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

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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**

<table>
<thead>
<tr>
<th>Database Searched (Specific to CAT)</th>
<th>Number of abstracts</th>
<th>Number of Relevant Abstracts</th>
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<td><strong>Total</strong></td>
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**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

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Johnson et al (2008) studied a group of 50 that were already on a waiting list for total hip replacement (THR). 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 track criteria predicted the outcome in 38 patients out 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

<table>
<thead>
<tr>
<th>THR carried out</th>
<th>THR not carried out</th>
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</thead>
<tbody>
<tr>
<td>Patients who fulfil FTSCs seen in fast-track clinic</td>
<td>23</td>
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<tr>
<td>Patients not fulfilling FTSCs seen in traditional OPA</td>
<td>15</td>
</tr>
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</table>

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 ostephyses 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


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