Introduction

There are situations where an ORIF for a Lisfranc injury is indicated, but there are also situations where a primary fusion is the correct option.

Indications for primary fusions

1) Comminuted intra-articular fractures of the medial three tarsometatarsal joints.
2) High energy fracture-dislocations
3) Major ligamentous disruptions with multidirectional instability/dislocation of the Lisfranc joints.
4) Crush injuries of the midfoot with intra-articular fracture-dislocation.

Contraindications

1) Skeletal immaturity/open physes
2) Mild/moderate instability with examination under anesthetic.
3) High profile/professional athlete is a Relative contra-indication because of the negative connotation of fusions in sports.

Results

There is increasing consensus that fusion for Lisfranc injuries is not only a reasonable alternative to conventional open reduction and internal fixation, it might in fact lead to better long-term outcomes. Fusion used to be reserved for failed open reduction and internal fixation cases or if there are significant intra-articular fractures. Recent studies concluded that the indications for fusion could include any severe Lisfranc injury pattern.
<table>
<thead>
<tr>
<th>Authors/year</th>
<th>Number of patient</th>
<th>Procedure or approach</th>
<th>Mean age(range)</th>
<th>Mean f/u (range in months)</th>
<th>AOFAS score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reinhardt/2012</td>
<td>25</td>
<td>Fusion</td>
<td>46(20-73)</td>
<td>42(24-96)</td>
<td>81</td>
</tr>
<tr>
<td>Henning/2009</td>
<td>14</td>
<td>ORIF fusion</td>
<td>37(20-58)</td>
<td>9(3-24)</td>
<td>Used SMFA and SF36. Trending towards fusion</td>
</tr>
<tr>
<td>Ly/2006</td>
<td>20</td>
<td>ORIF Fusion</td>
<td>32 (19-52)</td>
<td>42 (25-60)</td>
<td>69</td>
</tr>
<tr>
<td>Rajapaske/2006</td>
<td>17</td>
<td>ORIF</td>
<td>33(16-76)</td>
<td>43(11-69)</td>
<td>70</td>
</tr>
</tbody>
</table>

**Recommended Reading:**


