

## Memory Loss: Review Questions

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### QUESTIONS

Choose the single best answer for each question.

- 1. A 74-year-old woman presents to your office complaining of difficulties with her memory. In your evaluation, all of the following should be considered EXCEPT:**
  - (A) A relative or other close observer should corroborate her history
  - (B) In healthy older persons, the ability to learn new information declines
  - (C) The history should include medication use
  - (D) Her chance of having Alzheimer's dementia is less than 5%
  - (E) Knowledge of the patient's social functioning is important in the diagnosis of dementia
- 2. All of the following are known reversible causes of dementia EXCEPT:**
  - (A) Hypercalcemia
  - (B) Major depression
  - (C) Normal-pressure hydrocephalus
  - (D) Parkinson's disease
  - (E) Vitamin B<sub>12</sub> deficiency
- 3. Which of the following statements regarding the Folstein Mini-Mental State Examination (MMSE) is correct?**
  - (A) A person who scores 21 points or fewer has dementia
  - (B) Abstract thinking is one of the components of the MMSE
  - (C) The MMSE can differentiate between vascular dementia and Alzheimer's dementia
  - (D) Educational background does not have to be considered when scoring the MMSE
  - (E) The MMSE has both written and verbal responses
- 4. An 80-year-old man is admitted to the hospital for pneumonia. He has a history of hypertension and mild dementia. After admission, he becomes agitated, anxious, and more confused than his baseline. He is disoriented but cooperates with medical treatment. His family is present. Which of the following is most appropriate for the management of this patient with delirium?**
  - (A) Observation
  - (B) Restrict family visits
  - (C) Use physical restraints to prevent the patient from pulling out his intravenous line
  - (D) Administer haloperidol 0.5 mg twice per day
  - (E) Administer lorazepam 1 mg intravenously every 6 hours
- 5. A 69-year-old woman has recently been diagnosed with Alzheimer's disease by a local neurologist. She returns to her family physician for follow-up management. All of the following are reasonable initial management strategies EXCEPT:**
  - (A) Begin a cholinesterase inhibitor such as donepezil
  - (B) Start donepezil and vitamin E
  - (C) Start sertraline only
  - (D) Provide counseling and refer the family to the Alzheimer's Association for education and support groups
  - (E) Obtain clarification of the patient's treatment wishes prior to her incapacitation

*(turn page for answers)*

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## ANSWERS AND EXPLANATIONS

1. **(D) Her chance of having Alzheimer's dementia is less than 5%.** Alzheimer's dementia is found in approximately 5% of persons aged 65 years, and this percentage increases about 5% every 5 years, leading to a prevalence of 40% to 50% by age 85 years.<sup>1</sup> A diagnosis of dementia includes a detailed history and verification with a close observer. Age-associated cognitive changes include a decline in information processing and new learning, and old age per se does not imply pathologic memory decline. Medications, including over-the-counter preparations and herbal supplements, are a common cause of cognitive impairment in the elderly. The degree of memory loss must include severe impairment in social or occupational functioning and represent a major decline from a previous level of functioning to meet the DSM-IV criteria for dementia.
2. **(D) Parkinson's disease.** Although true reversible dementias represent less than 10% of those presenting with a dementia syndrome, a search for these processes is a necessary part of a dementia work-up. A complete blood count, chemistry profile, measurements of vitamin B<sub>12</sub> and folate levels, rapid plasmin reagin test, thyroid function studies, and cranial imaging are recommended.<sup>2</sup> Although 50% of those with Parkinson's disease will eventually develop dementia, it is not reversible.
3. **(E) The MMSE has both written and verbal responses.** Quantitative mental status examination is essential to the work-up of memory loss complaints. The Folstein MMSE has become the gold standard screening test and takes less than 10 minutes to administer in the office. Generally, scores less than 21 (maximum points, 30) indicate cognitive impairment, but the score alone is never diagnostic and the patient's educational level must be taken into account. The test cannot differentiate between the different types of dementia nor can it differentiate pseudodementia (major depression masquerading as cognitive impairment) from true dementia. Testing requires verbal responses and reading, writing, and mathematical ability as well as vision and motor control skills.<sup>3</sup>
4. **(A) Observation.** Delirium is a confusional state characterized by a transient reduction in the clarity of awareness of the environment, accompanied by a fluctuating level of consciousness. This disturbance devel-

ops over hours to days, not weeks to months. Risk factors include age older than 80 years, known dementia, fracture or institutionalization prior to admission, and infection. Nonpharmacologic approaches are key to the management of delirium. Presence of familiar faces (ie, family) or moving the person to a well-lit area, such as the nursing station, are initial strategies. Use of restraints or antipsychotic medication should be reserved for patients with severe agitation that causes interruption of essential medical therapies or poses a safety hazard to patient or staff.<sup>4</sup>

5. **(C) Start sertraline only.** Cognitively-impaired patients have frequent concurrent depression, and the use of antidepressants (sertraline and others) is recommended only for those who are identified as meeting the criteria for adjustment disorder with depressed mood or major depression. Current clinical guidelines include several pharmacologic recommendations.<sup>2</sup> Cholinesterase inhibitors have been shown to slow (but not reverse) cognitive decline, while offering improvement in cognition, mood, and activities of daily living enhancement. These improvements are often modest but have been shown to delay nursing home placement by up to 2 years. Likewise, vitamin E has been shown to decrease functional decline compared with placebo. Obtaining the support of professionals with experience and expertise in the support of dementia families and clarifying advanced directives are also important.

## REFERENCES

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