Questionnaire Helps Determine Risk of Falls

BY JOYCE FRIEDEN

WASHINGTON — Offering interventions to improve balance and ensure proper functioning of assistive devices can cut the incidence of falls by half in older people, researchers found. The same study showed that indicators as diverse as difficulty clipping toenails and leg weakness could predict fall risk.

John Parrish, Ph.D., executive director of the Erickson Foundation, and his associates developed a six-page, 29-item questionnaire to predict fall risk. The questionnaire can be self-administered or given by medical personnel or other professionals, Dr. Parrish said at a session on fall prevention at the sixth annual World Health Care Congress.

The researchers administered the questionnaire to 198 people aged 62 years or older and then checked back 6 and 12 months later. A total of 152 patients completed the survey and both follow-ups.

The researchers found that 48% of respondents had experienced one or more falls within the 6 months before the survey, including 0.5% who had as many as six falls. People who had fallen were more likely to report problems cutting their toenails, poor balance, leg weakness, numbness in their feet, use of an assistive device such as a walker, inability to walk one-quarter mile, inadequate exercise, and dizziness when standing up, Dr. Parrish said.

After the survey, patients who had histories of falling were referred for interventions including balance retraining, medication management, and evaluation of their assistive device to make sure it was working properly. About 94% of the patients who reported falls had received at least one intervention by the end of the 6-month follow-up period, Dr. Parrish said.

Of those who pursued an intervention, 91% either stabilized or decreased their fall frequency, while 9% experienced more falls than they had before completing the questionnaire. At the 12-month follow-up, the researchers found that only 25% of respondents had fallen during the previous 6 months, a statistically significant decline from baseline.

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DR. PARRISH

Dr. Matthew Narrett, executive vice president and chief medical officer of Erickson Health, said in the session that his company, which provides health insurance coverage and medical care at 20 retirement communities nationwide, reduced hip fractures in a population of 2,300 seniors from 45 in 2004 to 26 in 2008. Measures taken included:

► **Patient evaluation.** When a patient falls, an e-mail is sent to all relevant parties. A health care worker goes to the patient's apartment the next day and documents the circumstances of the fall, and results are entered into the patient's electronic medical record.

► **On-site osteoporosis screening.** "We cover it in our [health] plan for men as well as women," since 20% of men over age 80 have osteoporosis, Dr. Narrett said.

► **Provider education on vitamin D deficiency.** "Using the electronic medical record, we demonstrated a fourfold increase in vitamin D screenings among our residents" after providers were given information on vitamin D deficiency in the elderly, he said.

Preventing falls has an economic benefit as well, since 25% of patients who sustain hip fractures will end up being admitted to long-term care facilities, he noted.

Bonita Lynn Beattie, vice president of injury prevention at the National Council on Aging, said in her presentation that 35%-40% of adults aged 65 or older fall each year, and if they fall once, they're two to three times more likely to fall again. Of those who sustain hip fractures, 20% die within a year.

"We think many falls are preventable," she said. "If a person has a history of falls, they really need a clinical assessment to see if there's appropriate intervention."

All adults need to work on balance and strength, ensure that their meds are managed appropriately, and adhere to their medication regimen, Ms. Beattie said. Vision problems also are an important component that needs to be addressed.

Home hazards also need to be reduced, she said. "Putting grab bars in the bathroom … where people will use them and teaching people how to use them can make a significant difference," she said.

The panel was sponsored by Erickson Health. The Milton H. Erickson Foundation is a private research and philanthropic foundation. ■

Resources for Fall Prevention

Dr. Parrish recommended the following Web sites for fall-prevention information:

► www.stopfalls.org: The Web site of the Fall Prevention Center of Excellence was created by the California Fall Prevention Consortium. It includes information for providers, individuals, and researchers.

► www.ncoa.org (type "falls" into the search bar): The Web site of the National Coalition on Aging includes information on fall prevention funding, fall prevention checklists, and other news related to fall prevention campaigns.

► www.jefferson.edu/jchp/carah (click on "Publications and Presentations" and find Project ABLE): The Web site of the Jefferson College of Health Professions spotlights a project aimed at making homes safer for older adults having trouble performing daily activities.

