Exams Differentiate Delirium From Dementia

BY MICHELE G. SULLIVAN
Mid-Atlantic Bureau

SAN FRANCISCO — Two brief mental state exams can reliably differentiate delirium from dementia in the elderly emergency department patient.

Because delirium usually is caused by an organic illness, confusional symptoms may disappear once the underlying problem is treated, said Dr. Allen Yuen, director of emergency medicine at Epworth Hospital, Melbourne. Dementia, the product of a progressive disease, is largely untreatable.

“Poor differentiation between the confusional states is associated with poor outcomes in the patients, with increased morbidity and mortality, longer hospital stays, and functional decline,” he said at the 12th International Conference on Emergency Medicine.

There are three types of confusion in the elderly patient, Dr. Yuen said at the meeting, which was hosted by the American College of Emergency Physicians. Delirium is characterized by the sudden onset of symptoms. Patients may appear either drowsy or agitated. They can exhibit variable short-term memory, poor attention, disorganized thoughts, and even hallucinations.

The underlying causes can range from serious cardiovascular disorders—such as cerebral ischemia, myocardial infarction, and pulmonary embolism—to such seemingly innocuous problems as a urinary tract infection, pain, cold, urinary retention, and constipation.

Dementia is a state of chronic confusion induced by a long-term neurologic illness such as Alzheimer’s disease. This is progressive and irreversible. Short-term memory is impaired, and the patient may not be able to perform simple tasks when asked. Language may be impaired. Family members may report aggression or personality changes.

Acute or chronic confusion occurs when a treatable illness, such as infection, brings on acute delirium in a patient with dementia.

A combination of the Confusion Assessment Method (CAM) and the Mini-Mental State Exam (MMSE) is highly effective in differentiating the types of confusion, Dr. Yuen said. “A positive CAM and an MMSE score of more than 25 are strongly predictive of delirium,” he said.

CAM has sensitivity of 95%-100% and a specificity of up to 95% for diagnosing delirium in the elderly. It relies on observations both by family members or caretakers and clinicians to assess four symptoms: acute confusional onset, inattention, disorganized thinking, and altered level of consciousness. The diagnosis of delirium by CAM requires the presence of both the first and second feature and at least one of the other two.

The MMSE, while not considered a diagnostic tool, does identify patients with cognitive impairment suggestive of dementia. The screen measures orientation, short-term memory, calculation ability, and language. A score of 18-26 indicates mild dementia, although, highly educated patients with early dementia may still achieve a score of up to 30, Dr. Yuen noted.

The usual battery of tests (complete blood count, electrolytes, blood urea nitrogen and glucose, liver function, C-reactive protein, and urinalysis) often will reveal the physical problem underlying delirium. A chest x-ray, electrocardiogram, and brain CT may be helpful as well.

In addition to the indicated therapy, patients will benefit from supportive care. A quiet room with a clock, family photos, and personal items can help them regain their orientation. Any assistive devices the patient regularly uses, such as hearing aids or glasses, should be available. “Patients and their family members will need reassurance and encouragement,” Dr. Yuen said. “Patients usually do much better if the family is present—24 hours a day if possible. This is especially true if the patient doesn’t speak English.”

Drugs and restraints should be avoided or kept to the absolute minimum needed to ensure the patient’s safety, he said. Use restraints only for extreme agitation, aggressiveness, or risk of self-harm, not to prevent injury or falls. They’re not effective for this and may even contribute to falls if used inappropriately,” Dr. Yuen added.

Drugs should be considered only for hallucinations or delusions that may increase the risk of harm to self or others, Dr. Yuen said. “Don’t use them routinely, and use them only until the cause of the delirium is reversed.”