There is No Difference in Post-operative Complication Rates between Single and Multiple Incision Approaches to Lateral Ligament Repair for Chronic Ankle Instability

Cone B, BS; de Cesar Netto C, MD PhD; Hudson PW, BS; Sahranavard B, MD; Pinter Z, BS; Lee S, BS; Bergstresser S, BS; Shah A, MD.
Disclosures

• I (or my co-authors) have nothing to disclose
Background

• Causes of chronic ankle instability are usually multifactorial
  o Lateral ankle ligaments
  o Peroneal tendons
  o misalignment of the hindfoot

• Classically, a small curvilinear incision is made to access the lateral ankle ligaments, and separate incisions are made to address the peroneal tendons, or to perform a calcaneal osteotomy, if needed.
Background

• The use of single longitudinal extensive approach allows access to the lateral ankle ligaments, peroneal tendons, and lateral wall of the calcaneus, without the need for additional incisions.
Purpose

• This study evaluates the post-operative complication rates between the single and multiple incision approach for patients undergoing lateral ligament repair and treatment of associated pathologies.

• We hypothesized no difference would be found in complication rates when comparing the single and multiple incision approaches.
Methods

• Retrospective review of patients who underwent surgical treatment for chronic lateral ankle instability from 2011 to 2016.

• A total of 187 patients met included.

• Complications including chronic pain, sural neuritis, infections and wound problems were recorded.
Results

• Of the 187 patients, 160 were in the single incision group and 27 in the multiple incision group.

• The complication rate was comparable between both groups
  o Single incision group complication rate: 24% (39/160)
  o Multiple incision group complication rate: 22% (6/27)
Results

- The most frequent complication in both groups was sural neuritis
  - Single incision sural neuritis - 31% (12/39)
  - Multiple incision sural neuritis - 50% (3/6)
Conclusion

• Performing a single longitudinal extensive approach in the treatment of chronic lateral ankle instability does not have increased rates of post-operative complications compared to a multiple incision approach.

• The extensive approach may be performed without concern for increased rates of post-operative complications when addressing chronic lateral ankle instability and associated pathologies.
References

