

# EVIDENCE AND DECISION ALGORITHM FOR THE WITHDRAWAL OF ANTIPSYCHOTIC TREATMENT IN THE ELDERLY WITH DEMENTIA AND NEUROPSYCHIATRIC SYMPTOMS

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## Background

Antipsychotics (APs) are commonly used to manage neuropsychiatric symptoms (NPS) in elderly patients with dementia (approximately 48% of elderly people with dementia are treated with APs), even though several large studies have demonstrated an association between AP treatment and increased morbidity and mortality in people with dementia.

## Objectives

The proposed algorithm is intended for improvement in the correct use of AP in the elderly with dementia to assist in decision-making.

## Methods

A computerized literature search (MEDLINE: 1966 to July2017, EMBASE: 1982 to July2017) was used to locate relevant literature. The following terms were used in the MESH database and Emtree thesaurus: Aged, Antipsychotic Agents, Behavioral Symptoms and Dementia. The information and recommendations of full references were extracted to perform an algorithm represented on a paper in a flow-chart form. In the algorithm we define non-pharmacological interventions, NPS and signs and symptoms of AP withdrawal. We used the Neuropsychiatric Inventory-Questionnaire (NPI-Q) to score the severity of the NPS.

## Results

Earlier studies of APs used in elderly patients with dementia suggest that, in most elderly demented patients, APs can be withdrawn with no effect on behaviour. These patients are likely to benefit from the algorithm we propose to assist clinicians in the withdrawal of APs (**Algorithm 1**). Although prolonged treatment in specific circumstances may be advisable in clinical practice, the general advice is to discontinue APs after 12 weeks in cases of agitation or psychosis associated with dementia based on weak and conflicting evidence regarding long-term efficacy. A gradual tapering strategy is to reduce dosage by 25 to 50% every 2 weeks and to end treatment 2 weeks after administering the lowest dose.

Abbreviations: AP, antipsychotic agent; NPI, Neuropsychiatric Inventory-Questionnaire; NPS, neuropsychiatric symptoms; NSAIDs, non-steroidal anti-inflammatory drugs; UTI, urinary tract infection.

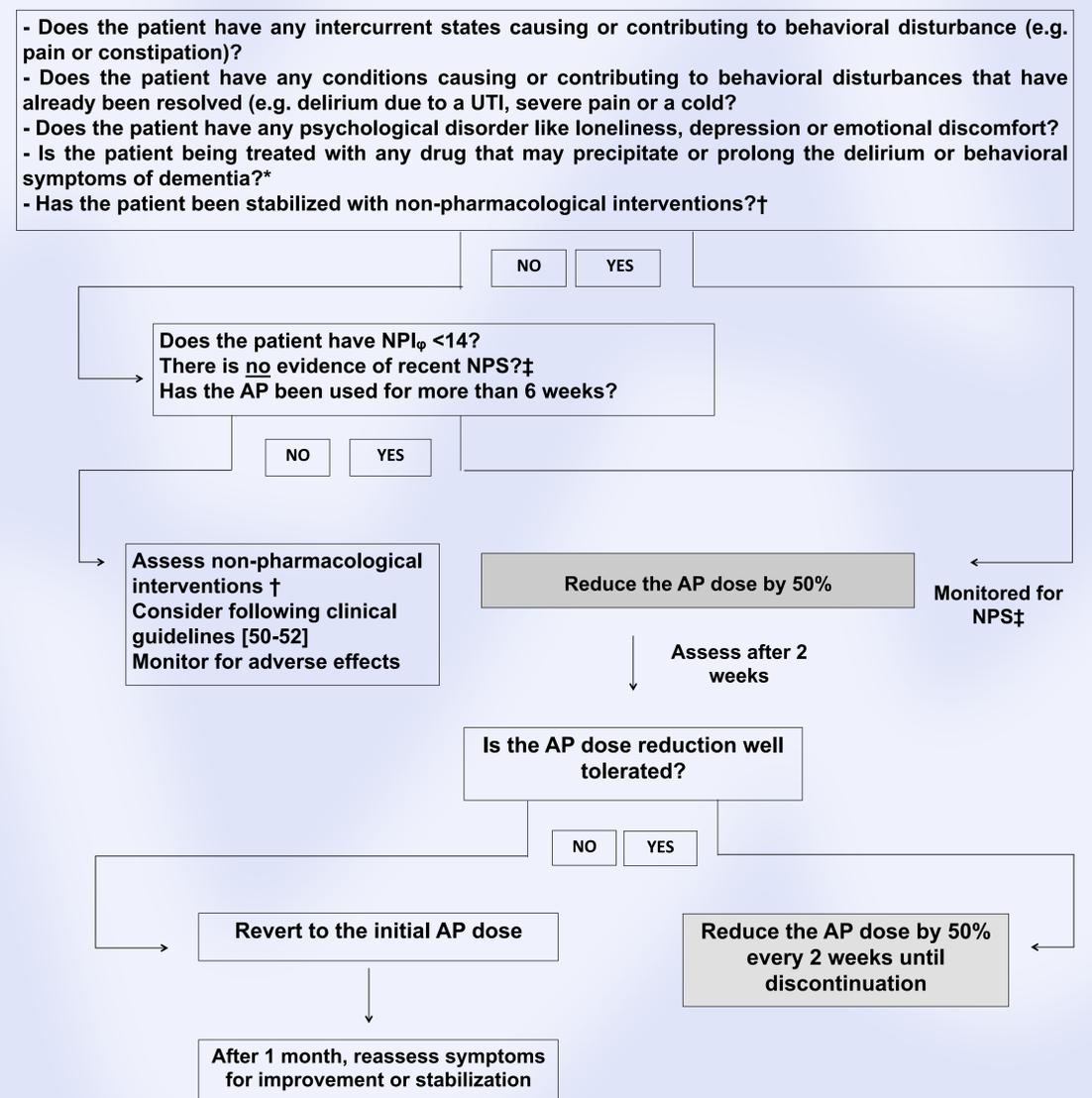
\*Drugs that can precipitate or prolong delirium: anticholinergics, antidepressants and anticonvulsants, antagonists of the histamine receptor H<sub>2</sub>, corticosteroids, NSAIDs [80].

†Non-pharmacological interventions: stimulation techniques, educational programmes, group therapy, communication training and personalized care staff, pleasurable activities such as sensory interventions including touch and music therapy, aromatherapy and light therapy light (note, however, that these are not fully supported by evidence) [81].

‡NPS: agitation, depression, apathy, anxiety, hallucinations, paranoid ideation, psychosis [82].

¶NPI: Neuropsychiatric Inventory-Questionnaire. See Table 1 [83].

Figure 1. Decision algorithm for withdrawal of antipsychotic treatment for NPS in elderly patients with dementia



## Conclusions

Information gathered on the literature review raises the need to establish safe and effective pharmacological approaches to AP prescription for demented elderly with NPS. We have described an algorithm consisting of three main steps presented in a form of a flowchart that draws on AP withdrawal approaches recommended in both dementia and care guidelines, which can assist clinicians in the withdrawal of APs.