SharedCare
Partners for Patients

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EVIDENCE SUMMARY

Antipsychotics in the Treatment of Behavioural and Psychological Symptoms of Dementia (BPSD) in the Elderly

Remember – the elderly have a decreased ability to eliminate medications; while you may be reviewing a specific medication, it's the concomitant use of multiple medications that increases the risk of side effects and drug interactions.

Focus – Most people with dementia will experience BPSD at least once during the course of their disease. The focus of this document is on the behavioural component.

Main Message- Choosing Wisely Canada: "People with dementia often exhibit challenging behavioural symptoms such as aggression and psychosis. In such instances, antipsychotic medicines may be necessary, but should be prescribed cautiously as they provide limited benefit and can cause serious harm, including premature death. Use of these drugs should be limited in dementia to cases where non-pharmacologic measures have failed, and where the symptoms either cause significant suffering, distress, and/or pose an imminent threat to the patient or others. A thorough assessment that includes identifying and addressing causes of behaviour change can make use of these medications unnecessary…..This recommendation does not apply to the treatment of delirium or major mental illnesses such as mood disorders or schizophrenia." (1)

EVIDENCE FOR USE-Pharmacologic

BENEFITS IN PATIENTS OVER THE AGE OF 65

Indication	Outcome	NNT
BPSD	Decreased behavioral episodes	5-14*

*"Calculated from selected ratings scales from selected trials and lack validity" (2)

- **Efficacy**: Many of the studies were done with LTC residents, mainly with Alzheimer dementia. The studies have limitations being of short duration and of variable design with incomplete [partial, selective] reporting of outcomes, limiting meta-analysis. CATIE-AD

(out-pt, Alzheimer dementia, 82% with delusions) is one of the best studies with head-to-head drug comparisons and is succinctly analyzed in Rx files. (3-5) While there may be a statistically significant change in scores for scales measuring neuropsychiatric symptoms (NPS), the clinical significance demonstrated is modest, with moderate placebo effects as well. For aggressive behavior, the best evidence base from the studies is for risperidone and aripiprazole, more limited for olanzapine and not established for quetiapine. Risperidone is labelled by Health Canada for "short-term symptomatic management of aggression or psychotic symptoms in patients with severe dementia of the Alzheimer Type".

- **Harm** (ref. for harms: 4-16): RCTs typically do not evaluate or collect adverse event data in a comprehensive way. Nonetheless, when antipsychotic studies are pooled the following adverse events were reported to be statistically significantly increased. Some adverse effects may be related to the anticholinergic properties of antipsychotics.

Harm with NNH	Harms-NNH not available
Stroke-100* Parkinsonism-9 Gait-13*** Somnolence-6 UTI-25	Metabolic** Pulmonary embolus Cardiac arrhythmias (prolonged QTc) Cognitive decline

*Unclear proportion that would be disabling
** Weight gain, hyperglycemia, hypercholesterolemia
*** Not clear whether falls are increased

  - Increased mortality, both short term (NNH 100) and with longer term use (DART-AD trial-ref 11) has also been reported but has not been demonstrated in all meta-analyses of RCTs or in longer observational studies-there may be a relationship to cardiovascular events or infections, particularly pneumonia.

- **Long Term Use and Discontinuation**: The course of BPSD is individual and care context specific and can resolve without medication use over time, especially if mild-moderate. Long term use of antipsychotics may be associated with ongoing adverse events and increased mortality and indeed, studies have shown reduced mortality with discontinuation. (3,16,17) Studies have shown that antipsychotics can usually use be tapered and discontinued safely if done slowly and if effective non-pharmacologic approaches are applied. (18) The risk of recurrence may be higher in individuals with previously severe symptoms and/or of discontinuation has caused recurrence previously. (19)
- **Pain management**: Pain is a common underlying cause of agitation in dementia, and a recent RCT in 352 patients reported a 17% improvement in agitation after stepped treatment with analgesics, similar to the benefit seen with antipsychotics. (20,21)

EVIDENCE FOR USE-Non-Pharmacologic

- Evidence is currently limited and evolving. Studies are limited in quality and duration. Some efficacy has been demonstrated for staff training in NPS management strategies, for mental health consultation and for treatment planning, exercise, recreational activities, and music therapy or other forms of sensory stimulation. Significant time commitments from care staff may be required for successful implementation. (22) A recent RCT looked at applying person-centered care, med review, social interaction and exercise for the 'real-world' (not

needing outside resources) and demonstrated reductions in NPS, antipsychotic use and mortality but only if the non-pharmacologic approaches could be effectively applied. (17)

Practice Points

- A BC resource for assessment and management is the BC BPSD algorithm (23)
- Assessment for pain and a trial of treatment may be considered
- Note that certain behaviours do not respond to antipsychotic medications and these include: wandering, hiding/hoarding, repetitive activity, vocally disruptive behavior ('calling out'), inappropriate (un) dressing, inappropriate voiding, eating inedible objects, pushing wheelchair bound co-residents, resistiveness to care (if severe, may respond).(23)
- If a resident is on an antipsychotic, review the indication-consider a dose reduction trial when started for delirium in acute care, for non-responsive behaviours (above) or for behaviours that are stable or no longer evident after 3-6 months. (24)
- With a dose reduction trial, observe daily for target symptom recurrence, review every 2 to 4 weeks for further dose reduction if target symptoms are reduced or manageable. (24)

References

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