



Lateral Ankle Instability notes w/ Dr. Mangone

Anatomy

- ATFL*
 - Restraint to sagittal talar translation + axial talar rotation
- CFL*
- Posterior talofibular ligaments

History Physical Examination

- Ankle injury in the past
- Inversion injuries / recurrent inversion (normally subtalar joint)
- Anterior drawer
 - Anterolateral direction vs anterior translation only
 - Thumb palpates step off
- Anterolateral drawer
- Talar tilt testing
 - Assesses coronal plane stability by CFL
- ATFL maximally tensioned during ankle dorsiflexion
- CFL tensioned during ankle plantarflexion
- Compare two sides

Imaging

- Xrays
- Stress radiographs
 - Anterior drawer w/ 5-1mm difference
 - May underestimate displacement
- MRI
 - Sensitive in identifying ATFL abnormality
 - ATFL thickness abnormal in 90ish percent cases
 - CFL thickness abnormal in about 70%
 - Inflammation, synovitis
 - Ligament tears
- Dynamic ultrasound

Non-Op Treatment

- PT- peroneal strengthening
- Proprioceptive reeducation
- Shoewear modifications

- Lateral heel wedge
- UCB
- Bracing

Operative treatment

- Indications: fail non-op, recurrent sprains, ballet dancers

Pre-op planning

- Instability degree
- Subtalar laxity
- Peroneal tendon function intact?
- Mechanical alignment- calcaneal osteotomy?
- Arthroscopy?

Non- anatomic

- Evans - peroneus brevis
- Watson Jones- peroneal tendon routed through talus
- Chrisman- snook- peroneus brevis split then through fibula > calc

Anatomic

- Brostrom- direct repair of ankle ligaments
- Gould modification of Brostrom- reinforced w/ lateral extensor retinaculum
- Karlson modification

Modified Brostrom- split evans

Varus Malalignment or Cavovarus foot

- Correct alignment (calc osteotomy, 1st ray elevation osteotomy)

Post- op regimen

Sources

Chang, S. H., Morris, B. L., Saengsin, J., Tourné, Y., Guillo, S., Guss, D., & DiGiovanni, C. W. (2021). Diagnosis and treatment of chronic lateral ankle instability: review of our biomechanical evidence. *JAAOS-Journal of the American Academy of Orthopaedic Surgeons*, 29(1), 3-16.

Lateral Instability of the Ankle' Diagnosis % Treatment Tulane Grand rounds- Ramon Rodriguez MD