

## Letters to the Editor

### Caution with olanzapine use in dementia

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I found the article on limiting antipsychotic drugs in dementia excellent.<sup>1</sup> However, the antipsychotic deprescribing algorithm in Fig. 2 suggests considering a change to risperidone, olanzapine or aripiprazole.

I question why olanzapine has been suggested as an alternative. The reason for my concern is that treatment for behavioural and psychological symptoms of dementia (BPSD) occurs predominantly in older people (>65 years) with only a very small percentage being prescribed to younger patients.

Older people are very susceptible to adverse effects from drugs that exhibit clinically significant anticholinergic activity. This may include confusion, agitation, profound restlessness and hallucinations (similar to BPSD) and a worsening of dementia, as well as loss of visual acuity and dizziness, which increases the risk of falls.<sup>2</sup> Olanzapine exhibits clinically significant anticholinergic activity. It is also one of the most sedating antipsychotics, further increasing the risk of falls. (NPS MedicineWise has several [resources covering medicines in dementia](#).)

In my role undertaking residential medication management reviews for people suffering from dementia in residential care, I am continually recommending that, where possible, olanzapine should be avoided in older people for the specific indication of treating BPSD, due to the high risk of anticholinergic adverse effects and sedation.


I believe it is inappropriate to list olanzapine as an alternate antipsychotic to consider for the treatment of BPSD without also highlighting its high potential for anticholinergic side effects in the elderly (which may mimic BPSD), as well as its high risk of causing sedation.

**Mark Coles**

AACP Accredited Pharmacist, Diabetes Educator,  
Halls Head, WA

#### REFERENCES

1. Macfarlane S, Cunningham C. Limiting antipsychotic drugs in dementia. *Aust Prescr* 2021;44:8-11. <https://doi.org/10.18773/austprescr.2020.078>
2. Mintzer J, Burns A. Anticholinergic side-effects of drugs in elderly people. *J R Soc Med* 2000;93:457-62. <https://dx.doi.org/10.1177/014107680009300903>

*Stephen Macfarlane* , one of the authors of the article, comments:



Mark Coles correctly highlights an important caveat in relation to the use of olanzapine in older people, particularly those with dementia.

The deprescribing algorithm which appeared in the article was reproduced with permission from Canadian Clinical Practice Guidelines.<sup>1</sup> While correctly suggesting the use of alternative antipsychotics in accordance with existing evidence-based guidelines, the algorithm is not without its flaws. The existing evidence base, by necessity, is limited by the studies that pharmaceutical companies have conducted for regulatory approval of their products for particular indications. There is evidence for both aripiprazole and olanzapine in the treatment of aggression in Alzheimer's disease.

Olanzapine certainly has significant anticholinergic properties which are dose dependent. A study found that olanzapine (5 or 10 mg) was significantly more effective than placebo in reducing agitation, aggression and hallucinations in a six-week study in 206 nursing home residents with Alzheimer's disease.<sup>2</sup> The 5 mg dose had the greatest effect, followed by the 10 mg dose, while 15 mg was no more effective than placebo. While it is possible that the lack of efficacy at the higher dose relates to the increasing anticholinergic load, the authors found that peripheral anticholinergic effects were significantly different from placebo in the 15 mg group only. However when central anticholinergic activity was measured, there were no differences found at any dose compared to placebo.

The correspondence reinforces the central tenets of our article that:

- no antipsychotic is a safe choice in this group
- numbers needed to treat are high
- antipsychotics often do more harm than good
- if antipsychotics are used, a deprescribing plan is needed to limit their duration.

#### REFERENCES

1. Bjerre LM, Farrell B, Hogel M, Graham L, Lemay G, McCarthy L, et al. Deprescribing antipsychotics for behavioural and psychological symptoms of dementia and insomnia: evidence-based clinical practice guideline. *Can Fam Physician* 2018;64:17-27.
2. Street JS, Clark WS, Gannon KS, Cummings JL, Bymaster FP, Tamura RN, et al. Olanzapine treatment of psychotic and behavioral symptoms in patients with Alzheimer disease in nursing care facilities: a double-blind, randomized, placebo-controlled trial. The HGEU Study Group. *Arch Gen Psychiatry* 2000;57:968-76. <https://doi.org/10.1001/archpsyc.57.10.968>



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