Frailer older patients at higher risk of readmission or death after discharge from hospital

May 25 2015

Frailer older patients are at higher risk of readmission to hospital or death within 30 days after discharge from a general internal medicine ward, but health care professionals can assess who is at risk using the Clinical Frailty Scale, according to a study in *CMAJ* (*Canadian Medical Association Journal*).

Readmission within 30 days after hospital discharge is common and also costly for the health care system. Identifying at-risk patients and addressing the factors contributing to readmission can help reduce recurrences. However, current tools are not able to predict accurately who might be at risk of readmission.

Researchers assessed whether the Clinical Frailty Scale can help predict readmission or death within 30 days after hospital discharge in a group of 495 patients at 2 Alberta hospitals. The Clinical Frailty Scale, an easy-to-use tool developed several years ago, can be used at the bedside by physicians and other health care professionals to determine frailty. The scale measures difficulty in daily living activities with mild frailty (score of 5) corresponding to difficulty with 1 or more complicated daily living activities such as finances, shopping, meal preparation and housework. Moderate frailty (score of 6) indicates difficulty in bathing, dressing or climbing stairs. Severe frailty (score of 7) means a patient is physically or mentally dependent on someone for 3 or more daily living activities.

Of the patients enrolled in the study, half were women, and the median age was 64 years. One-third of the patients (162) were frail, with a score of 5 or higher on the Clinical Frailty Scale in the week before admission to hospital. Within 30 days after discharge, 85 patients (17%) were readmitted or had died. Compared with nonfrail patients, frail patients were at greater risk of readmission or death within 30 days (24% v. 14%), especially those with moderate or severe frailty (31% v. 14%). Inclusion of frailty assessments improved the prediction of post-discharge outcomes, leading the authors to suggest that this assessment be included in discharge planning procedures to help identify patients at highest risk of poor transition from hospital to home.

The researchers suggest that a variety of factors may contribute to readmission to hospital.

"Although frailty or vulnerability before becoming ill may affect outcomes after discharge, patients in hospital may also experience an acquired, transient period of risk for adverse events that is harmful in addition to the stress of the acute illness," writes Dr. Finlay McAlister, University of Alberta, with coauthors. "This 'post-hospital syndrome' is a multidimensional construct that incorporates sleep deprivation, cognitive stress, poor nutrition and physical pain. Patients who are already frail before hospital admission may be more sensitive to the stresses of this syndrome and at higher risk of readmission and poor outcomes."

The Clinical Frailty Scale can be a useful tool for health care professionals to identify patients at high risk of readmission and provide support to lessen the likelihood of readmission.

More information: *CMAJ*, www.cmaj.ca/lookup/doi/10.1503/cmaj.150100