

Isn't Your Staff Trained To Manage My Mother?

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Sylvia is the nursing administrator of a long-term care facility. Ms. A, an 84-year-old resident with dementia, has developed severe paranoid delusions, has threatened other residents, and is aggressive with care to the point that staff fear for their safety. The facility's physician performs a thorough assessment, including for potential medical contributors to her behavior (e.g., pain), and concludes that an atypical antipsychotic is warranted. The next day, Sylvia receives a call from Ms. A's anxious daughter, who has been scouring the Internet for information about antipsychotics in dementia. "They're not supposed to be that helpful," she says, "And the doctor said there's a warning about almost doubling the risk of death. Isn't your staff trained in how to manage these types of problems without resorting to medication?"

Up to two-thirds of nursing home residents have some form of dementia, and among them, at least 80% may suffer from at least one neuropsychiatric symptom (1). Severe neuropsychiatric symptoms cause marked distress and can threaten the safety of the patient and others. As for a safe and effective treatment that Sylvia and her team can offer Ms. A with confidence, none currently exists. Against this disappointing backdrop, the contribution by Ballard et al. (2) in this issue is timely. Urgent need exists for evidence-based, practical guidance for the use and discontinuation of antipsychotics, as well as for optimal employment of nonpharmacological strategies either in lieu of or in addition to pharmacological ones. Ballard et al. (2) conducted a cluster-randomized factorial controlled trial with two replications in 277 participants residing in 16 nursing homes in the United Kingdom to explore the impact that antipsychotic review and nonpharmacological measures would have on antipsychotic use, neuropsychiatric symptoms, and mortality.

Antipsychotics in Dementia

Atypical antipsychotic use for neuropsychiatric symptoms in dementia has been extensively studied and has been shown to at best have only moderate efficacy. All atypical antipsychotics carry a black box warning from the FDA due to increased (1.5–1.7) risk of mortality and a 2–3-fold higher risk of a cerebrovascular event, and a similar warning applies to conventional antipsychotics. A recent retrospective case-control study by Maust et al. (3) suggests that the mortality risk from antipsychotic use in dementia may be even greater than previously reported. Other risks of antipsychotics in dementia include sedation, falls, confusion, extrapyramidal

symptoms, and metabolic effects. As Ballard et al. (2) note, these safety concerns have resulted in a "shift in the landscape of their use," with prescriptions now reserved mostly for those with severe neuropsychiatric symptoms. In fact, in this study, only 18% of the nursing home residents were taking an antipsychotic at baseline. Expert consensus remains that when neuropsychiatric symptoms are severe and present an acute safety risk to the patient and/or others, the use of an antipsychotic may still be appropriate when, in the clinician's judgment, potential benefits outweigh the risks (4, 5). Discontinuation of the antipsychotic should be attempted within 12 weeks, if possible (4). Research on the success of discontinuation has been conflicting. Several studies have found no increased risk of neuropsychiatric symptom reoccurrence, while others have shown an increased risk of or shorter time to relapse, as well as behavioral deterioration (6, 7). Ballard et al. (2) make the important points that current prescribing habits may be altering the risk-to-benefit ratio and that a revisiting of guidelines may now be warranted.

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Nonpharmacological Interventions

Given the limitations of antipsychotic treatment and current lack of more effective alternatives, nonpharmacological (e.g., behavioral) strategies are universally recommended as a first line of approach, except in certain severe cases (8), such as that of Ms. A. In the long-term care setting, such nonpharmacological strategies include training staff to manage neuropsychiatric symptoms, social and recreational activities, exercise, music therapy, aroma therapy, and other types of sensory stimulation (9). Such interventions may be applied generally (e.g., educating staff that arthritic pain can provoke aggression with dressing or undressing) or be individualized (e.g., providing a former musician with access to a piano). While these strategies have the important advantage of negligible, if any, adverse effects, support for consistent and reliable benefit from these approaches, especially in severe cases, remains underwhelming. Seitz et al. (9) reviewed 40 randomized, controlled trials of nonpharmacological interventions in the long-term care setting and found that only 40% reported statistically significant results favoring the intervention group, and a mere two studies (5%) reported

results reflecting clinically significant outcomes. As noted by one expert panel (8), “Effective nonpharmacological strategies for neuropsychiatric symptoms have not been translated into real-world clinical management and standard care.” Observing that some of the more encouraging results have come from studies employing a person-centered approach, Ballard et al. (2) incorporated such into their interventions.

