

Frailty can help predict complications, death in older trauma patients

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Measuring frailty using the Frailty Index (FI) can be a predictor of in-hospital complications, need for discharge to a skilled nursing facility or in-hospital death in older patients following physical trauma.

The role of [frailty](#) in [trauma patients](#) remains unclear. Current guidelines that define the management of elderly [patients](#) who experience trauma fail to take into account the low physiological reserve and altered response to injury these patients have.

The authors measured frailty in all elderly trauma patients (65 years or older) during a two-year study at a [trauma center](#) at the University of Arizona. Frailty was measured using the FI, which was obtained from the Canadian Study of Health and Aging. Frailty was defined as a syndrome of decreased physiological reserve and resistance to stressors, which results in increased vulnerability to poor health outcomes, worsening mobility and disability, hospitalizations and death. The study enrolled 250 patients with an average age of 77.9 years.

Of the patients, 44 percent (n=110) met the definition of frailty. Patients with frailty were more likely to have in-hospital complications (cardiac, pulmonary, infectious, hematologic, renal and reoperation) and adverse discharge disposition (discharge to a skilled nursing facility or dying at the hospital). The overall mortality rate was 2 percent and all the patients who died had frailty.

"Using age as the sole reference for clinical decision making is

inadequate and misleading in geriatric patients. The FI should be used as a clinical tool for risk stratification among geriatric trauma patients."

Bellal Joseph, M.D., of the University of Arizona Medical Center, Tucson, and colleagues wrote in their *JAMA Surgery* paper.

In a related commentary, Thomas N. Robinson, M.D., M.S., of the University of Colorado School of Medicine, Aurora, and Emily Finlayson, University of California, San Francisco, M.D., M.S., write: "Joseph and colleagues are to be congratulated on this important work highlighting the relative effect of chronological and physiological age on trauma outcomes. Although the best frailty tool for trauma cases has yet to be determined, this study should trigger further research and quality improvement efforts targeting the growing population of trauma patients with frailty."

More information: *JAMA Surgery*. Published online June 11, 2014. [DOI: 10.1001/jamasurg.2014.296](https://doi.org/10.1001/jamasurg.2014.296)
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