

Managing Residents With Alzheimer's Disease

A team approach to delaying cognitive, functional, and behavioral decline.

By Lesley M. Blake, MD

Dr. Blake is the Director of the Division of Geriatric Psychiatry at the Stone Institute of Psychiatry, Northwestern Memorial Hospital, and an Associate Professor of Psychiatry and Behavioral Sciences at Northwestern University, Chicago, IL.



An estimated two-thirds of nursing home residents suffer from some form of dementia.¹ Many of these patients are initially admitted to long-term care facilities because of other illnesses or conditions but are later discovered to have Alzheimer's disease or another form of dementia. Because these conditions progressively affect cognition, function, and behavior, members of the multidisciplinary team must work together to meet the many challenges associated with treating this illness. This includes being aware of the disease's symptoms, seeking an appropriate and early diagnosis, and instituting a care plan that focuses on slowing cognitive decline, treating associated behavioral problems, and reducing the burden on caregivers.

Early and Appropriate Treatment

The natural history of Alzheimer's disease varies from patient to patient (see figure), yet early diagnosis and treatment remains an important goal for all people with this condition. Detecting the disease early helps to reduce patient and caregiver anxiety, allows for future planning before the loss of one's cognitive and physical abilities, and enables the clinician to manage behavioral or functional symptoms. Early treatment also delays or slows the symptom progression, which in turn may limit the patient's reliance on caregivers.^{2,4}

Slowing Cognitive Decline. Several organizations, including the American Medical Directors Association and the American Psychiatric Association, have developed clinical practice guidelines for the care of patients with dementia

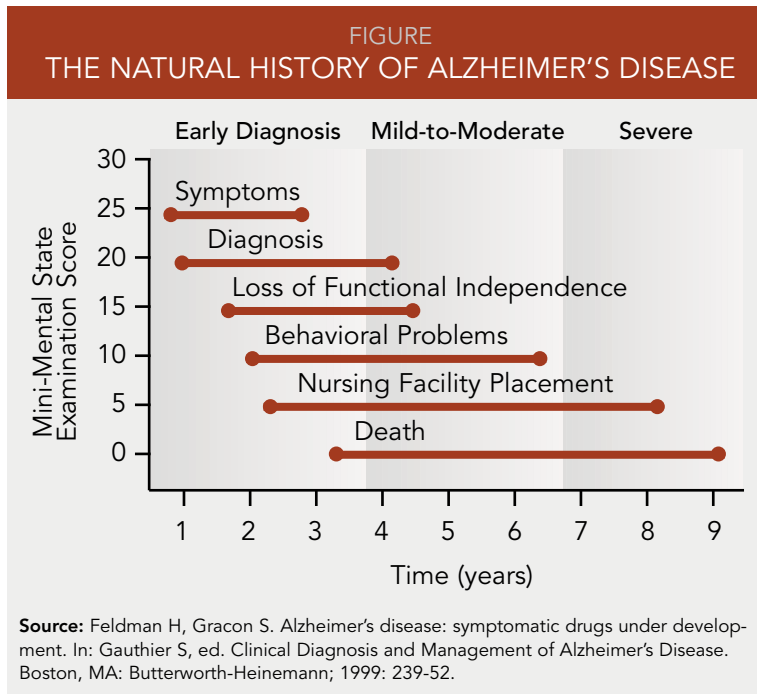
that emphasize early recognition and accurate diagnosis of cognitive impairment. Because no one standard has emerged as a model management tool, it is important to combine various aspects of these guidelines to tailor a care plan that best meets each patient's cognitive treatment goals.

Acetylcholinesterase inhibitors are theorized to improve cholinergic function in patients with Alzheimer's disease. These drugs have also been proven to slow the decline of cognition, maintain function, delay the onset of behavioral symptoms,⁵ and decrease caregiver burden;⁶⁻⁸ the maximum benefits of these drugs can be achieved by taking the recommended doses early in the course of the disease and continuously thereafter.

The Food and Drug Administration has approved four acetylcholinesterase inhibitors for the symptomatic treatment of mild-to-moderate dementia of the Alzheimer's type. Tacrine, donepezil, rivastigmine, and galantamine have shown superiority to placebo in delaying cognitive decline during a six-to-12-month time period.⁹⁻¹² These agents have also been shown to delay deterioration in cognition over an extended period of time in patients with Alzheimer's disease.^{13,14} In addition, in October 2003 the FDA approved memantine, the first in a new class of medications, for the treatment of moderate-to-severe dementia of the Alzheimer's type.

