History
Mr. Jay is an 80-year-old retired store clerk. He has been living on his own for 10 years since his wife’s death. Mr. Jay’s daughter accompanies him to your office because she is concerned about his mental deterioration and irritability. As a long-standing patient, he has shown a gradual onset and decline of cognition over the past year. Mr. Jay is at a stage where he has difficulty remembering how to perform simple tasks. He cannot recognize some written words or letters. He scores 26/30 on the MMSE, with one out of three points on short-term memory, but he insists on maintaining his independence.

Question
• How would you proceed?

Comment
It is important to develop a proactive management strategy for the patient with Alzheimer disease (AD). There are four major components to this strategy:

Education. Education about AD and its progression is recommended. Areas to plan for include: personal care, finances, Power of Attorney (POA), advanced directives and will-making. Encourage the patient’s family to begin planning for clinical and nursing needs.

Monitoring. It is incumbent upon the physician to develop a therapeutic alliance with the patient and family and to include them in monitoring the functioning and safety risk of the AD patient. Monitoring of medication compliance, driving, use of the phone and other daily activities by the family facilitates identification and response to significant changes in the patient’s health status. The family member/caregiver may find it useful to begin a diary to document the patient’s daily functioning and to monitor any new problems.

Linkage. The physician’s role also includes facilitating linkage with other agencies and associations, such as The Alzheimer Society, for ongoing support and education of patients and their caregiver/family.

Medical Issues. Addressing ‘medical’ issues including:
• treating any concomitant illness;
• eliminating non-essential drugs that could interfere with cognition, such as over the counter medications, herbal remedies or alcohol; and
• discussing available AD symptomatic medications.

Progress
At a follow-up visit, Mr. Jay’s daughter reports that her father is more forgetful and has greater difficulty using household items. She is also very concerned about her father’s personal safety. Twice in the past month, he has turned the stove on to ‘heat’ the electric kettle. He also gets confused while taking his daily medication and loses count of the pills. He continues to drive, even though his daughter does not feels safe driving with him.

Mr. Jay is more irritable, especially when questioned, and disoriented to time and place. He is aware of the time because he wears a watch, but is confused about the date and month. He remembers the address of his building, but cannot remember his floor or apartment number. His physical exam is unremarkable, but his MMSE Score is 22/30, with 0 out of 3 on short-term memory and a Functional Activities Questionnaire (FAQ) score of 15/30.

Question
• How would you address Mr. Jay’s daughter’s concerns about her father’s personal safety?

Discussion
A systematic approach to assessing safety risk can be incorporated into the ongoing assessment of the AD patient. A useful instrument is the Instrumental Activities of Daily Living (IADL) questionnaire, developed by Lawton and Brody, which inquires about areas in which risk issues can be uncovered. These include: the ability to use the phone, shopping, food preparation, housekeeping, laundry, mode of transportation, responsibility for taking own medications and ability to handle finances. In Mr. Jay’s case, three areas of safety concern are food preparation, mode of transportation and medications. His daughter should be told that her concerns are valid. His disorientation to time and place point to further deterioration of his cognitive functioning. Immediate plans should be instituted to ensure safety and minimize further risk.

Strategies should be discussed with the family to minimize the risk of fire in Mr. Jay’s home. Options can include disabling the stove/oven, using auto shut off kettles and having smoke and heat detectors installed. Alternatives to cooking his own meals should be considered. Should the risk of fire become severe, emergency placement can be requested. Homecare may be able to
provide some homemaking and supervision. Private options should be reviewed for the future, such as having Mr. Jay move in with his daughter temporarily until alternative arrangements can be made.

Medication errors can lead to delirium and increase risk of falls. Careful monitoring of medication compliance is needed at this stage. As a precautionary step, Mr. Jay should be enrolled in the Alzheimer Disease Wandering Registry.

Actual assessment of functioning and safety risk is essential and best done in the home, as long as risk level does not necessitate his removal from the home. This may involve Senior’s Outreach to assess, provide initial case coordination and monitor.

It is the medico-legal obligation of the physician to document the consideration of driving capacity following a diagnosis of dementia and whenever there is a change in cognitive functioning. The physician should advise the patient and family when the patient lacks the fitness to drive. The obligation to report a lack of fitness to drive may vary depending on the province. Physicians should be familiar with these obligations. In Mr. Jay’s case, this should be done immediately.

**Progress**

Mr. Jay reluctantly agrees to relieve his daughter’s “worries” by conceding the need to make adjustments in the home, and to bring in health care professionals. He and his daughter return after an occupational therapy functional and safety assessment and the Seniors Outreach team’s involvement. His daughter inquires about the possibility of initiating a trial of donepezil.

**Question**

- **Would a trial of donepezil be advised?**

**Discussion**

A trial may be considered under strict supervision at home, once stability is obtained in the home. Prior to initiation of treatment, the physician should establish some baseline measures of cognition and function against which future evolutions can be compared to determine response. These may include the MMSE and clock test (cognitive measures) and functional measures such as the FAQ, IADL or Physical Self-Maintenance Scale (PSMS). The patient and caregiver should be interviewed regarding current cognitive, behavioural and emotional status. A careful history from the caregiver regarding problems arising in day-to-day functioning should be documented as well. Potential effects and side effects of donepezil should be explained.

Donepezil should initially be started at 5 mg at bedtime. If the patient develops sleep difficulties, it may be changed to a morning dosage. This dosage should be maintained for six to eight weeks prior to increasing to 10 mg per day. Increasing the dosage prior to six weeks may result in increased side effects. If the patient cannot tolerate the 10 mg dosage (e.g., low body weight) or it is contraindicated (refer to product monograph), then they can be maintained at 5 mg.

Patients should be evaluated within four to six weeks to ensure that they are tolerating the medication, as well as to determine the degree of response. Caregivers should be advised to call the physician should any new symptoms arise during treatment. If clinical deterioration occurs or the patient experiences intolerable side effects, stop treatment.

Follow-up assessments may include a repeat of cognitive and functional measures. Patient and caregiver should be interviewed about any observed changes. Caregivers may find it helpful to maintain a diary to track new findings. This input is extremely important as changes may be detected in behaviour, emotion and function without any change in objective measures. Should the caregiver report—or patient demonstrate—improvement or stability at 24 weeks, then treatment should be maintained. Discontinuation needs to be considered when the disease has progressed to the severe stage (MMSE < 10) in collaboration with the patient’s substitute decision maker.

**References**


Pfizer Canada: Product monograph for Aricept™ (donepezil).
