Management and Outcomes of Scapholunate Interosseous Ligament Injuries

A Retrospective Review

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Objectives

Compare outcomes of acute and chronic surgery

Describe risk factors for surgical failure

In the chronic setting, compare Ligament Reconstruction to Repair/Capsulodesis

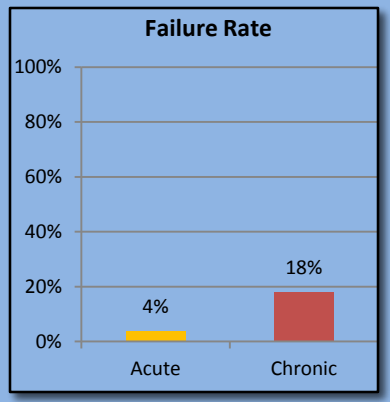
Describe injury patterns that lead to surgery in chronic period

Methods

Retrospective chart review of 80 patients (82 wrists) who underwent soft-tissue wrist repair/reconstruction.

Exclusion criteria:
- arthrosis / SLAC wrist
- Previous wrist surgery

Overall Results



RISK FACTORS FOR FAILURE

SIGNIFICANT
- Workers Comp -- Odds Ratio 5.2
- Chronic Setting -- Odds Ratio 5.7

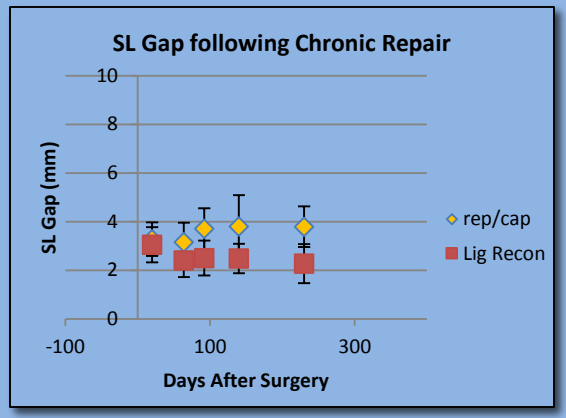
TREND
- Smoking – OR 2.6
- Complete Tear (Grade 4) -- OR 3.5

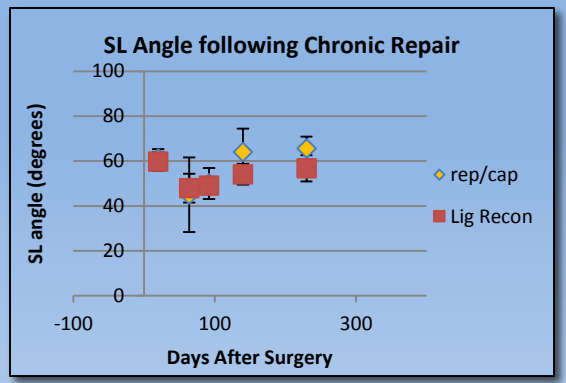
NO RELATION TO FAILURE
- Age -- 39 vs 38
- Dominant hand – 12.5% dominant vs 16% non

- Radiographic outcomes similar
- DASH scores similar
- Grip Strength / ROM Similar
- Failure higher in acute setting (18% vs 4%, p = 0.034)

Chronic Management:

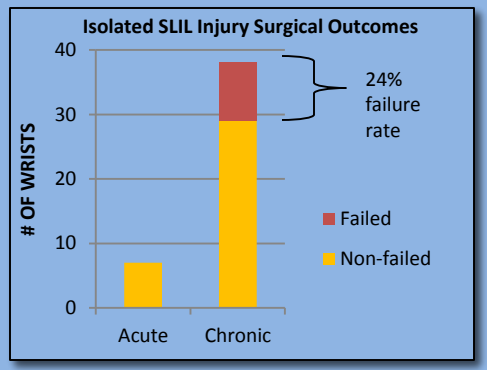
Repair ±Capsulodesis
Vs. Ligament Reconstruction





- DASH scores similar
- Grip Strength Similar
- Failure trend in Repair/Capsulodesis group (25% vs 11%, Non-significant, CI 0.51–13.88)

Isolated Injuries



Among isolated injuries receiving surgery:

86% of isolated injuries receive chronic surgery
82% of chronic surgeries are for isolated injuries

Conclusions

Failure more likely in chronic setting, and among Workers Comp patients

Ligament Reconstruction is preferable to capsulodesis for chronic SLIL injuries
- Comparable functional outcomes
- Superior Radiographic outcomes
- Trend towards lower failure rate

Isolated injuries more likely to receive surgery in chronic period, despite higher failure rates.

Acute intervention is preferable – use lower early threshold for surgery