Ankle Fractures that Should Not Be Fixed and How

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Operative vs. Non-Operative
Open vs. Closed
Unstable vs. Stable
Displaced vs. Non-Displaced
Presence vs. Absence of Articular Impaction

FIRST 1MM OF TRANSLATION = 42% REDUCTION IN CONTACT PRESSURES

Unstable vs. Stable
What are we trying to avoid?
Ankle Stress Test for Predicting the Need for Surgical Fixation of Isolated Fibular Fractures

<table>
<thead>
<tr>
<th>Condition</th>
<th>Sensitivity</th>
<th>Specificity</th>
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</thead>
<tbody>
<tr>
<td>Medial Tenderness</td>
<td>56%</td>
<td>80%</td>
</tr>
<tr>
<td>Swelling</td>
<td>55%</td>
<td>71%</td>
</tr>
<tr>
<td>Ecchymosis</td>
<td>26%</td>
<td>91%</td>
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</tbody>
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Positive Stress Radiograph = 4 mm
Relationship of Self-Reported Ability to Weight-Bear Immediately After Injury as Predictor of Stability for Ankle Fractures.

Weight bear = 8.6x more likely to be stable

46M s/p MCC

Compartment Syndrome
55 of 57 union
Good functional outcomes
45M, psychotic, unclear mechanism

1 month

2 months

4 months

Left ankle

Right ankle
Who to Manage Non-Operatively

<table>
<thead>
<tr>
<th>Isolated Fibulas</th>
<th>Medial Malleolus</th>
<th>Bilallocal fractures</th>
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</thead>
<tbody>
<tr>
<td>Intact mortise</td>
<td>Non-displaced fractures</td>
<td>Geriatric</td>
</tr>
<tr>
<td>No talar shift</td>
<td>Distal tip fractures</td>
<td>Sick</td>
</tr>
<tr>
<td>&lt; 3 mm displaced</td>
<td></td>
<td>Skin burns/blisters</td>
</tr>
<tr>
<td>&lt; 4 mm widening on stress</td>
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</tbody>
</table>

HOW to Manage Non-Operatively

209 Protocols

Pfeifer injury 2015

- WBAT
- ROM as tolerated
- Walking Boot

Thank you

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