RACGP
Royal Australian College *of* General Practitioners

RACGP aged care clinical guide (Silver Book)

5th edition

Part A. Behavioural and psychological symptoms of dementia

General principles

- A structured work-up of behavioural and psychological symptoms of dementia (BPSD) is vital to its management.
- Understanding the triggers for the patient's behaviours can lead to optimal management.
- Non-pharmacological management is the first-line treatment option for BPSD.
- Pharmacological management of BPSD is only reserved for patients who do not respond to other interventions.
- The risks of pharmacological treatment need careful consideration prior to prescription.
- Reassessment of patients with BPSD is important to down-titrate medications.

Practice points

Practice points	References	Grade
Conduct a comprehensive work-up of patients presenting with behavioural and psychological symptoms of dementia (BPSD), including the family and carers	2	Consensus-based recommendation
Document the patient's triggers, describe the behaviours, frequency and timing with the assistance of family members and carers by using scoring tools	4, 5	Consensus-based recommendation
Review the patient's medication to exclude drug-induced delirium as a cause for the BPSD	7	Consensus-based recommendation

Conduct an assessment to understand the social, cultural and religious norms of the patient	7	Consensus-based recommendation
Consider changes to the patient's environment, routine and tasks that may help to reduce distress in day-to-day activities	9	Consensus-based recommendation
Seek advice from carers and residential aged care facility (RACF) staff on what they have tried and what has worked in the past	11	Consensus-based recommendation
The first-line management of BPSD includes a person-centred, multidisciplinary management plan of non-pharmacological approach	13	Consensus-based recommendation
Prescription of antipsychotic medication can be effective, particularly for behaviours and distress that have been precipitated by hallucinations and delusions, but must be carefully considered	11	Consensus-based recommendation
Consider the use of antipsychotics (risperidone has the strongest evidence) in those with BPSD who cause 'significant distress to themselves or others'; treatment must be reviewed every one to three months	13	Grade of Recommendation: Moderate Quality of Evidence: Moderate
Conventional antipsychotic agents (eg haloperidol) are not recommended because of a lack of evidence of effectiveness and side effects	1	Consensus-based recommendation
Consider the risks and benefits of using medication to manage BPSD before prescribing	12	Consensus-based recommendation

Introduction

Psychological and behavioural symptoms are an integral manifestation of dementia. Behavioural symptoms are common in the intermediate stages of Alzheimer's disease and at various stages in other types of dementia.[1]

General practitioners (GPs) and residential aged care facility (RACF) staff can minimise and manage behavioural and psychological symptoms of dementia (BPSD) effectively with a clear approach to the work-up, diagnosis and management of the presentation.

Clinical context

There are three models of BPSD:

- Unmet need – this model directs thinking towards a cause of the symptoms. It describes the behavioural symptoms as a manifestation of an unmet need. For example, is the patient in pain, hungry, thirsty or tired and not able to express it?
- Lowered stress threshold – this model directs thinking towards a cause of the symptoms. It explains the behaviours as a reaction to a stressor. Patients with dementia have less resilience and react to stressors that may seem subtle.
- Biological model – this model suggests that the behaviours are caused by a pathophysiological process (ie aberrant neurotransmitters, other biological factors).

The benefit of considering these models is that it provides options when seeking a cause and deciding on management.

In practice

Working up

Patients presenting with BPSD need a comprehensive work-up. Involving the patient's family and carers are vital, as these are the people who often see the patient exhibiting the behaviours. Clarifying the behaviours in detail aids in the search for a cause, working out the differential diagnoses and gives guidance for management.[2]

Document the triggers, and describe the behaviours, frequency and timing with the assistance of family members and carers. The Neuropsychiatric Inventory Questionnaire[3] is useful for an objective measure of the patient's behaviours. Repeating the questionnaire allows for monitoring for any changes over time.[4,5]

Addressing all of the individual symptoms of BPSD (Box 1) is outside of the scope of this guide; however, each of the symptoms will be touched on when relevant.

Box 1. Broad classification of BPSD symptoms[6]

- Aggression
- Agitation
- Anxiety
- Apathy
- Depression
- Disinhibited behaviours
- Nocturnal disruption
- Psychotic symptoms
- Vocally disruptive behaviours
- Wandering

A full clinical work-up is necessary, including a mental-state exam (as part of a mental assessment, and stands alone). A full clinical work-up may include an assessment of:

- physical health
- psychological health
- cognition
- medication chart
- obs and bowel chart
- blood and urine investigations
- environmental and psychosocial stressors
- behaviour
- function
- unmet needs
- mobility and falls risk
- social needs
- carer needs
- capacity of discharge
- supports necessary to meet the patient's needs.

In some cases, the behaviours may be so severe that the GP may need to omit or modify parts of their work-up to prevent increasing the symptoms (eg leaving out chest auscultation because it increases the agitation of the patient). In this case, close observation of the respiratory rate and work of breathing could be the only signs elicited.

