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Outcomes For Older Patients With Hip Fractures: The Impact Of Geriatric Care

Abstract

Background: Hip fracture (HF) in older persons is associated with significant morbidity, mortality, disability and institutionalisation. To improve the outcome after HF different models of joint orthogeriatric care have been proposed with variable outcomes.

Objective: To assess the impact of geriatric care (GC) on clinical HF outcomes.

Design: Retrospective cohort observational study.

Participants: 951 patients 60 years of age or older admitted with a primary diagnosis of HF over a 7-year period (1995-2002).

Intervention: Between 1995 and 1997, medical problems were managed by a consultation-only service. In 1998 a part-time orthogeriatric registrar was appointed to oversee daily medical care with weekly geriatrician consultant review.

Measurements: Patient demographic characteristics, type of fracture, comorbid conditions and post-operative medical complications, mortality, length of stay and discharge destination. Data were compared for two time periods: a 3-year period before (no GC; 504 patients) and a 4-year period after (GC; 447 patients) the introduction of GC.

Results: No age or sex differences between the time periods were noted (females 76.2% and 74.5%, aged ≥ 75 years 81% and 82%). Comparing the GC period to the previous 3-years (no GC) there was a significant reduction in post-operative medical complications and comorbid conditions (4% vs 14%; $p < 0.001$) including delirium (0.9% vs 1.7%), pneumonia (0.45% vs 4%), gastrointestinal bleeding (0.9% vs 2.3%), acute cerebrovascular (0.45% vs 2.3%) and coronary (1.3% vs 2.4%) syndromes. Mortality also significantly decreased (4.7% vs 7.7%; $p < 0.05$). However, no differences were observed in median length of hospital stay (10.8 vs 10.0 days) or in the percentage of patients discharged to residential care (25.7% vs 25.1%). Use of anti-osteoporotic treatment for both primary and secondary prevention of HF was low during the study period. Anti-osteoporotic treatment for secondary prevention progressively increased to 70% in the last year of the study.

Conclusions: Combined orthogeriatric care for older patients with HF was associated with a significant reduction in post-operative medical complications and comorbid conditions and mortality, but not with length of stay or discharge destination. Geriatrician input also resulted in an increase of anti-osteoporotic treatment for secondary HF prevention. Options for improvement of the orthogeriatric service (e.g. a dedicated orthogeriatric ward) need to be investigated.

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