



Clinical Digest

PATIENT SAFETY

Brain Injuries from Falls

When an older adult falls, a broken hip isn't the only risk. Traumatic brain injury (TBI) also is a great concern. But just how many older adults die or are hospitalized as a result of TBI sustained from a fall? To determine the most up-to-date answer, CDC researchers analyzed data from the National Center for Health Statistics' National Vital Statistics System and the Agency for Healthcare Research and Quality's Nationwide Inpatient Sample.

They found that, in 2005, nearly 8,000 people aged 65 and older died of TBI after a fall—accounting for half of all fall-related deaths in that age group. Another 56,000 older adults were hospitalized for nonfatal, fall-related TBI. Both of these estimates were higher than those previously reported.

The highest hospitalization rates were for adults aged 90 to 94. Most patients were hospitalized for two to six days, although 10% of men and 6% of women were hospitalized for two weeks or more. At discharge, roughly half were transferred to another facility, such as a skilled nursing home. Only one third were discharged home.

The researchers note that TBI often has long-term consequences, including cognitive, emotional, and functional impairment. To help prevent falls and TBI in their patients, the researchers recommend that providers encourage patients to exercise and make their homes safer, review patients' medications, and check their vision more often. They also suggest helping patients' family members learn to prevent, recognize, and respond to fall-related TBI.

Source: *J Safety Res.* 2008;39(3):269–272.

EMERGENCY MEDICINE

Detecting Hypertension in the ED

It is currently recommended that patients with elevated blood pressure (BP) recorded in the emergency department (ED) be referred for outpatient hypertension evaluation. There is no standard for establishing an elevated BP in the ED, however, say researchers from Cooper University Hospital, Camden, NJ; Albert Einstein Medical Center, Philadelphia, PA; and Virtua Memorial Hospital, Mount Holly, NJ. Furthermore, their study shows that using the initial, triage BP measurement to identify patients with elevated BP, which they say is a common practice, can inflate the number of patients flagged for referral.

In this study, the researchers screened 2,192 adults presenting to an urban hospital ED over the course of two months for study inclusion. Of the 1,991 patients who agreed to participate, 455 had a triage BP measurement that fulfilled the criteria for hypertension. Data from the 326 patients not taking a BP altering medication during the study were analyzed.

These patients had two more BP measurements taken by study personnel: one immediately after giving consent and another after completing a data collection form (about 12 minutes later). The researchers compared four methods of evaluating BP, using: the triage measurement only, the mean of the triage and second measurements, the mean of all three measurements, and the mean of the second and third measurements.

With each successive method, the number of patients with “elevated BP” dropped—from 326 using the triage method to 202 using the mean of

the second and third measurements. Given this reduction of nearly 40%, the researchers say a standardized protocol to identify at-risk hypertension is urgently needed.

Source: *Am J Emerg Med.* 2008;26(5):561–565. doi:10.1016/j.ajem.2007.09.001.

WOMEN'S HEALTH

Smoking and Endometrial Cancer

Could some “beneficial” effects of smoking provide clues on how to protect women against endometrial cancer? That's the conclusion reached by researchers from Nanjing Medical University, Nanjing, China, who performed a meta-analysis of 34 epidemiologic studies. They found that women who had ever smoked had a reduced risk of endometrial cancer compared with women who had never smoked, and this risk reduction was significant among postmenopausal women. Women who smoked and took hormone replacement therapy seemed to have an even greater risk reduction.

Although the researchers could not confirm that smoking duration was associated linearly with reduced endometrial cancer risk, they found that smoking 20 more cigarettes per day correlated with a 16% drop in risk in six prospective studies and a 27% drop in six case-control studies.

The researchers suggest several possible mechanisms at work, such as smoking-induced alterations in steroid production and metabolism. Understanding these mechanisms could help in designing strategies to prevent endometrial cancer. ●

Source: *Am J Med.* 2008;121(6):501–508. doi:10.1016/j.amjmed.2008.01.044.