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Do antipsychotic dose reduction trials result in worsening behavior among nursing home residents with dementia: a systematic review of the literature

Jennifer Tjia  
*University of Massachusetts Medical School*

Abir O. Kanaan  
*University of Massachusetts Medical School*

Jennifer L. Donovan  
*University of Massachusetts Medical School*

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DO ANTIPSYCHOTIC DOSE REDUCTION TRIALS RESULT IN WORSENING BEHAVIOR AMONG NURSING HOME RESIDENTS WITH DEMENTIA: A SYSTEMATIC REVIEW OF THE LITERATURE

Jennifer Tjia, MD, MSCE; Abir Kanaan, Pharm D; Jennifer Donovan, Pharm D

Meyers Primary Care Institute, University of Massachusetts Medical School, Reliant Medical Group, and the Fallon Community Health Plan

Contact: Jennifer Tjia, MD, MSCE, Email: Jennifer.tjia@umassmed.edu, Phone: 508-856-3586

**Background:** While federal regulations require gradual dose reduction trials of antipsychotics prescribed for behavior management in nursing home (NH) residents with dementia, widespread concern about precipitating behavioral disturbances limits implementation. We conducted a systematic review of clinical trials reducing antipsychotic drug use in NH residents to determine best dose reduction practices and risk of behavior escalation.

**Methods:** A comprehensive literature search was conducted in MEDLINE, EMBASE, and International Pharmaceutical Abstracts between January 1970 and October 2011 using the terms “antipsychotic agent or neuroleptic agent,” “dementia,” “nursing homes,” and “withdrawal.” One investigator reviewed abstracts for inclusion based on: English-language, human subjects, clinical trial, nursing home site, and ≥5 participants, and reported reduction in medications due to an intervention. We excluded review articles and commentaries and secondary analysis of main trial results. The remaining articles were reviewed by 2 investigators for final inclusion, resulting in 9 articles.

**Results:** The nine articles meeting inclusion criteria included randomized controlled trials of both typical and atypical antipsychotics. Study populations ranged in size from 55 to 183 NH residents with dementia and typically targeted patients who were not psychotic and did not have a history of violent behavior. Gradual dose reduction protocols typically followed a strategy of 50% dose reduction per week for 2-3 sequential weeks. Outcomes measured included behavioral problems, cognitive function, and resumption of antipsychotic medications. All 9 studies reported that the majority of residents randomized to gradual dose reductions of antipsychotics had no overall detrimental effect on functional and cognitive status, or exacerbation of behavioral symptoms.

**Conclusions:** Clinical trials evaluating the withdrawal of antipsychotic medications from NH residents with dementia do not show evidence of rebound behavioral escalation after gradual dose reductions.