Patients suffering from Alzheimer's disease often experience a decline in cognition during the course of several years. It is therefore essential that acetylcholinesterase inhibitor therapy be initiated soon after a diagnosis of Alzheimer's disease, regardless of the patient's age. Although some health care providers may believe that older

nursing home residents will not benefit from acetylcholinesterase inhibitors, this hesitation to prescribe is not beneficial to the patient. It is also not based on scientific evidence, which points to the medications' safety and effectiveness in this population.¹⁵⁻¹⁸ Without appropriate dosing, patients may not experience the full benefits of acetylcholinesterase inhibitor therapy and may continue to exhibit a decline in cognition, function, and behavior.



disturbances, whereas those receiving treatment with acetylcholinesterase inhibitors were found to have a delayed onset of behavioral decline.⁵

Therapeutic Goals.

Although cognitive decline may be the only sign that a patient has Alzheimer's disease, behavioral and functional symptoms frequently occur concurrently. For this reason, therapeutic goals often differ and must be tailored to the patient's most immediate needs. All patients should have a therapeutic plan that maximizes functional abilities

Maintaining Function. Maintaining a patient's functional independence decreases the burden on the caregiver. Even in the long-term care setting, preserving functional independence (i.e., the patient's ability to perform activities of daily living [ADLs]) should be a therapeutic goal.

The Alzheimer's Disease Cooperative Study/Activities of Daily Living Inventory (ADCS-ADL) is a validated measure of ADLs in patients with mild-to-moderate Alzheimer's disease. Tariot and colleagues⁵ found that the administration of galantamine therapy for five months led to the maintenance of patients' ADCS-ADL scores; in contrast, patients receiving placebo exhibited progressively declining scores. Reducing the amount of time caregivers spend assisting patients with ADLs can benefit both the caregiver and patient.

Delaying Behavior Problems. The behavioral symptoms of dementia—such as delusions, hallucinations, agitation or aggression, and disinhibition—vary widely and may change during a patient's life. These symptoms are among the main causes for nursing home admission of people with Alzheimer's disease.^{19,20} In fact, many clinical practice guidelines emphasize the need for educating caregivers of patients living in the community about managing behavior symptoms.

Behavioral symptoms may be a significant cause of injury to patients and caregivers and one of the reasons for caregiver burnout. In a five-month galantamine study, patients receiving placebo showed an increase in behavioral

and aims to curtail or delay cognitive decline. Yet the therapeutic goals for a patient with a more mild form of dementia may focus on involvement in group activities, whereas the desired outcome for someone with a more severe form of the disease may simply be that he maintain his ability to feed himself.

No matter what the symptoms, everyone involved in managing the disease must be realistic about treatment goals. Evidence of a stable, slow decline in cognition, which may be viewed as failure in the context of many other conditions, indicates therapeutic success in patients with Alzheimer's disease. The goal of currently available therapies is not to cure the condition, but to slow symptom progression. This information must be shared with family members, who may hold the unrealistic expectation that their loved one will recover from the illness.

The Team Approach

The caregiver team should work together to proactively observe, detect, and diagnose Alzheimer's disease. Care team members in the nursing home are most likely aware of this disease's prevalence and should be familiar with its signs and symptoms. Recognizing the symptoms of Alzheimer's disease—along with the disease stages they most likely coincide with—and sharing this information with other team members will help confirm a diagnosis.

For example, two isolated events in the course of a day or week may remain unconnected unless the care team has properly documented, coordinated, and communicated

CASE STUDY

Upon admission to a long-term care facility, family members describe Ms. C, who is 78 years old and has a history of hypertension and osteoporosis, as being depressed, agitated, and increasingly unable to perform ADLs. Her cognition and function are tested and assessed, and the results recorded in her chart. After a period of time, Ms. C's daytime nurse discovers that the resident is no longer able to brush her hair. During the following week, Ms. C forgets to attend two appointments with an occupational therapist. The consultant pharmacist checks on her hypertension medicine a month later and finds that a two-week supply has not been taken. All three providers record this information and report it to the practicing physician, who decides to again perform cognitive and functional tests. The physician finds a significant decline in Ms. C's cognition since admission and ultimately diagnoses her with Alzheimer's disease. She begins receiving an acetylcholinesterase inhibitor and a new care plan is initiated, with a primary goal of treating her Alzheimer's disease symptoms.

