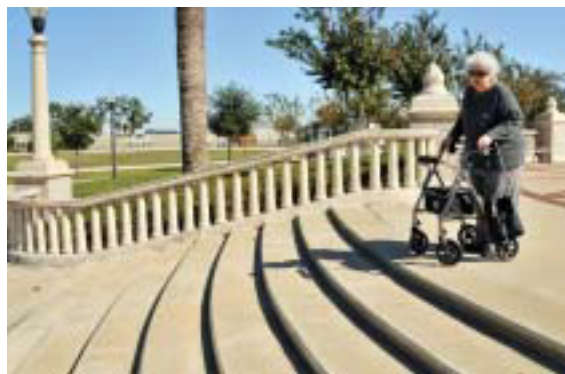


Many Injuries Occur With Walking Aids

BY KEITH HAGLUND

The Centers for Disease Control and Prevention wanted to know how elderly people get around using walkers and canes. Not so well, CDC researchers found out—at least according to emergency department data.

After investigating 3,932 emergency department visits for fall-related injuries from 2001 to 2006, CDC researchers estimated that each year, 47,312 people



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Elderly women appear to be particularly susceptible to falls with walkers and canes.

aged 65 years and older go to EDs in the United States for mishaps associated with use of canes or walkers. One-third of those people are hospitalized. The estimated yearly injuries total 17,856 fractures, 14,106 contusions or abrasions, 6,590 lacerations, 3,213 strains or sprains, 3,003 internal injuries, and 2,544 other.

“Injuries and hospital admissions for falls associated with walking aids were frequent in this highly vulnerable population,” Judy A. Stevens, PhD, and her CDC colleagues wrote in the *Journal of the American Geriatrics Society* (2009;8:1464-9). In an interview, she said the CDC looked into the topic because falls are the leading cause of injuries in older adults. The researchers suggested that the design of walkers and even canes could be improved. They also called for research into the physical and cognitive demands that walking aids put on users.

The team estimated fall injuries in both nursing homes (annually, 6,713 with walkers and 544 with canes) and public places (3,426 with walkers and 749 with canes). But, by far, the most falls associated with aids occur at home: 25,144 with walkers and 3,289 with canes, making up about 60% of all such injuries. About 12% of injuries occurred at unknown locations.

Older women appear to be particularly susceptible. Although they constitute 59% of the 65-and-older population, they suffered 77% of the fall injuries in the study. Most of those involved walkers. Women and men also suffered different injuries: Women most often damaged lower-trunk areas, whereas men had more head and neck injuries.

The researchers wrote that other studies support the perception that walkers and canes help elderly people with balance and mobility, but the team added that

some studies “suggest that they can be associated with greater fall risk because they can cause tripping or interfere with a person’s balance control.”

The numbers of injuries associated with the aids seem “higher than they should be,” said Dr. Stevens. She suggested that many times walkers and canes aren’t fitted to an individual’s size and capability and that too often, users receive no instruction.

Even simple devices call for fitting and proper instruction, she said. For instance, a cane user needs to learn which side of the body needs the support and how tall the device should be, but canes “bought at the corner drugstore” don’t come with such instructions, she said.

On walkers, features such as wheels and seats can be inappropriate. Dr. Stevens said that falls commonly occur when a walker rolls away from a user or

the person moves too far into a lightweight device and loses control of his or her center of gravity. “People need to be aware that these are not one-size-fits-all devices,” said Dr. Stevens.

“Older adults who use such assistive devices often have problems with balance, muscle weakness, stiff joints, or coordination,” said Dr. Hosam Kamel of the department of geriatrics at the University of Arkansas, Little Rock, who coauthored AMDA’s a clinical practice guideline on falls (see sidebar). “In addition, such individuals are often frail,

which increases their risk of sustaining an injury as a result of a fall.”

Dr. Kamel said that, when used properly, the aids can greatly improve elders’ quality of life but added, “If not used appropriately, they can cause more harm than benefit.” He stressed the necessity of fitting each elderly person with the proper assistive device and then periodically reassessing the person’s physical and cognitive abilities to handle that device.

Keith Haglund is managing editor of CARING FOR THE AGES.