Part of the work-up should include a review of the patient's medication to exclude drug-induced delirium as a cause for the BPSD (refer to Part A. Medication management).[7]

Expanding the assessment to understand the social, cultural and religious norms for the patient can reveal a cause for agitation or similar symptoms. The approach used for the work-up of BPSD should be personalised, as someone with differing expectations can interpret an interaction that may seem normal differently. Considering the BPSD behaviours as a form of communication is helpful when assessing patients.

Management

The first-line management of BPSD includes a person-centred, multidisciplinary management plan of non-pharmacological approach. The multidisciplinary team may include GPs, nurses, RACF staff, carers, families, other specialist medical practitioners (eg geriatrician, psychogeriatrician), pharmacists and allied health professionals.

Changes to the patient's environment, routine and tasks may help to reduce distress in day-to-day activities. Refer to Dementia Australia for help sheets on daily care (eg hygiene, dressing, safety), behavioural issues (eg sundowning, wandering, aggression, agitation), and changes that can be made to the patient's environment. Dementia Support Australia's *BPSD guide: Managing behavioural and psychological symptoms of dementia* is a helpful resource and goes into detail regarding management.

Assisting carers and family in the community and staff at the RACF is important as they can have variable experiences with managing patients with BPSD. On the other hand, experienced staff are a valuable source of advice. Asking RACF staff and carers what they have tried and what has worked in the past can help gain valuable insight into the management of the patient. The *Agitation decision-making framework* is a guide for nursing staff and carers, and can be a useful resource.[8]

Behavioural interventions may include:[9]

- tailored activities program – setting up activities that are tailored to the interests of the patient[10]
- music therapy
- aromatherapy
- physical exercise
- bright light therapy
- touch therapy
- combined activities (ie a mix of the above).

Because of the serious nature of delirium, delirium should be ruled out if a patient with dementia becomes acutely disturbed. A common cause of delirium is the medications that the patient is on, including those used to manage BPSD.[3]

Pharmacological management

Medication for the management of distressing BPSD may be considered in addition to non-medication interventions. Antipsychotic medication can be effective, particularly for behaviours and distress that have been precipitated by hallucinations and delusions.[11] The risks and benefits of using medication to manage BPSD need to be carefully considered.[12]

For any treatment, the effect on quality of life is a key consideration, including potential benefits and risks. For example, a GP may decide that the risk of the medication used is outweighed by the harm of a hospital admission, and in this case, would feel comfortable prescribing an antipsychotic.

Antipsychotic medication may be effective for specific indications; for example, depression, anxiety (refer to Part A. Mental health), psychotic symptoms (hallucinations and delusions), motor activity and aggression. Starting doses should be low and increased slowly with careful monitoring for adverse effects, especially sedation, postural hypotension and Parkinsonism.[12] Prescribing antipsychotic medications 'as needed' (*pro re nata* [PRN]) is discouraged. However, a practice point is to convert the regular antipsychotic to 'as needed' when weaning the medication. This way, appropriately qualified nursing staff are able to 'top up' the dose during the weaning process.

Risperidone has been approved by the Pharmaceutical Benefits Scheme (PBS) for the management of BPSD, and has been found to be effective in reducing psychotic features and aggression. The National Health and Medical Research Council's (NHMRC's) *Clinical practice guidelines and principles of care for people with dementia* highlights that those with BPSD who cause 'significant distress to themselves or others' may be offered antipsychotic medications such as risperidone.[13] The use of risperidone should be reviewed every one to three months.

Although risperidone has fewer serious adverse effects than other antipsychotics and is better tolerated, it may sometimes cause extrapyramidal side effects, drowsiness, hypotension, hyperglycaemia and increased risk of cerebrovascular accidents.[11,14] It is important to ask the RACF staff to monitor and report signs of possible adverse effects, including abnormal movements of the face, trunk and limbs; dizziness or fainting on standing; sudden weakness or numbness in the face, arms or legs; speech or vision problems; or worsening diabetic control.[12]

Conventional antipsychotic agents (eg haloperidol) are not recommended because of a lack of evidence of effectiveness, common extrapyramidal side effects and sedative anticholinergic side effects.[1] They should not be used in patients with suspected Lewy body dementia or Parkinson's disease.[11]

Selective serotonin reuptake inhibitors (SSRIs) are helpful in managing depressive symptoms and aggression in residents with dementia.[15] There is some evidence that citalopram is effective in the management of agitation.[16]

Benzodiazepines may exacerbate cognitive impairment in dementia and increase the risk of falls and associated injury; however, these can be used for severe anxiety and agitation. Oxazepam is a common choice due to its short half-life and uncomplicated metabolism.[17] Benzodiazepines can be used in an 'as needed' capacity for times when behaviours escalate; however, GPs need to be aware of the associated adverse effects (especially falls in older people).

There is some evidence for the use of memantine for the medical management of agitation and aggression. Currently there is no evidence for valproate in the use of BPSD.

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