

Frailty and Outcomes for Older Patients Treated in a Major Trauma Centre

A. Angus¹, M. Flinn¹, K. Wallace¹, M.W.G. Gordon², E. Capek³, A. Anand^{1,4}

1. Department of Medicine for the Elderly, Royal Infirmary of Edinburgh, Edinburgh, Scotland

2. Department of Emergency Medicine, Queen Elizabeth University Hospital, Glasgow, Scotland

3. Department of Medicine for the Elderly, Queen Elizabeth University Hospital, Glasgow, Scotland

4. Centre for Cardiovascular Science, University of Edinburgh, Scotland



Introduction:

Older people are the fastest growing group of hospitalised trauma patients, most commonly due to falls from standing height. The Scottish Trauma Audit Group (STAG) collect extensive national data, but this does not currently include frailty and longer-term dependency.

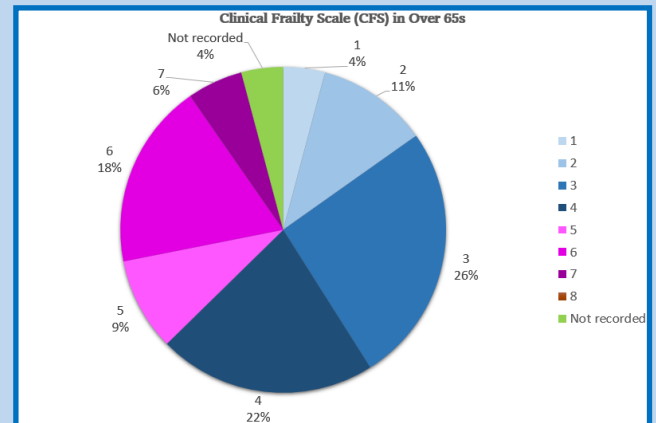
Method:

We retrospectively reviewed consecutive cases in the STAG database for the Royal Infirmary of Edinburgh between September 2018 and February 2019. Casenote review was used to calculate baseline frailty status using the Clinical Frailty Scale (CFS).

Outcomes of residence and mortality were collected to 1 year.

Results:

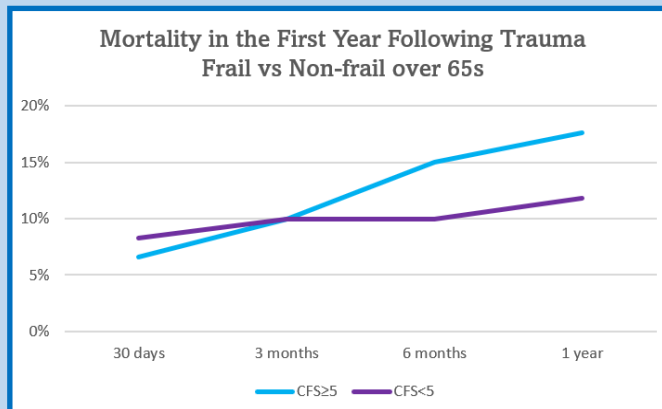
We included 442 patients (mean age 62±20 years old, 43% female), of whom 218 (49%) were ≥65 years old (mean 78±8 years, 57% female). CFS could be ascertained in 209 (96%) patients ≥65 years, of whom 73 (35%) were frail (CFS ≥5) **Graph 1**. Median Injury Severity Scores (ISS) did not vary by age or frailty (9 [9-10] in frail group vs 9 [4-14] in non-frail, p=0.59).



Graph 1

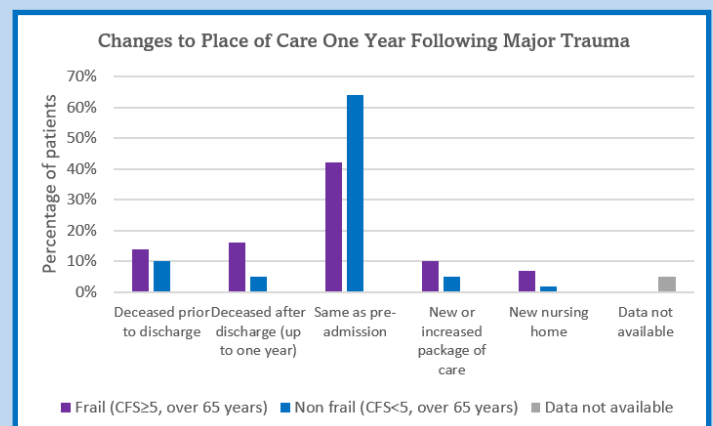
Although short-term mortality was similar, frail patients were twice as likely to die at 1 year after trauma, after adjusting for age (odds ratio 2.4, 95% CI 1.2-4.9, p=0.02)

Graph 2



Graph 2

In survivors to 1 year, 16% of frail older patients required increased care at home (vs. 8% of non-frail older patients, p<0.001) and 14% were newly admitted to a care home (vs. 4% of non-frail, p<0.001) **Graph 3**.



Graph 3

Conclusion:

A third of older patients with trauma are frail and this is an important predictor of patient outcomes beyond death. Frailty provides more prognostic information than age in this setting.