LTC Perspective

CARING FOR THE AGES sought comment from Hosam Kamel, MD, CMD, who cochaired the latest update committee for AMDA’s clinical practice guideline “Falls and Fall Risk” (www.amda.com/tools/guidelines.cfm).

On CDC’s finding that 47,000 elders are injured annually in falls associated with walkers and canes, Dr. Kamel said he is “not surprised at all. Falls happen frequently among older adults who use walkers and canes. Individuals in the nursing home are often more frail than community-dwelling elderly,” said Dr. Kamel of the department of geriatrics at the University of Arkansas, Little Rock.

“They have higher incidence of dementia, Parkinson’s disease, and visual problems. These conditions can greatly affect coordination, response time, and safety awareness. Nursing home patients with dementia who use walkers or canes may forget to use them at all or may forget to use them properly. In addition, nursing home patients have a high prevalence of osteoporosis, and this increases their risk of sustaining fall-related injuries.”

Dr. Kamel advised how to make sure the assistive devices do more good than harm as a person’s needs change: “Proper utilization of these devices include proper fitting of the device to the individual, educating the individual on how to properly use this device. The problem is that the older individual gets fitted with a device and often left without follow-up assessments to evaluate if this device is still suitable for that individual.”

Nursing homes can significantly reduce the number of falls and injuries associated with walkers and canes, said Dr. Kamel. They should:

- ▶ Ensure that the individual is fitted with the proper device.
- ▶ Assess the environment for any risks that may increase falls (such as access to the toilet in the room, hallways clear of clutter, adequate lighting at night).
- ▶ Educate the person on how to use the device correctly.
- ▶ Realize that repeated assessment and education may be needed as the individual’s comorbidities advance.
- ▶ Ensure that the individual who uses these devices is screened and treated for osteoporosis.

Falls Prompt Most ED Visits by Nursing Home Residents

BY BRUCE JANCIN

NEW ORLEANS — Falls constitute by far the most common reason for emergency department visits by nursing home residents, according to a national survey.

After injuries from falling, which accounted for an estimated 14% of all nursing home patients’ ED visits in 2004, the list of the top five reasons for a trip to the ED was rounded out by chest pain and pneumonia (accounting for 4.5% of visits each), followed by psychiatric symptoms (3.7%), and cardiac conditions other than acute coronary syndrome (3.2%), Scott Wilber, MD, reported at the annual meeting of the Society for Academic Emergency Medicine.

Some investigators have asserted that up to one-half of ED visits by nursing home residents are for problems that could have been treated effectively by a visiting primary care physician. But the new national survey data suggest that nursing home patients who go to the ED typically do so for trauma and serious medical conditions. They tend to be on the more medically complex

end of the spectrum, said Dr. Wilber, director of the emergency medicine research center at Northeastern Ohio Universities College of Medicine, Rootstown.

His analysis of data from the 2004 National Nursing Home Survey indicated that within the 90 days before the survey, 8.3% of nursing home residents had made a visit to the ED.

In a multivariate logistic regression analysis, the significant risk factors for ED visits by nursing home patients were issues related to the presence of a gastrointestinal or genitourinary device, being on more than nine medications, weight loss, pressure ulcers, male gender, and having no advance directive.

“These findings are not especially surprising,” said Bill Kubat, vice president of the Sioux Falls, S.D.-based Good Samaritan Society. “A nurse can do the basic assessment after a fall but cannot make a diagnosis. If the physician is called and there is a suspicion of an injury, the usual directive is to send the patient to the ED.”

On the other hand, he said, “if we can identify any factors that might predispose someone to falls—such

as multiple medication use or a history of falling—we can take precautions early on and prevent falls from happening.” This calls for a multidisciplinary approach to reducing sedation, strengthening muscles, correcting vision problems, improving lighting, and making sure residents have slip-proof footwear.

Kubat also suggested that “access to a physician or PA who can come to the facility and see residents in-house would eliminate many unnecessary ED visits.”

Communication between the nursing home and the acute care facility is also important. “This information can make sure that the [nursing] facility has the equipment, medications, and other support the resident will need to stay safe and avoid ED visits due to accidents or adverse events,” said Mr. Kubat. Two-way communication should also ensure that ED staff know what medications the person is taking, what diagnoses he or she has, and the person’s preferences.

Bruce Jancin is with the Denver bureau of Elsevier Global Medical News.