

The Fate of the Elderly: Orthogeriatric Outcomes After Various Fragility Fractures

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Purpose: Fragility fractures (FFs) are associated with increased morbidity and mortality and often reflect a dramatic turning point in the life of the elderly. We hypothesize that all geriatric patients with FF will benefit from orthogeriatric co-management in terms of 1-year mortality and residential status.

Methods: We retrospectively evaluated all patients over 70 years of age with FF of our Geriatric Trauma Centre DGU, who received orthogeriatric treatment after geriatric assessment for the years 2019-2021. Demographic data, fracture type, complications, discharge modality, and residential status, as well as mortality after 12 months were recorded. Primary outcome parameters were mortality and residential status 12 months after admission. A logistic regression analysis was performed with the influencing factors age, Charlson Comorbidity Index, type of FF, and residential status prior to FF.

Results: We were able to retrospectively analyze 486 patients (83.8 ± 6.6 years, 145 men, 341 women). Included were 263 proximal femur fractures, 33 proximal humerus fractures, 76 pelvic ring fractures, 63 thoracolumbar vertebral fractures, 25 fractures of the cervical spine, and 26 periprosthetic proximal femur fractures. Patients who were still living independently at home before FF showed a significantly lower 1-year mortality (26.5% vs 48.1%; $P < 0.05$). Patients who were discharged home from acute hospital or acute geriatric care showed a 1-year mortality of 12.9%. Patients discharged to a nursing home had a mortality rate of 39.6%. The chance of surviving FF and still being able to care for themselves was significantly increased by a factor of 2.2 for thoracolumbar fractures, and decreased 17.5-fold for patients who had lived in a nursing home before FF. Of the 355 patients who previously lived independently at home, only 186 (52.3%) were still living at home after 1 year.

Conclusion: Orthogeriatric treatment of patients with FF is not only crucial for proximal femoral fractures. The 1-year outcome for geriatric patients with FF shown in this study shows that despite orthogeriatric co-management, almost half of the patients who previously lived at home die or have been transferred into nursing care.