Delirium and the Dying: Take Steps to Ease Suffering

BY PATRICE WENDLING

AUSTIN, TEX. — Most palliative care patients will suffer delirium at the end of life, yet the condition is often misdiagnosed and underrecognized.

The prevalence of delirium reaches 56% in hospitalized elderly patients, 87% in the ICU, and 88% in advanced cancer patients—and may be as high as 100% in patients receiving palliative care at death, palliative care pharmacist Rosene Pirrello said at the annual meeting of the American Academy of Hospice and Palliative Medicine.

Delirium develops quickly, may fluctuate throughout the day, and presents with a variety of symptoms,including inattention, confusion, agitation, delusions, lethargy, stupor, and coma.

The consequences of delirium can be significant, said Ms. Pirrello, of the Institute for Palliative Medicine at San Diego Hospice. The condition can increase mortality and morbidity, result in prolonged hospitalizations, and reduce quality of life. In 99 terminally ill cancer patients who recovered from delirium, 73 (74%) remembered the episode, and of those, 59 reported the experience as distressing (Cancer 2009 Feb. 24 [doi:10.1002/cncr.24215]). Caregivers and spouses reported similar levels of distress.

How often is delirium overlooked? In 107 patients with terminal cancer who had all experienced delirium, the overall detection rate was 47%; just 20.5% of the cases of hypoactive delirium, the most prevalent and underrecognized subtype, were detected (Jpn. J. Clin. Oncol. 2008;38:56-63), said psychiatrist Scott Irwin, director of psychiatry programs at the San Diego institute. In his own review of 2,716 hospice patients at the institute, delirium was documented in 18% of home care patients and in 28% of inpatients.

"This is grossly underrecognized, not only in our setting, but in all settings," he said.

Delirium management should ensure patient safety, assess causes, and address environmental issues, Dr. Irwin said. Delirium has many causes, with medications at the top of the list. Environmental interventions can include providing materials that orient patients to the surroundings, adequate but soft lighting, and sensory aids; maintaining caregiver consistency; limiting stimulation; and having companions at the bedside for safety.

Treatment is radically different depending on the context and goals of care. "Benzodiazepines are the medication of choice for settling patients at the end of life, but they are completely contraindicated in our mind in the management of potentially reversible delirium," said Dr. Frank Ferris, director of international programs at the institute.

Because of the neurologic and physiologic changes that occur when a patient is dying, it is probably impossible to do anything more than settle an agitated patient, he said.

"How many of you have had patients and families say to you in the agitation and confusion of dying, 'Please, simply settle the patient; we can't stand to watch it'?" Dr. Ferris asked his audience.

Benzodiazepines such as lorazepam and midazolam are sedatives that can decrease agitation and relax skeletal muscles. But more important, they are amnesics, Dr. Ferris said.

"If you actually ask patients who are approaching the end of their lives—and I do this with virtually everybody—'If you get to a place where you are agitated and confused, do you want to experience that or not?' virtually everyone says, 'I don't want to experience it or remember it,' " he said.

Neuroleptics are a better choice for potentially reversible delirium, in part because they may not cause sedation to the same degree that benzodiazepines do, they are not amnesics, and they may decrease the seizure threshold. Evidence suggests that older neuroleptics such as haloperidol are as safe and effective as newer agents, and they are cheaper and have more routes of administration.

All of the speakers stressed that delirium is not the same as dementia, although the two are often confused. Cognitive impairment is present in both, but rapid onset is unique to delirium. The differential diagnosis for delirium also includes depression, anxiety, and akathisia, Dr. Irwin said.

Tools that can help improve delirium recognition include the Confusion Assessment Method, which asks four simple questions and has a robust sensitivity of 94%-100% and specificity of 90%-95%, Dr. Irwin said.

Etiology is important because delirium is reversible in about 50% of cases, Ms. Pirrello said. An acronym that can bring to mind the many causes of delirium is I WATCH DEATH O, she said. The letters stand for Infection, Withdrawal, Acute metabolic changes, Trauma, CNS pathology, Hypoxia, Deficiencies, Endocrinopathies, Acute vascular events, Toxins or drugs, Heavy metals, and Other.

The speakers reported no relevant conflicts of interest. ■