

## RISPERIDONE

Risperidone is an atypical antipsychotic indicated for treating schizophrenia and related psychoses, bipolar disorder and severe behavioural disturbances in autism spectrum disorder. It is also approved for managing behaviour disturbances resistant to non-drug measures in Alzheimer-type moderate-to-severe-dementia. This article will focus on the benefits and risks of risperidone in behavioural and psychological symptoms of dementia (BPSD). Guidelines recommend that antipsychotics such as risperidone should not be used as first-line treatment for BPSD. It is estimated that only 10% of psychotropic medicine prescribing for treating BPSD is appropriate.

### Use in BPSD

Risperidone is the only antipsychotic listed on the Pharmaceutical Benefits Scheme (PBS) for the treatment of BPSD of the Alzheimer type for 12 weeks duration. The resident must be experiencing psychotic symptoms and aggression and have failed to respond to non-pharmacological methods of treatment. Treatment should be ceased if there is no improvement in symptoms of psychosis and aggression or worsening of symptoms with therapy.

For continuation beyond 12 weeks treatment, residents must have responded to an initial course of treatment. Response to treatment is defined as a significant reduction in symptoms of psychosis or aggression.

This additional use beyond 12 weeks is intended for dose tapering purposes as part of a trial of treatment reduction or cessation. Trials of reduction or cessation of therapy should be considered periodically with the intention of maintaining symptom control through non-pharmacological measures wherever possible and/or lowest effective dose therapy.

If worsening or re-emergence of symptoms during a trial reduction or cessation occurs, risperidone may be further prescribed under the PBS regulations.

The recommended starting dose for risperidone for BPSD is 0.25mg twice daily. If necessary, the dose can be increased by 0.5mg daily every second day. Once daily dosing may be suitable once the resident is stabilised. The usual dosage range is 0.5 to 1.5mg daily.

As-needed (prn) doses of risperidone are not effective in reducing or preventing severe and ongoing behaviours. A prn regimen can be considered when clinical presentations are episodic or rapidly changing. Any order for as-needed risperidone needs to have a specific indication with a maximum dose. Short-acting benzodiazepines may be more effective than risperidone for acute anxiety or agitation.

### Use in aged care homes

High rates of prescribing of antipsychotics in residential aged care homes has been recognised in numerous studies and highlighted in the Royal Commission into Aged Care Quality and Safety. Antipsychotic prescribing rates have been declining in recent times, with earlier data showing antipsychotics being prescribed for an average of 2.2 years.

Australian studies have shown that one in 5 residents in aged care homes are prescribed at least one antipsychotic. Whilst dispensing of psychotropic medicines is high for people with dementia before entering residential care, use increases markedly soon after admission. Risperidone accounts for more than half of all antipsychotic prescribing.

### Benefits

Risperidone may have some benefit in residents with distressing agitation, aggression or psychoses associated with moderate to severe Alzheimer's disease. Antipsychotics are only effective for one in five people with Alzheimer's disease for short-term management. Non-pharmacological interventions such as cognitive stimulation, music therapy, and/or reminiscence therapy should be tried first as they can improve cognition, behavioural symptoms and promote independence. Response to risperidone occurs within one to two weeks and clinical improvement is expected within 12 weeks.

Symptoms that do not respond to treatment with risperidone include:

- Anxiety
- Culturally inappropriate behaviours
- Depressed mood
- Hoarding
- Restlessness
- Screaming
- Calling out

*continued over*

- Sexual disinhibition
- Shadowing
- Sundowning
- Swearing
- Wandering

There is minimal evidence of risperidone's efficacy to treat BPSD beyond 3 months.

### Side effects

Antipsychotics such as risperidone are associated with an increased risk of death. The risk of cerebrovascular adverse events such as stroke and transient ischaemic attacks (TIAs) for residents treated with risperidone is increased 3-fold compared to placebo. The risk seems greatest, early in treatment and with higher doses.

Other adverse effects include:

- Anticholinergic and extrapyramidal effects
- Sedation and drowsiness
- Postural hypotension
- Increased risk of falls
- Weight gain
- Increased blood glucose levels (hyperglycaemia)
- Increased cholesterol levels
- Hyperprolactinaemia

Extrapyramidal effects include dystonias, akathisia, Parkinsonism and tardive dyskinesia. Dystonias are involuntary muscle contractions that cause slow repetitive movements; they usually occur within 1 or 2 days of starting treatment. Akathisia is a distressing feeling of restlessness, which usually occurs 2-3 days after starting treatment. Parkinsonism includes tremor, rigidity or bradykinesia which may develop after weeks or months of risperidone use. Involuntary movements of the face, mouth or tongue, and sometimes head and neck, trunk or limbs are signs of tardive dyskinesia.

### Deprescribing

Deprescribing of antipsychotics for BPSD should be considered after 3 months of use or if unacceptable adverse effects occur. Residents and/or substitute decision-makers should be involved in the decision to deprescribe. Behavioural management strategies should be supported concurrently.

Antipsychotics should not be stopped abruptly. In general, a dose reduction of 25-50% of the daily dose is recommended every 1 to 2 weeks. If serious adverse effects are present, a faster tapering is recommended. If recurrent or withdrawal symptoms occur, the previous tolerated dose should be maintained, rather than reverting to the starting dose.

Common withdrawal symptoms of antipsychotics include irritability, insomnia, anxiety and sweating.

The Halting Antipsychotic use in Long-Term care (HALT) study explored antipsychotic deprescribing in 23 Australian aged care homes. The number of residents on regular antipsychotics was reduced by more than 80% over 12 months.

Importantly, deprescribing of antipsychotics was not accompanied by increases in other medicines or a significant increase in as-needed (prn) antipsychotics or benzodiazepines.

There was no change in BPSD or in adverse outcomes including withdrawal behaviours, falls, hospitalisations and cognitive decline. Agitation or aggression did not increase with deprescribing.

Use of risperidone may be appropriate in some people with BPSD. Residents should be carefully monitored when risperidone is tapered or ceased. In the HALT trial 22% of residents whose medication was ceased were subsequently prescribed a regular antipsychotic, on average 2.7 months after original cessation.

### Resources

NPS MedicineWise has developed a tool to facilitate multidisciplinary review of antipsychotic medicines prescribed for patients experiencing BPSD, including advice on how and when to taper.

### References

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