Conservative or surgical management for first patellar dislocation
Report by Martin Thomas, Research Fellow
Search checked by Paul Wallman, Specialist Registrar

Clinical scenario
A 20 year old woman presents to the emergency department having suffered her first lateral patellar dislocation one hour before. She has managed to reduce it herself. You wonder whether surgery is superior to conservative management.

Three part question
In [patients with primary patellar dislocation] is [surgery better than conservative treatment] in [reducing symptoms and preventing redislocation]?

Search strategy
Medline 1966 to 6/99 using the OVID interface. ({exp patella OR patella$.mp} AND {exp dislocations OR dislocate$.mp OR dislocation$.mp}) AND {exp emergency treatment OR exp treatment failure OR exp treatment outcome OR treatment$.mp} AND maximally sensitive RCT filter LIMIT to human and english.

Search outcome
Seventy nine papers were found of which were 74 irrelevant and three of insufficient quality for inclusion. The remaining two papers are shown in table 4.

Comment
There are a great number of single treatment case series in this area. Only one comparative series is randomised, and the surgical treatment is not standardised in either series. There is a suggestion that outcome may be different if there is a predisposition to dislocate but the evidence for this is very weak. Further work is required.

Clinical bottom line
Conservative management of primary patellar dislocation is as effective as surgery and has a lower complication rate. It is the treatment of choice.

Table 4

<table>
<thead>
<tr>
<th>Author, date, and country</th>
<th>Patient group</th>
<th>Study type (level of evidence)</th>
<th>Outcomes</th>
<th>Key results</th>
<th>Study weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Hughston, USA, 1988&lt;sup&gt;5&lt;/sup&gt;</td>
<td>103 primary patellar dislocations over 30 years</td>
<td>Retrospective cohort</td>
<td>Recurrence rate (more than 1 redislocation)</td>
<td>36.5% v 23% v 0</td>
<td>Retrospective non-randomised series over 30 years Very small numbers in some groups</td>
</tr>
<tr>
<td>Conservative treatment (74) v arthroscopy (13) alone v arthroscopy (16)</td>
<td>Recurrence rate (more than 1 redislocation)</td>
<td>Conservative 43% v 20% Arthroscopy 0 v 11% Arthroty 0 v 0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subanalysis predisposed to dislocate (69) v no predisposition (34)</td>
<td>Congenital predisposition v none</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nikku et al, Finland, 1997&lt;sup&gt;2&lt;/sup&gt;</td>
<td>125 patients with acute primary patellar dislocation</td>
<td>PRCT</td>
<td>Instability (redislocation or subluxation)</td>
<td>No significant difference</td>
<td>Randomised by year of birth Operations not standardised All patients had EUA and arthroscopy before randomisation</td>
</tr>
<tr>
<td>Conservative (55) v operative (70)</td>
<td>Patient opinion</td>
<td>No significant difference</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lysholm II score</td>
<td>No significant difference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hughston VAS</td>
<td>No significant difference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of major complications</td>
<td>4 in operative group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EUA = examination under anaesthesia; PRCT = prospective randomised controlled trial.
Towards evidence based emergency medicine: best BETS from the Manchester Royal Infirmary. Conservative or surgical management for first patellar dislocation.

M Thomas

doi: 10.1136/emj.16.5.365

Updated information and services can be found at:
[http://emj.bmj.com/content/16/5/365.citation](http://emj.bmj.com/content/16/5/365.citation)

**Email alerting service**

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

**Notes**