**A Look at the Problem of Falls Among People With Cancer**

*Sandra Holley, PhD, ARNP, AOCN®*

Many people with cancer have multiple risk factors for falls, such as older age, diminished functional status, neurologic and nutritional deficits as a result of cancer treatments, polypharmacy, and deconditioning related to cancer-related fatigue (Dean et al., 1995; Holley, 2000; Holley & Borger, 2001; Kurtz, Kurtz, Given, & Given, 1993; Nail & King, 1987; Piper et al., 1989). People with cancer are achieving long-term periods of remission and survival and even are cured, making the quality of survivorship a central concern (American Cancer Society, 2001). Of all types of accidents, falls pose the most serious threat to the elderly. In addition to injuries, falls can have serious consequences related to reduced physical functioning and quality of life (Dunn, Rudberg, Furner, & Cassel, 1992; Spar, La Rue, Hewes, & Fairbanks, 1987).

### The Morbidity of Falling

The U.S. Centers for Disease Control and Prevention (CDC) (2000) defined a fall as resulting from a syndrome that represents symptoms and signs of disordered function in a disordered environment. It does not have a single cause but is the result of an interaction of intrinsic, extrinsic, and environmental factors (CDC). Falls are the leading cause of injury deaths among people aged 65 and older (Hoyert, Kochanek, & Murphy, 1999). Epidemiologic studies of individuals with impaired functional ability found falls to be more intrinsic in nature and were classified as anticipated physiological falls (Hogue, 1982; Jacobson et al., 1990; Morse, Prowse, Morrow, & Federspeil, 1985). Falls are related more commonly to age and functional ability and are influenced by disease status, physical strength, coordination, and level of alertness (Gehlsen & Whaley, 1990; Gluck, Wientjes, & Rai, 1996; Graafmans et al., 1996; Groves, Lavori, & Rosenbaum, 1992; Mathers & Rai, 1996; Graafmans et al., 1996; Groves, Lavori, & Rosenbaum, 1992; Mathers & Rai, 1996; Graafmans et al., 1996; Groves, Lavori, & Rosenbaum, 1992; Mathers & Rai, 1996). Falls can be markers of poor health and declining function, and they often are associated with significant morbidity. More than 90% of hip fractures occur as a result of falls. Not all falls can be prevented, but the incidence and severity of injury can be reduced (Speechley & Tinetti, 1990).

Although patients with cancer are at high risk for falls and subsequent complications, this is not a well-documented problem in the literature. A search of all major literature databases for information on falls among patients with cancer revealed only one, rather old, quality-assurance audit report (Coyte, 1979). The findings of this report are not generalizable to most populations of patients with cancer for several reasons. The sample included only people with neurologic cancers, the ages of those falling were 40–49 (the average age of a person with cancer is 60), and the patients had excessively long hospitalizations (up to 110 days), which is extremely rare today.

Literature on special patient populations (e.g., healthy elderly in a community, elderly nursing home residents, people with neurologic disorders) has revealed that patient falls are high-frequency, high-risk problems in older, hospitalized people (Speechley & Tinetti, 1990). Each year, patient falls increase healthcare costs by about $2 billion (DiBella & Harvey, 1999). Concomitant problems, such as impaired functional status, impaired cognition, impaired ambulation, multiple medications, continence problems, and sensory deficits, have been identified in many patients as risk factors for those who fall (Rubenstein, Josephson, & Robbins, 1994). Many, if not all, of the aforementioned characteristics are part of the cancer experience and treatment.

### Intrinsic Factors of People Who Fall

Many researchers have attempted to identify people who are at risk of falling. Intrinsic (host) factors, such as older age, declining...