# Complications of Lateral Ankle Stabilization & Peroneal surgery


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# Cochrane Reviews

- 90% of lateral ankle sprains are effectively treated with a functional rehab program
- Bracing & taping effective
- Foot Orthoses
- Imaging?...

# Ankle MRIs

- False positive showing “torn” ATFL & Peronei in 30+% (Saxena et al 2011 JFAS, Galli et al 2014 JFAS, 2017 Jolman et al FAI)
- Is that why more people are getting “scoped & roped”?
- **Do not do ankle stab surg based on MRI**
- **During my 2011 study I saw 432 LAS & performed 43 stabilizations**

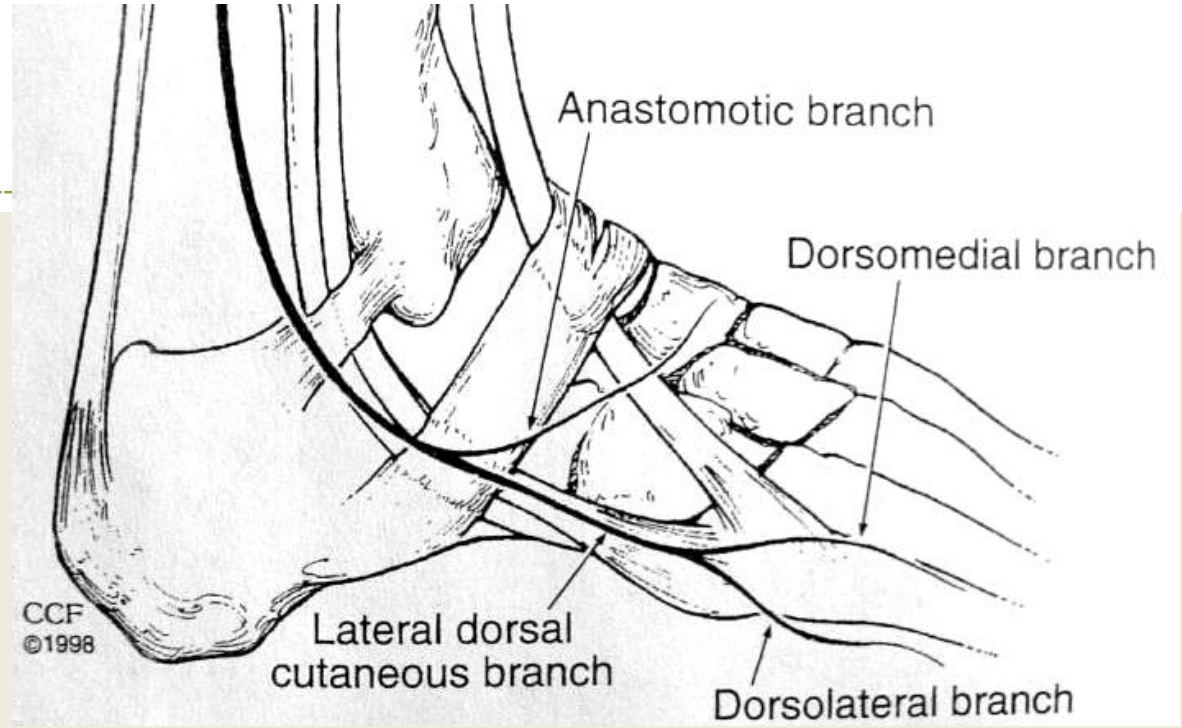
# Ankle stabilization surgery

- Broström compared to Chrisman-Snook:
  - Less nerve damage
  - Less post-op DJD long-term
  - RCT showed sig less complications
  - MORE LIKELY TO BE SPELLED INCORRECTLY!

  NOTE: Contraindications to Broström: ligamentous laxity, prev failed repair, instability > 10yrs

  Structural deformity?

# Lateral ankle: Peroneal repair, stabilization


Anastomotic branch
Dorsomedial branch
Lateral dorsal
cutaneous branch
Dorsolateral branch
CCF
©1998

# Ollier’s Incision: intermediate dorso-cutaneous nerve

# Most common complications from ankle stabilization surgery

- Nerve damage (some studies show up to 30% esp with Chrisman-Snook incision)
- Over-tightening, patients complain of being too stiff
- Long-term ankle DJD w non-anatomic repair
- **Re-injury?** Current personal series is less than 3% (Study under way)

# Ankle Stabilization surgery

- Thermo-capsular shrinkage? Long-term? Potential to burn cartilage
- Autograft: donor site risks (Plantaris, Gracilis)
- Allograft reconstruction: **cost**, reaction, infection?
- Arthroscopic repair: can only address ATFL
- See Ferran et al 2009 Sports Med Arthos Rev

# Peroneal Tendon Surgery Comps

- Review of  277 personal cases 2000-14
- Re-subluxation with prior repair 3/58 cases (due to excess muscle in groove)
- Suture granuloma : 2 cases
- Nerve pain post-op: 2 cases
- Re-tear: 1 ( 3 pts fractured distal to repair after an inversion injury)

# Literature review of comps

- Re-dislocation (+/- groove deepening)
- Exostosis from groove deepening
- Re-tear
- Continued pain (from structural deformity)
- Nerve damage
- NOTE: most level IV series 7-20 cases

# What I do currently

- Ankle stabilization surgery in less than 10% of ankle sprainers (see Cochrane Reviews)
- Groove deepening much **less frequent**
- Remove all muscle, accessory tendon
- Reduce peroneal tubercle if pain/tear located there

# Suggested References


- Ferran et al 2009 Ankle Instability Sports Med Arthos Rev
- Oliva et al 2011 Int Advances in Foot & Ankle Surg “Peroneal Tendinopathy” (disclosure: I am the Editor & co-author)
- Saxena et al 2011 Magnetic Resonance Imaging and incidental findings of lateral ankle pathological features with asymptomatic ankles J Foot Ankle Surg 50(4)