Hip fractures: comprehensive geriatric care and recovery

Hip fractures are a worldwide public health issue, with devastating consequences for both patients and their families. In 2000, 1·6 million hip fractures were reported worldwide and epidemiological studies estimate a 12·1% and 4·6% lifetime risk of hip fracture for women and men, respectively. Clinical and social consequences of hip fracture include death, depression, fear of falling, disability, institutionalisation, and social isolation. For old people, the ability to remain mobile is an essential aspect of quality of life, and is crucial for the preservation of independence. Many older patients develop disabilities in mobility after hip fracture surgery, and more than 30% do not regain independent ambulation 1 year later. A better understanding of this suboptimum recovery, and innovative, effective interventions beyond surgery, are clinical and public health priorities.

In The Lancet, Anders Prestmo and colleagues present their well designed study providing strong evidence that, for patients aged 70 years or older with hip fractures, perioperative comprehensive geriatric care given in a dedicated ward improves short-term and long-term function in mobility, as compared with treatment in a traditional orthopaedic care unit. 198 patients were randomly assigned to comprehensive geriatric care, and 199 to usual orthopaedic care. Mobility was assessed by the trial’s primary endpoint, the Short Physical Performance Battery (SPPB), an objective, composite test of lower leg function. Mean SPPB scores 4 months after surgery were 5·12 for patients assigned to comprehensive geriatric care, and 4·38 for those assigned to usual care (between-group difference 0·74, 95% CI 0·18–1·30). Additionally, a benefit in patients in the experimental group as judged by the SPPB was seen at 1 year, and two measures of activities of daily living (ADL)—the composite measures Barthel Index and the Nottingham Extended ADL scale—also improved.

On the one hand, the importance of these findings is supported by the clinically meaningful difference in SPPB score between the two groups, and by the strong prognostic value of SPPB for future disability, dependency, risk of hospitalisation, institutionalisation, and death. On the other hand, the study did not specifically investigate patients’ capabilities to perform mobility tasks in the community, such as climbing stairs or walking a quarter of a mile. Information about disability in mobility would have been helpful to understand the clinical and public health implications of the study fully, and enable estimation of clinical efficacy, including the number needed to treat to prevent disability for these outcomes. By contrast with previous studies, the comprehensive geriatric care intervention was associated with longer length of hospital stay (12·6 days with comprehensive geriatric care vs 11·0 days with usual care; difference 1·7 days [95% CI 0·20–2·93]) and increased costs. The causes of these unexpected findings are unclear and might need further investigation. Nevertheless, the extra hospital days were of benefit; comprehensive geriatric care produced a more favourable overall cost-effectiveness profile, a lower rate of nursing home admission, and better quality of life than usual orthopaedic care. Prestmo and colleagues’ study therefore provides important information for both clinicians and policy makers.

Comprehensive geriatric care is a multidimensional, interdisciplinary diagnostic process focused on establishing an older person’s medical, psychological, and functional capabilities, to develop a coordinated and integrated plan for treatment and long-term follow-up. This type of care is therefore both a diagnostic and therapeutic strategy designed for the identification, prioritisation, and appropriate management of the many needs of such patients. Patients with hip fractures have several overlapping problems that need assessment across several domains, and which involve multiple disciplines for a successful integrated and personalised therapeutic plan to enhance recovery and promote independence. Frail, older patients might be the most likely to benefit from comprehensive geriatric care, and patients with hip fractures are among the oldest, sickest, and frail of all patients, requiring the most complex management.

Additional research is needed to confirm and enhance the generalisability of Prestmo and colleagues’ single-centre trial; however, the availability of comprehensive geriatric care facilities should be increased to respond better to the growing needs of a frail, older, population. Compliance with best practice and provision of adequate geriatric facilities might have a substantial effect on the quality of life of patients and their families.
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We declare no competing interests.