Predicting Falls in Older Patients Using Components of a Comprehensive Geriatric Assessment

Janine A. Overcash, PhD, ARNP, BC, and Jason Beckstead, PhD

This prospective study evaluated components of a comprehensive geriatric assessment (CGA) to identify rates and predictors of falls in older patients. Fall rates and scores on components of the CGA were compared among adults aged 70 or older in three groups: patients with cancer receiving chemotherapy, patients with cancer not receiving chemotherapy, and community-dwelling adults without cancer. Older adults in the chemotherapy group were hypothesized to fall significantly more often than those in the nonchemotherapy group. Among the patients with cancer, scores on the Activities of Daily Living Scale were a significant predictor of falls. The scores were the only domain of the CGA found to be a significant predictor; therefore, more research is needed to better understand fall risk assessment among older patients with cancer. Nurses should conduct fall risk assessments with measures of functional status as included in a CGA.

n 2005, 15,800 people aged 65 and older died from injuries associated with falls (National Center for Injury Prevention and Control, 2008). Falls are a complex syndrome characterized by the act of unintentionally coming to rest at a lower point for causes other than a violent blow, loss of consciousness, or a sudden onset of paralysis (e.g., stroke, seizure) (Kellogg International Work Group, 1987). Seventy percent of people who fall report a physical injury (e.g., fracture [Greenspan et al., 1998], and 25% require follow-up health services and suffer from functional decline (Stel, Smit, Pluijm, & Lips, 2004). The resultant functional impairment often never resolves, and independence and functioning permanently remain below prefall levels (Vidal, Coeli, Pinheiro, & Camargo, 2006). Understanding falls can help nurses identify older patients with cancer who are more at risk for falls and ultimately reduce injury. Falls can greatly affect older patients with cancer because of aggravating factors such as fatigue (Mock, 2004), anemia, weakness (Nail & Winningham, 1995), and often malaise (Holley, 2002), as well as the potential for treatment-delaying injury.

The present study evaluated the influence of falls on older adults with and without cancer using components of a comprehensive geriatric assessment (CGA). Older adults receiving chemotherapy were hypothesized to fall significantly more often than those without cancer and those with cancer but not receiving chemotherapy. The authors also hypothesized that older adults with cancer undergoing chemotherapy would fall more often than the other two groups when controlling for age and gender. This study will address the following questions: What are the fall rates in adults aged 70 and older with cancer who are receiving chemotherapy compared to adults

At a Glance

- Among adults aged 70 or older in this study, more falls were reported in community-dwelling adults without cancer than in patients receiving chemotherapy and not receiving chemotherapy.
- Older adults receiving chemotherapy were more likely to fall when compared to the other groups using unadjusted rates, but fall rates were not significantly different among groups when adjusting for age and gender.
- Scores on the Activities of Daily Living Scale were found to be a significant predictor of falls in older patients with cancer.

of the same age with cancer who are not receiving chemotherapy? When controlling for age and gender, do fall rates differ among patients with cancer receiving chemotherapy, patients with cancer not receiving chemotherapy, and patients without cancer? What are the mean differences of scores on the Activities of Daily Living Scale (Katz, Downs, Cash, & Grotz, 1970), the Geriatric Depression Scale (Yesavage et al., 1982), and the

Janine A. Overcash, PhD, ARNP, BC, is an assistant professor and Jason Beckstead, PhD, is an associate professor, both in the College of Nursing at the University of South Florida in Tampa. No financial relationships to disclose. (Submitted June 2008. Accepted for publication July 29, 2008.)

Digital Object Identifier:10.1188/08.CJON.941-949