Can threshold values for the Oxford hip and knee score determine the need for joint replacement surgery?

Clinical Bottom Line

There is some evidence from a small non randomised study which suggests a combination of an oxford hip score of 34 plus other features such as severe joint space loss and severe osteophytes may predict the need for a total hip replacement

There is no evidence that suggests an oxford hip or knee score alone can be used as a predictor for surgery

Criteria for Critically Appraised Topic

Population:

Adults with hip or knee osteoarthritis who are being referred for surgical opinion

Intervention:

The use of the Oxford hip and knee score to determine onward referral for surgery

Comparison:

Decisions for surgery based on usual care/ clinical reasoning

Outcomes:

Onward referral to orthopaedics for surgical opinion

Primary Outcomes:

Referral for surgery and arthroplasty surgery undertaken

Inclusions:

Patients with hip or knee osteoarthritis

Exclusions:

Patient with fractures Other serious pathologies affecting the knee/ hip

Search Terms used

Oxford hip score, oxford knee score, preoperative, pre-surgery, screening, waiting list, priority patient selection, patient recruitment, patient referral, referral and consultation

Types of study included:

All types

Time Frame: 2000-2011

Available Evidence

Database Searched (Specific to CAT)	Number of abstracts	Number of Relevant Abstracts
Cochrane	0	
Web of science	1	
Ahmed	2	
Medline	6	
CINAHL	8	
Embase	12	
Total	29	

Results:

Articles assessed:

29 articles were identified through the original search. 1 article specifically answered our CAT but it was a small non randomised study

Johnson et al (2008) studied a group of 50 that were <u>already on a waiting list for total hip</u> <u>replacement (THR).</u> They looked for common parameters for their inclusion on the waiting list. They then generated fact track criteria from the common parameters. These were then used to compare 52 patients on a routine orthopaedic waiting list

An oxford hip score of 34 or above, combined with severe joint space loss (Modified Kellgren-Lawrence criteria) and severe marginal oseophytes was common to most patients on a waiting list The fast tract criteria predicted the outcome in 38 patients our of 52. Positive predictive value of 92% for joint replacement being carried out and a negative predictive value of 46%

Outcomes of the fast-track clinic

	THR carried out	THR not carried out
Patients who fulfil FTSCs seen in fast-track clinic	23	2
Patients not fulfilling FTSCs seen in traditional OPA	15	13

THR, total hip replacement; OPA, out-patient appointment. Sensitivity, 0.605; specificity, 0.867; positive predictive value, 0.920; negative predictive value, 0.464.

Implications for practice

There is some limited quality evidence that suggests using the oxford hip score (along with other criteria (Xrays and ostephyes formation) may be a method of selecting patients for surgery

Hip replacement: an update (2003) suggests using locally agreed scoring system for assessment and management of the patient in primary care. It is not stated that this locally agreed scoring system should be used to prioritise patients

References

Bourn J Controller and auditor (2003) Hip replacements: an update National Audit Office London the Stationary Office

Johnson SA Kalairajah Y Moonot P Steele N Field RE (2008) Fast track assessment clinic: selection of patients for a one stop shop hip assessment clinic