Takedown of Ankle Fusions and Conversion to Total Ankle Replacements: A Prospective Longitudinal Study

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Disclosures

NO CONFLICT TO DISCLOSE

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My disclosure is in the Final AOFAS Mobile App.

I have no potential conflicts with this presentation.
Introduction

• Ankle replacements gaining credibility over the last several years

• Not much in the literature about conversions of an ankle fusion to a replacement

• With a correct indication, a conversion of an ankle fusion to a total ankle replacement might do as well as a primary total ankle replacement
Methods

• We reviewed 9 patients with either ongoing ankle pain after a fusion or increasing pain after a period of relative comfort after an ankle fusion
  – Six female
  – Mean age is 62.79 years (36.55 - 72.89)

• Pre/post-operative function were evaluated prospectively
  – VR-12 scoring
  – Ankle Osteoarthritis Scale (AOS)
  – American Orthopaedic Foot and Ankle Society (AOFAS) Ankle-Hindfoot Score
  – Pain on a visual analog score (VAS)
  – and Patient satisfaction survey
Exclusion Criteria

• History of Diabetes

• Peripheral neuropathy

• Excision of either malleoli at the time of fusion

• Pantalar fusion

• Neurovascular compromise
Results

• Mean follow up for outcome scores 20.87 months (range 4.2 - 52.76 months)

• No patients were lost to follow-up

<table>
<thead>
<tr>
<th>Outcome Score</th>
<th>Pre-operative</th>
<th>Post-operative</th>
</tr>
</thead>
<tbody>
<tr>
<td>VR-12 Physical</td>
<td>21.86</td>
<td>41.94</td>
</tr>
<tr>
<td>VR-12 Mental</td>
<td>60.06</td>
<td>53.43</td>
</tr>
<tr>
<td>AOS Pain</td>
<td>411.70</td>
<td>128.86</td>
</tr>
<tr>
<td>AOS Disability</td>
<td>536.63</td>
<td>124.29</td>
</tr>
<tr>
<td>AOFAS</td>
<td>25.57</td>
<td>81</td>
</tr>
<tr>
<td>Range of Motion:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dorsiflexion (DF)</td>
<td>minimal to none (as expected for fusion)</td>
<td>DF: 5.83° (2°-15°)</td>
</tr>
<tr>
<td>plantarflexion (PF)</td>
<td></td>
<td>PF: 18.33° (15°-40°)</td>
</tr>
<tr>
<td>VAS</td>
<td>7.30</td>
<td>2.41</td>
</tr>
<tr>
<td>Patient Satisfaction</td>
<td>72.33</td>
<td>92.29</td>
</tr>
</tbody>
</table>
Conclusions

- Small study with reasonable short follow-up, but evidence shows very satisfactory functional outcomes after a conversion of an ankle fusion to a total ankle replacement.
Conclusions

• Patient selection is extremely important

• Long-term follow-up will show whether the longevity of these replacements compare to primary replacements