CASE STUDY

A Case Study in Alzheimer's Disease

A 69-year-old woman presents with symptoms of forgetfulness that worsen over time. Now the doctor must decide when a diagnosis of Alzheimer's disease should be made, how the family should be told and what support can be offered to the caregiver.

by Serge Gauthier, MD, FRCPC

History

Mrs. J. is a 69-year-old Caucasian woman who presents with symptoms of forgetfulness. She has trouble remembering names and the location of certain keys on her typewriter. Her past medical history includes uncomplicated shingles and treatment with prednisone for temporal arteritis between the ages of 65 to 67, with residual osteoporosis. Consequently, she has been taking calcium supplements as well as low doses of thyroid replacement therapy.

Twenty months later, Mrs. J. is reassessed and she reports that her memory impairment has worsened and is now "embarrassing" her. She has stopped working in an office and her husband has observed her to be more irritable as well as nervous.

Her family history includes a maternal uncle with dementia who is in his 90s. A standard laboratory blood work-up is negative except for mild normocytic anemia. The neurologic exam reveals mild limb apraxia. Her Mini-Mental Status Exam (MMSE) score is 27/30 (considered normal) and her clock drawing is perfect (Figure 1). The initial diagnostic impression is that of uncertainty as to the benignity of the cognitive (predominantly recent memory) loss.

Twenty months later, Mrs. J. is reassessed and she reports that her memory impairment has worsened and is now "embarrassing" her. She has stopped working in an office and her husband has observed her to be more irritable as well as nervous. The neurologic exam shows that the patient now has buccolingual and limb apraxia. Her clock drawing is now impaired in that she has put in at least 15 numerals and has no idea how to place the hands of the clock. A diagnosis of early Alzheimer's disease (AD) is made.

One year later, Mrs. J. is assessed by an AD specialist. Her symptoms now encompass some word-finding difficulties and the need for supervision to look after her financial affairs and for cooking. Her affect is described as sad, with a tendency to sleep more in the daytime. A psychogeriatric consultation rules out depression. Her MMSE is 24/30 and her clock drawing is impaired. The diagnosis of AD is confirmed and felt to be of stage 4 on the seven stages Global Deterioration Scale (GDS) (Table 1).

A year after that, Mrs. J. is forgetting to give phone messages, can still dial familiar phone numbers, and has shown temporary spatial disorientation in her condo in Florida and when visiting her brother's house. She has stopped cooking altogether, is afraid of the oven and needs some supervision for the selection of her clothes. She is still able to stay alone for several hours at a time, allowing her husband some time at his golf club. Nevertheless, she shows anxiety for upcoming events. The MMSE is now 20/30. Her GDS stage is 5. Her husband and children have heard about new AD drugs and hope that some drug intervention might stabilize Mrs. J.'s symptoms. A follow-up visit is scheduled.