- Carefully consider the need to use an antipsychotic in any patient with dementia with Lewy bodies as they are at particular risk of extrapyramidal adverse effects.[4, 14] As an alternative, consider acetylcholinesterase inhibitors (donepezil, galantamine or rivastigmine).[14]
- Avoid using an antipsychotic in people with vascular or mixed dementia as they are at a significantly increased risk of cerebrovascular adverse events.[4]
- Consider the effect of comorbid conditions, including depression.[14]
- Consider the risk of a prolonged QT interval, potential drug interactions and an increased anticholinergic load.[8]
- Use only one antipsychotic at a time.[8]
- If possible, avoid using an anticholinergic medicine, for example, benztropine, to treat extrapyramidal symptoms including parkinsonism due to the antipsychotic medicine, as they are likely to increase cognitive impairment and may result in delirium.[8]
- Prescribe an oral solution for people with swallowing difficulties.

An estimated 21-28% of residents in Australian aged-care facilities are dispensed a regular antipsychotic.[24] Analysis of Department of Veterans' Affairs data indicates antipsychotics (risperidone, quetiapine, olanzapine and haloperidol) were dispensed to one in five veterans in aged-care facilities between July 2012 and July 2013. Of those veterans dispensed an antipsychotic, 61% were dispensed risperidone, 19% olanzapine, 15% quetiapine and 12% haloperidol. Long-term use was common.[25]

What to discuss with your patient, their carer, family and staff when prescribing an antipsychotic

Advise that an antipsychotic:

- Should include informed consent before being administered.
- Will be used for a maximum of 12 weeks only before being reviewed and ceased as soon as is clinically appropriate.
- Will help some patients with psychotic symptoms or persistent and severe agitation or aggression, but that not all will benefit.
- Will not help the wider behaviours of concern, including disruptive vocalisations, disinhibited behaviours, wandering, pacing, repetition, incontinence, voiding inappropriately, insomnia or emotional withdrawal.
- Is associated with an increased risk of serious adverse effects, including stroke and even death in older people with dementia.
- May cause other debilitating problems including increased confusion, cognitive decline, excessive drowsiness, gait disturbances, postural hypotension and extrapyramidal and anticholinergic effects.
- Will be given as an adjunct to non-pharmacological therapies.

Ceasing the antipsychotic

Review patients who have adverse effects or escalation of symptoms earlier than 12 weeks, with a likely aim of ceasing the antipsychotic.

Most patients with dementia can have their antipsychotic ceased without detrimental effects on their behaviour, especially if tapering is done slowly.[12] Even if the antipsychotic cannot be ceased, achieving a lower dose, if symptom control can be maintained, can be beneficial for the person.[26]

How to taper and cease an antipsychotic[13, 26, 27]

1	Discuss ceasing the antipsychotic medicine with your patient (if possible), family, carers and nursing home staff (if your patient is in an aged-care facility).
2	Cease the antipsychotic without tapering if the current dose is at the recommended starting dose, for example risperidone 0.25mg once daily.
3	Otherwise, reduce the dose over several weeks.
4	Monitor at least weekly for worsening or re-emergence of targeted problems.
5	If targeted problems return or worsen, do not continue to lower the dose.
6	Withdrawal symptoms that might occur usually appear within one to four days after taper starts and abate within seven to 14 days. Symptoms may include: nausea or vomiting, anorexia, diarrhoea, sweating, muscle pain, numbness or tingling, restlessness, insomnia, anxiety or agitation. Some of the withdrawal symptoms can be similar to targeted problems making it difficult to distinguish between the two.
7	If either targeted problems or withdrawal symptoms occur, consider reinstating the previous dose. If symptoms settle, maintain the dose for two to four weeks before gradually reducing again.
8	Continue to monitor for targeted problems and withdrawal symptoms, halting or slowing the taper as necessary until the suggested starting dose is reached.
9	Consider 'PRN' order as an interim measure, then cease.

Family and carers need support too

Families and carers often feel high levels of stress, social isolation, depression and a sense of loss when caring for someone with dementia.[28] Assess your patient's family and carers' needs even if your patient has entered residential care.[14]

Tailored interventions, including education and support programs increase the family and carers' knowledge and ability to handle behavioural problems, improve their own quality of life and lighten the burden of caring for someone with dementia.[14]

- Refer the family or carer to DBMAS. They can be contacted on 1800 699 799 or they are available at: www.dementia.com.au/
- Refer the family or carer to Dementia Australia available at: www.dementia.org.au/ or call the National Dementia Helpline Phone: 1800 100 500.
- Offer education and training that includes:
  - How to manage specific symptoms of BPSD and communicate more effectively with the patient. Initiate a discussion about sharing practical tips with staff (see Carers insert) to support care and improve communication between patient and carers.
  - How to plan activities that are meaningful and engaging for the patient.
  - How to make the carer and the patient's environment safe and enjoyable.
  - How to problem solve and develop a management plan.[1]
- Provide information about how the carer and family can maintain their own wellbeing, health and fitness.
- Inform them of support services available and encourage them to use them as needed, for example, how to access respite options or support groups or obtain nursing assistance.[14] The Department of Veterans' Affairs fund a wide range of services for veterans. Refer to the Carers brochure for resources.
- Encourage use of assistive technology to help provide support, including movement monitors and medication timers. For further information see the DVA Rehabilitation Appliances Program (RAP) – RAP National Schedule of Equipment PDF at: www.dva.gov.au/providers/provider-programs/rehabilitation-appliances-program-rap
- Include follow-up discussions and assessments.[1]

