### Characteristics of studies
### Characteristics of included studies

**Karlsson 1997**

| Methods | Location: Ostra Hospital, Goteborg, Sweden  
Design: Prospective randomized study  
Method of randomisation: Closed envelopes with the group assignment  
Assessor blinding: Not mentioned  
Study period: 1989 to 1992  
Follow-up: Mean 3.1 / 3.3 years, range 2 to 5 years in both groups  
Intention-to-treat: Complete follow-up |
|---|---|
| Participants | 60 participants, 42 men and 18 women, mean age of 24 years (range, 17 to 36)  
Inclusion criteria:  
(1) Chronic ankle instability for more than 6 months  
(2) Pre-operative supervised rehabilitation programme without success  
(3) Radiographic measurements: difference in anterior talar translation of ≥3 mm or talar tilt  
≥3° compared with the contralateral side  
Loss to follow-up: No patients lost. |
| Interventions | (1) Group I: Anatomic repairment of the lateral ankle ligaments by transosseous suture, viewed as a type of Modified Brostrom procedure.  
(2) Group II: Anatomic repairment of the lateral ankle ligaments by imbrication and with inferior extensor retinaculum reinforcement, Modified Brostrom procedure.  
Both groups underwent the same post-operative rehabilitation programme.  
Assigned: 30/30  
Analysed: 30/30 (Two patients, one in each group, both with excellent functional results, didn’t participate radiologic follow-up examination.) |
| Outcomes | (1) Operation time  
(2) Karlsson score (excellent: 91-100; good: 81-90; fair: 61-80; poor: <60)  
(3) Radiographic stability: Anterior talar translation and talar tilt  
(4) Postoperative complications: wound infection, nerve damage |
| Notes | |

### Risk of bias table

<table>
<thead>
<tr>
<th>Bias</th>
<th>Authors’ judgement</th>
<th>Support for judgement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Random sequence generation (selection bias)</td>
<td>Low risk</td>
<td>Closed envelopes with the group assignment before surgery</td>
</tr>
<tr>
<td>Allocation concealment (selection bias)</td>
<td>Unclear risk</td>
<td>Envelopes used, but further concealment protection not mentioned</td>
</tr>
<tr>
<td>Blinding of participants and personnel (performance bias)</td>
<td>Unclear risk</td>
<td>Blinding not mentioned</td>
</tr>
<tr>
<td>Blinding of outcome assessment (detection bias)</td>
<td>Unclear risk</td>
<td>Blinding not mentioned</td>
</tr>
<tr>
<td>Incomplete outcome data (attrition bias)</td>
<td>Low risk</td>
<td>Two patients, one in each group, both with excellent functional results, didn’t participate radiologic follow-up examination, data not analysed.</td>
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<tr>
<td>Selective reporting (reporting bias)</td>
<td>High risk</td>
<td>Additional outcome measure used but not described in the method section</td>
</tr>
<tr>
<td>Other bias</td>
<td>Unclear risk</td>
<td>There was insufficient information to judge the risk from other sources of bias.</td>
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</tbody>
</table>
Footnotes