**PUBLIC RELEASE: 27-APR-2016**

Hip fracture surgery is 'inconsistent and inequitable' warn experts

There is widespread variation in the use of hip fracture surgery across England, Wales and Northern Ireland, concludes a study published by *The BMJ* today.

The findings show that, despite clear national guidelines, patients with higher levels of socioeconomic deprivation and those who require surgery at the weekend are less likely to receive it.

There are over 70,000 hip fractures in the United Kingdom every year, with a combined health and social cost of £2bn.

A number of studies have shown that patients who undergo total hip arthroplasty (THA) have better function and less need for repeat surgery. So in 2011, the National Institute for Health and Care Excellence (NICE) recommended THA for patients with good cognitive and physical function who are fit enough for anesthesia and surgery.

But the extent to which surgeons comply with this guidance is unknown.

So a team of UK and US researchers set out to determine whether the use of THA among hip fracture patients is based on this guidance or if there are systematic inequalities.

Using the UK's National Hip Fracture Database, they analysed data for 114,119 adults aged 60 or over who received surgery for hip fracture at hospitals in England, Wales and Northern Ireland from July 2011 to April 2015.

The degree of non-adherence to this guidance was remarkable: only 32% of eligible adults received THA, and, of those who underwent the procedure, 42% did not meet the NICE eligibility criteria. There was also substantial variation in compliance between hospitals.

The researchers identified several variables that were associated with increased odds of receiving THA after fracture, including younger age, fewer co-morbid conditions, and better mobility before fracture.

Of particular concern, however, were the findings that being admitted on a weekday or being of a higher socioeconomic status were associated with increased odds that a patient would receive a THA.

The researchers suggest that availability of experienced hip surgeons "might account for the reduced use of this procedure observed at weekends."

This is an observational study, so no firm conclusions can be drawn about cause and effect. Nevertheless, the researchers say their results show "unexplained variation" - the so called "postcode lottery" - in the use of THA after a hip fracture.

"Further efforts are necessary to improve the use of THA for eligible patients and reduce unexplained variation in care for older adults with hip fractures," they conclude.

In a linked editorial, Harman Chaudhry at McMaster University in Canada says a lack of conclusive evidence on the benefits of THA and consensus among orthopedic surgeons about best practice may explain why there is such widespread non-compliance with the NICE guidelines.

He believes we need strong evidence to guide treatment decisions.

A concerted strategy to translate knowledge will be required, he says, combining dissemination of evidence based indications for THA with widespread mobilization and availability of specialized resources and personnel.

He acknowledges that there might never be a "silver bullet" intervention to improve the lives of patients with hip fracture. But calls for "evidence and models of care that facilitate standardization of hip fracture care nationally (and globally), ultimately rooting out biases in the system and improving the lives of patients after hip fracture."

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