References

1. Burns K, Jayasinha R, Brodaty H. A Clinician's Field Guide to Good Practice. Managing Behavioural and Psychological Symptoms of Dementia. 2014. Dementia Collaboration Research Centres & Dementia Behaviour Management Advisory Services. Available at: http://dbmas.org.au/uploads/resources/A_Clinicians_Field_Guide_to_Good_Practice.pdf [Accessed February 2016].
2. Byrne G. Pharmacological treatment of behavioural problems in dementia. Australian Prescriber. 2005; 28(3): 67-70.
3. Wallace T, et al. ReBOC Reducing Behaviours of Concern. A Hands on Guide. A resource to assist those caring for people living with dementia. 2012. Alzheimer's Australia. Available at: http://dbmas.org.au/uploads/resources/SA_DBMAS_REBOC_Guide_2012.pdf [Accessed February 2016].
4. Australian Government. Therapeutic Goods Administration. Medicines Safety Update: Risperidone and risk of cerebrovascular adverse events in dementia patients. 2015; 6(4): 1-4.
5. Banerjee S. The use of antipsychotic medication for people with dementia: Time for action. 2009. London, United Kingdom.
6. Marston L, et al. Prescribing of antipsychotics in UK primary care: a cohort study. BMJ Open. 2014; 4: e006135. doi: 10.1136/bmjopen-2014-006135
7. Peisah C & Skladzien E. The Use of Restraints and Psychotropic Medications in People with Dementia. A report for Alzheimer's Australia. 2014. Available at: https://fightdementia.org.au/files/NATIONAL/documents/Alzheimers-Australia-Numbered-Publication-38.pdf [Accessed July 2016].
8. Australian Medicines Handbook, Adelaide: Australian Medicines Handbook Pty Ltd. 2016.
9. Pratt N, et al. Risk of hospitalization for hip fracture and pneumonia associated with antipsychotic prescribing in the elderly. A self-controlled case-series analysis in an Australian health care claims database. Drug Saf. 2001; 34(7): 567-575.
10. Ballard C, et al. The dementia antipsychotic withdrawal trial (DART-AD): long term follow-up of a randomised placebo-controlled trial. Lancet Neurol. 2009; 8: 151-157.
11. Carson S, McDonagh M, Peterson K. A systematic review of the efficacy and safety of atypical antipsychotics in patients with psychological and behavioral symptoms of dementia. Journal of the American Geriatrics Society. 2006; 54(2): 354-361.
12. Declercq T, et al. Withdrawal versus continuation of chronic antipsychotic drugs for behavioural and psychological symptoms in older people with dementia (Review). The Cochrane Collaboration. 2013; 3: 1-49.
13. Ballard C, et al. Optimising treatment and care for people with behavioural and psychological symptoms of dementia. A best practice guide for health and social care professionals. Alzheimer's Society. 2011.
14. Cognitive Adaptation Committee. Clinical Practice Guidelines and Principles of Care for People with Dementia. Sydney. Cognitive Adaptation Committee; 2016.
15. Australian Medicines Handbook Aged Care Companion. Adelaide: Australian Medicines Handbook Pty Ltd. 2014.
16. Therapeutic Guidelines: Psychotropic. Version 7. 2013. Melbourne: Therapeutic Guidelines Limited.
17. Takai Y, et al. Literature review of pain prevalence among older residents of nursing homes. Pain Manag Nurs. 2010; 11(4): 209-223.
18. Australian & New Zealand Society for Geriatric Medicine. Top 5 Low-value Practices and Interventions. Sydney. Available at: http://evolve.Edu.Au/docs/default-source/default-document-library/download-the-australian-and-new-zealand-society-of-geriatric-medicine-top-5-list.Pdf?Sfvrsn=0 [Accessed March 2016].
19. Clinical Excellence Commission, 2014. Top5: Improving the care of patients with dementia 2012-2013, Sydney: Clinical Excellence Commission.
20. Alzheimer's Australia Inc. Living with Dementia in the Community: Challenges and Opportunities. A report of national survey findings Alzheimer's Australia. Alzheimer's Australia Inc. 2014.
21. Livingston G, et al. Non-pharmacological interventions for agitation in dementia: systematic review of randomised controlled trials. The British Journal of Psychiatry. 2014; 205: 436-442.
22. Kroes M, et al. KCE Report 160a. Dementia: which non-pharmacological interventions? 2011. Available at: http://kce.fgov.be/sites/default/files/page_documents/kce_160c_dementia_0.pdf [accessed June 2016].
23. Royal Australian College of General Practitioners Practice Guidelines (Silver Book). Medical care of older persons in residential aged care facilities. 4th edition. 2006.
24. Snowdon J, Galanos D, Vaswani D. Patterns of psychotropic medication use in nursing homes: surveys in Sydney, allowing comparisons over time and between countries. International Psychogeriatrics. 2011; 23: 1520-1525.
25. DVA Health Claims Database, University of South Australia, QUMPRC. [Accessed March 2015].
26. Woodward M. Pharmacological treatment of challenging neuropsychiatric symptoms of dementia. Journal of Pharmacy Practice and Research. 2005; 35(3): 228-234.
27. All Wales Medicines Strategy Group. Polypharmacy: Guidance for Prescribing. July 2014.
28. Adelman R, et al. Caregiver burden: A clinical review. JAMA. 2014; 311(10): 1052-1060.

University of South Australia

Veterans' MATES

Provided by: University of South Australia | Quality Use of Medicines and Pharmacy Research Centre
In association with: Discipline of General Practice, The University of Adelaide | Discipline of Public Health, The University of Adelaide | NPS MedicineWise | Australian Medicines Handbook | Drug and Therapeutics Information Service