

LESS IS MORE

Hospice Diagnosis: Polypharmacy

A Teachable Moment

Claire K. Larson, MD
Division of Geriatrics,
Department of
Medicine, University of
California, San
Francisco.

Helen Kao, MD
Division of Geriatrics,
Department of
Medicine, University of
California, San
Francisco.

Story From the Front Lines

An 86-year-old woman with moderate dementia, depression, and osteoporosis fell and experienced a vertebral compression fracture at her assisted-living facility. Prior to the fall she was ambulatory with a walker and enjoyed socializing with her friends and family. During the week after the fall, while taking escalating dosages of opioids for pain, she walked less and less and suffered from constipation. In the following days, she became withdrawn and repeatedly called out "Help me!" for unclear reasons. She was started on diazepam and haloperidol, but her vocalizations increased and her cognition worsened. Over the next week, she stopped walking and developed a pressure ulcer. When she developed dysphagia and weight loss, she was enrolled in hospice care.

When the patient became chair- and bed-bound, she was seen by a "house calls" geriatrician who evaluated her and suspected polypharmacy. Hospice was discontinued. Haloperidol and opioids were stopped and diazepam tapered off. Her caregivers were educated to provide a daily routine and to speak calmly. When she called for help, if her needs (eg, toileting, eating, or pain relief) had been addressed, she was redirected to other activities, such as looking through family photographs or listening to music. Home physical, occupational, and speech therapy provided rehabilitation to help her regain her strength, mobility, and swallowing and to educate her caregivers.

The patient was started on citalopram hydrobromide for anxiety, melatonin for sleep, and acetaminophen for pain. Within 4 months, her repeated vocalizations stopped, and she returned to her prefall functional status. She began walking again, participating in activities, and eating and sleeping well. She recently celebrated her 87th birthday with her family.

Teachable Moment

The course of dementia is not always linear, but impairment in activities of daily living and speech, plus a dementia-related comorbidity (eg, aspiration pneumonia) are suggested for hospice enrollment.¹ Hospice care is a valued and underutilized resource in advanced dementia, and eligibility requires an understanding of the natural history of the disease. Notably, delirium, pain, constipation, adverse effects of medications, and environmental changes can trigger a more rapid decline in patients with dementia.

Neuropsychiatric symptoms (NPS) of dementia, such as depression, aggression, repetitive vocaliza-

tions, or disordered sleep, affect nearly all patients with dementia at some point in the course of their disease. Neuropsychiatric symptoms can also occur or worsen in the setting of delirium. Mismanagement of NPS can exacerbate these symptoms. In this case, a patient with dementia had a rapid, primarily iatrogenic decline provoked by polypharmacy and delirium, resulting in persistent NPS. Her condition was misinterpreted as progression to advanced dementia, and she was inappropriately enrolled in hospice care.

While NPS can occur in delirium, delirium can be differentiated from dementia by the presence of an inciting factor(s), acute onset, and fluctuating course of inattention and level of consciousness. Overuse of medications to manage NPS can counterproductively prolong a patient's impairment. Although nonpharmacologic interventions should be used first to address NPS, most clinicians lack the knowledge or time to develop and implement behavioral interventions. Thus, psychotropic drugs are often used as initial treatment in older adults with dementia despite increasing patients' risks for stroke and mortality.

To target disruptive NPS, caregivers and clinicians must collaborate to characterize the behavior and investigate underlying causes.² By identifying the symptom and potential triggers, strategic behavioral and environmental interventions can be applied. For example, a calm voice, reassuring touch, structure with daily routines, and use of distraction and engagement in meaningful activities can be helpful to address repetitive vocalizations.²

If nonpharmacologic strategies are insufficient, then medications can be considered. Scheduled acetaminophen can reduce NPS stemming from unrecognized pain.³ Selective serotonin reuptake inhibitors may reduce anxiety or depression.⁴ Melatonin may help increase sleep efficacy and total sleep time, with few adverse effects.⁵ If pain, insomnia, depression, or anxiety are not present, then a cholinesterase inhibitor with or without memantine can be tried.⁴ Only after failing these measures, should antipsychotics be considered. Ongoing collaboration between the clinician and caregiver(s), and frequent reassessment of the patient, is critical to effectively address NPS.

This case highlights the risk of polypharmacy in the treatment of NPS, the complexity of prognostication in dementia, and the importance of a multifaceted approach to NPS, including addressing triggers, providing behavioral interventions, and cautious use of medications.

Corresponding

Author: Claire K. Larson, MD, Division of Geriatrics, Department of Medicine, University of California, San Francisco, 3333 California St, Ste 380, San Francisco, CA 94118 (claire.k.larson@gmail.com).

Published Online: September 28, 2015.
doi:10.1001/jamainternmed.2015.5253.

Conflict of Interest Disclosures: None reported.

1. Mitchell SL, Miller SC, Teno JM, Kiely DK, Davis RB, Shaffer ML. Prediction of 6-month survival of nursing home residents with advanced dementia using ADEPT vs hospice eligibility guidelines. *JAMA*. 2010;304(17):1929-1935.
2. Kales HC, Gitlin LN, Lyketsos CG; Detroit Expert Panel on Assessment and Management of

Neuropsychiatric Symptoms of Dementia. Management of neuropsychiatric symptoms of dementia in clinical settings: recommendations from a multidisciplinary expert panel. *J Am Geriatr Soc*. 2014;62(4):762-769.

3. Husebo BS, Ballard C, Cohen-Mansfield J, Seifert R, Aarsland D. The response of agitated behavior to pain management in persons with dementia. *Am J Geriatr Psychiatry*. 2014;22(7):708-717.

4. Sink KM, Holden KF, Yaffe K. Pharmacological treatment of neuropsychiatric symptoms of dementia: a review of the evidence. *JAMA*. 2005;293(5):596-608.
5. Xu J, Wang LL, Dammer EB, et al. Melatonin for sleep disorders and cognition in dementia: a meta-analysis of randomized controlled trials. *Am J Alzheimers Dis Other Demen*. 2015;30(5):439-447.