Ms. C continues to have difficulty completing ADLs and displays temporary lapses in short-term memory. Yet the decline in her cognitive abilities has been noticeably slowed, and her behavior has not shown any signs of deteriorating. Each member of the multidisciplinary team continues to keep a watchful eye on her behavior, and cognitive and functional tests are performed regularly. All of her health care providers are aware that, had they not communicated their observations to each other and the physician, this patient's disease could have taken a very different turn.

information about the patient. A patient may resist a nurse aide's assistance with his ADLs on Monday and, on Wednesday, tell a therapist that he is angry at his loss of independence. Unless these two providers document the patient's actions and statements and share these observations with other team members, the patient's worsening condition may not be detected as early as possible.

Conclusion

Because a majority of long-term care residents develop Alzheimer's disease either before nursing home admission or during their residence, early symptom recognition and accurate diagnosis are important. No currently available therapy prevents onset, stops disease progression, or

improves patient symptoms to a premorbid level. However, study data show that acetylcholinesterase inhibitor therapy can slow cognitive decline, maintain function, and stabilize worsening behavior in patients with Alzheimer's disease. When administered by interdisciplinary team members who monitor and report any changes in the patient's status, these treatments can help people with Alzheimer's disease, regardless of age.

References

1. Callahan CM, Hendrie HC, Tierney WM. Documentation and evaluation of cognitive impairment in elderly primary care patients. *Ann Intern Med* 1995;122(6):422-9.
2. Ernst RL, Hay JW. The US economic and social costs of Alzheimer's disease revisited. *Am J Public Health* 1994;84(8):1261-4.
3. Weinberger M, et al. Expenditures in caring for patients with dementia who live at home. *Am J Public Health* 1993;83(3):338-41.
4. Stommel M, Collins CE, Given BA. The costs of family contributions to the care of persons with dementia. *Gerontologist* 1994;34(2):199-205.
5. Tariot PN, et al. A 5-month, randomized, placebo-controlled trial of galantamine in AD. The Galantamine USA-10 Study Group. *Neurology* 2000;54(12):2269-76.
6. Max W, Webber P, Fox P. Alzheimer's disease: the unpaid burden of caring. *J Aging Health* 1995;7(2):179-99.
7. Mohs RC, et al. A 1-year placebo-controlled preservation of function survival study of donepezil in AD patients. *Neurology* 2001;57(3):481-8.
8. Feldman H, et al. A 24-week, randomized, double-blind study of donepezil in moderate to severe Alzheimer's disease. *Neurology* 2001;57(4):613-20.
9. Blesa R. Galantamine: therapeutic effects beyond cognition. *Dement Geriatr Cogn Disord* 2000;11(suppl 1):28-34.
10. Davis KL, Powchik P. Tacrine. *Lancet* 1995;345(8950):625-30.
11. Rogers SL, et al. A 24-week, double-blind, placebo-controlled trial of donepezil in patients with Alzheimer's disease. Donepezil Study Group. *Neurology* 1998;50(1):136-45.
12. Corey-Bloom J, et al. A randomized trial evaluating the efficacy and safety of ENA 713 (rivastigmine tartrate), a new acetylcholinesterase inhibitor, in patients with mild to moderately severe Alzheimer's disease. *International Journal of Geriatric Psychopharmacology* 1998;1:55-65.
13. Wilcock, et al. Long-term cognitive effects of galantamine in the treatment of mild-to-moderate Alzheimer's disease: evidence from 48 months of treatment. Poster presented at *The American Psychiatric Association 156th Annual Meeting*. San Francisco, CA: May 17-22, 2003.
14. Rogers SL, et al. Long-term efficacy and safety of donepezil in the treatment of Alzheimer's disease: final analysis of a US multicentre open-label study. *Eur Neuropsychopharmacol* 2000;10(3):195-203.
15. *Aricept package insert*. Eisai Co, Ltd; Teaneck, NJ.
16. *Reminyl package insert*. Janssen Pharmaceutica Products, L.P.; Titusville, NJ.
17. *Exelon package insert*. Novartis Pharmaceuticals Corporation; East Hanover, NJ.
18. *Cognex package insert*. First Horizon Pharmaceutical Corporation; Alpharetta, GA.
19. Dunkin JJ, Anderson-Hanley C. Dementia caregiver burden: a review of the literature and guidelines for assessment and intervention. *Neurology* 1998;51(suppl 1):S53-60.
20. O'Donnel BF, et al. Incontinence and troublesome behaviors predict institutionalization in dementia. *J Geriatr Psychiatry Neurol* 1992;5(1):45-52.