

Inequalities in access to total hip arthroplasty for hip fracture: a population-based study

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Background

In June, 2011, the National Institute for Health and Care Excellence (NICE) recommended that total hip arthroplasty (THA) should be offered to a defined group of patients with displaced intracapsular hip fractures. We sought to determine whether national practice was consistent with national recommendations, or whether systematic inequalities exist in accessing THA for hip fracture.

Methods

Data for this observational study came from the UK National Hip Fracture Database (NHFD), which records data from all hospitals that treat adults with hip fractures in England, Wales, and Northern Ireland. Included were all patients within the NHFD who were aged over 60 and received operative treatment for a non-pathological displaced intracapsular hip fracture between July 1, 2011, and April 30, 2015. Provision of THA to patients eligible under criteria published by NICE were analysed with recursive partitioning and logistic regression.

Findings

114 119 patients with hip fracture were included, of whom 11 683 (10%) underwent THA. Recursive partitioning showed that NICE eligibility criteria did not optimally explain THA. Among patients satisfying NICE criteria, logistic regression demonstrated that access to THA was restricted by higher age (odds ratio 0.88, 95% CI 0.87-0.88), lower Abbreviated Mental Test Score (1.44, 1.34-1.54), higher American Society of Anesthesiologists score (0.74, 0.66-0.84), male sex (0.85, 0.77-0.93), walking with a stick (0.32, 0.28-0.35), and quintiles of increasing socioeconomic deprivation (1.0 [referent]; lowest vs highest quintile 1.30, 1.13-1.51). Patients treated during the week were more likely to receive THA than those treated at the weekend (1.12, 1.04-1.21).

Interpretation

There are wide disparities in access to THA among individuals with hip fractures, and compliance with NICE guidance is poor. Patients with higher levels of socioeconomic deprivation and those requiring surgery at the weekend are less likely to receive THA. Inconsistent compliance with NICE recommendations means that the optimum treatment for older adults with hip fractures can depend on where and when they present to hospital.