

## A Minimally Invasive Technique of Open Reduction and Percutaneous Screw Fixation For Displaced Calcaneal Fractures

**Bruce Cohen, MD**  
OL Miller Foot and Ankle Institute  
OrthoCarolina

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## Calcaneal Fractures

- Questions to ask
  - How should we treat?
  - Which patient's are at risk for a poor outcome?
  - Should we use an extensile or a minimal incision approach?

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### Factors assoc. with Poor Outcome:

<ul style="list-style-type: none"> <li>– Age &gt; 50</li> <li>– Strenuous labor</li> <li>– Greater body weight</li> <li>– Increased time from work</li> <li>– Subtalar incongruity</li> <li>– Increased heel width</li> <li>– Decreased fibulocalcaneal space</li> <li>– Decrease Bohler's angle                             <ul style="list-style-type: none"> <li>– Paley JBJS 93'</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>– Male gender</li> <li>– Medium and heavy laborer</li> <li>– Worker comp. support</li> <li>– Bilateral fractures</li> <li>– Females did well with operative or nonoperative treatment                             <ul style="list-style-type: none"> <li>– Tufescu JOT 01'</li> </ul> </li> </ul>
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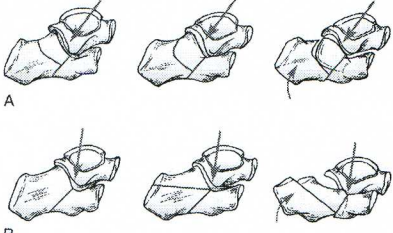
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### Operative vs. Non-operative

- Buckley et al JBJS 2002
  - 471 Fractures
    - 249 ORIF
    - 262 Non-op
  - 2-8 yr follow-up
  - Outcomes not different between groups
    - SF-36, VAS
    - Non-Worker's comp and women better with ORIF
    - Younger, mcd Bohler's (0-14), comminuted fractures, light workload, <2mm step-off post-op were better with ORIF
  - Study design excluded non-op pts who went on to Subtalar fusion (37 vs. 7)

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### Classification: Essex-Lopresti

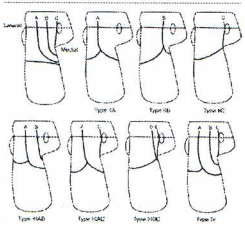


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### Classification: Intra-articular

- Sanders JOT 92'
  - Useful for determining treatment as well as prognosis
  - Determine the coronal section on CT with the widest undersurface of the posterior facet of the talus
  - Talus is divided into three columns by lines A and B, line C is just medial to posterior facet



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