

CORR Insights®: Does Early Functional Outcome Predict 1-year Mortality in Elderly Patients With Hip Fracture?

Joseph M. Lane MD

Received: 8 April 2013 / Accepted: 10 April 2013 / Published online: 19 April 2013
© The Association of Bone and Joint Surgeons® 2013

Where Are We Now?

Dubijanin-Raspopović and colleagues provided strong evidence that early functional outcome predicts 1-year mortality in elderly hip fracture patients. It is well documented that approximately 20–25% of hip fracture patients will not survive 1-year, and that men fare more poorly. While many factors have been associated with morbidity and mortality after this injury, the current article used a careful multivariate analysis to demonstrate that the Functional Independence Measure (FIM) test identified patients at risk. Parameters like age, comorbidity status, and gender all are accommodated by the postoperative 1-week FIM test. Of note, it appears that patients presenting with prior poor function often have poor function

after fracture. Thus, a level of prefracture frailty may correlate with postoperative function.

Where Do We Need to Go?

If postoperative function predicts survival, the individuals presenting with frailty and poor postoperative FIM scores are at risk for death after hip fracture. It would be desirable to set up grouping of FIM scores to identify risk level and target at-risk patients for intervention. The intensive care units (ICUs) have long used the frailty score to recognize the patients at poor survival risk. The established frailty tests have been validated for ICU patients, but not for hip fracture patients. In addition, the FIM is a 13-question combined system. Could a shortened system be specially made for hip fracture patients?

How Do We Get There?

FIM and fragility testing must be modified and validated for hip fracture patients in various environmental presentations including inner city municipal hospitals, university hospitals, and rural community hospitals. Cost effectiveness teams should use this test to target high-risk patients and evaluate interventions in an evidence based manner. Lastly, individuals with poor support systems as measured by currently available tests have fared poorly. Good intentions need receptive and supported patients. Consequently, prefracture frailty, poor postoperative function and patients with inadequate support systems are destined for high hip fracture mortality. They should be targeted for the limited resources currently available. Patients do not die immediately following a hip fracture; they dwindle away unless we intervene.

This CORR Insights® is a commentary on the article “Does Early Functional Outcome Predict 1-year Mortality in Elderly Patients With Hip Fracture?” by Raspopović and colleagues, available at DOI 10.1007/s11999-013-2955-1.

Each author certifies that he or she, or a member of his or her immediate family, has no funding or commercial associations (eg, consultancies, stock ownership, equity interest, patent/licensing arrangements, etc) that might pose a conflict of interest in connection with the submitted article.

All ICMJE Conflict of Interest Forms for authors and *Clinical Orthopaedics and Related Research*® editors and board members are on file with the publication and can be viewed on request. This CORR Insights® comment refers to the article available at DOI 10.1007/s11999-013-2955-1.

J. M. Lane (✉)

The Hospital for Special Surgery, 535 East 70th Street,
New York, NY 10021, USA
e-mail: lanej@hss.edu