Study Design

Staff in all homes were provided with high-quality training in person-centered care. Eight homes were then each randomly assigned for 9 months to antipsychotic review, a “social interaction with pleasant activities” intervention, and an exercise intervention, with most homes assigned to more than one arm. Antipsychotic use, agitation (Cohen-Mansfield Agitation Inventory) (10), and depression (Cornell Scale for Depression in Dementia) (11) were the primary outcome measures. Secondary outcomes were overall neuropsychiatric symptoms (Neuropsychiatric Inventory) (12) and mortality. Participants were assessed at baseline and at 9 months.

Interventions

Person-centered care. This training, provided to all staff members, included the nature of dementia, the potential relationship between behavior and an individual resident’s life story, and how staff-resident interactions can affect well-being.

Antipsychotic review. Prescribing clinicians were trained in best practice guidelines, including the risks/benefits of antipsychotics in dementia, using nonpharmacological approaches as the first-line approach, and discontinuation, if possible, in participants treated for ≥ 3 months, with extra caution recommended in those with the most severe symptoms.

Social interaction with pleasant activities. A manual was developed to assist staff in providing participants with positive social interactions that were individualized on the basis of life history and interests.

Exercise. Individualized exercise plans were developed for participants based on published protocols.

The delivery of all interventions was coordinated by a therapist who attended a 10-day training program, and at least two staff member “champions” were trained to implement them.

Results

The authors note that 50% of participants in the antipsychotic review group stopped antipsychotics prior to follow up, while none in the group without antipsychotic review did. Mortality was 35% with neither antipsychotic review nor social interaction, but it decreased to 28% with antipsychotic

review without social interaction, and 19% with both interventions. In the main analysis model, the reduction in mortality with antipsychotic review became statistically significant only when antipsychotic review was combined with social interaction. Antipsychotic review also resulted in worse outcome in overall neuropsychiatric symptoms. However, when social interaction was used in conjunction with antipsychotic review, no such deterioration was noted. A particularly troubling finding was that social interaction on its own was actually associated with an increase in neuropsychiatric symptoms. The authors wonder if a key benefit of social interaction may be its specific use as an aid in successful antipsychotic reduction. Additional findings from this study are that exercise improved overall neuropsychiatric symptoms, but not depression, and no intervention or combination of such showed any benefit for agitation.

In interpreting their results, Ballard et al. (2) note as a limitation that their study was powered to examine each of the primary outcomes, but not to correct for testing three separate ones. Also, because the physicians managing antipsychotics used clinical judgment instead of a protocol, treatment decisions that were “not optimal” may have contributed to worsening neuropsychiatric symptoms in some participants.

The authors describe this study as the first to their knowledge to robustly evaluate practical interventions that can be feasibly administered in the long-term care setting. In discussing the lackluster support for many nonpharmacological interventions, Seitz et al. (9) noted that these often require the use of specialized staff from outside the facility and/or time commitments from staff that present an implementation hurdle. Other than the therapists/coordinator, the interventions studied by Ballard et al. (2) can be administered without specialized staff. The exercise and social interaction activities are also described as involving no more than 60 minutes weekly. If further research confirms such, the demonstration that a nonpharmacological intervention is capable of mitigating the mortality risk associated with antipsychotic use would be an important step forward in understanding the ways that specific practical interventions may provide targeted clinically relevant benefits.

Conclusion

Sylvia, challenged by Ms. A’s daughter to devise an effective behavioral intervention that is capable of replacing an antipsychotic, remains at a loss for a good solution. In fact, despite some hopeful results, the Ballard et al. study (2) also suggests that were Sylvia to make a dedicated effort to provide Ms. A with a personally tailored social interaction program, and in addition ensure that all staff caring for her receive high-quality person-centered care training, this still may not be enough to ameliorate her severe behavioral symptoms. However, such an intervention might have the benefit of maximizing the success of a future antipsychotic discontinuation trial. For now, Ms. A’s daughter likely does not feel very reassured, and she, Ms. A, Sylvia, and her staff deserve better answers.

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