The Extensile Lateral Approach to the Calcaneus and the Sural Nerve: There is No Safe Zone
Disclosure

No personal disclosures
Introduction

• Extensile lateral approach (ELA), commonly used for calcaneus fractures

• Despite awareness of sural nerve, postoperative nerve symptoms are a problem

Up to 8% of patients reports sural nerve dysthesia postoperatively
Introduction

• Symptoms may arise from damage to the main trunk of the sural nerve or to the lateral calcaneal branch (LCBs)

• AIM: Anatomical study to describe the course of the sural nerve and its LCBs in relation to the ELA
Methods

• 17 cadaver foot specimens dissected, exposing sural nerve and LCBs

• Line representing ELA created

• Noted if the ELA crossed the sural nerve, LCBs, number of LCBs, and location of intersection using distal tip of fibula as reference
**Results**

- Main trunk of sural nerve did not cross ELA
- At least one LCB was identified in all specimens, mean number 2 (range, 1-4)
- ELA crossed the path of at least one LCB in 15 specimens (88%)
- Mean distance from fibula at which ELA crossed LCB, 2.4 cm (± 1.2) posterior and 2.6 cm (± 1.6) inferior
Conclusion

• ELA traverses the paths of the LCBs in the majority of specimens

• Potentially accounts for the presence of sural nerve postoperative symptoms despite careful dissection
References


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