

LOW (COMMON) ANKLE SPRAINS

TIPS & TRICKS

DR STEVEN KENT - FOOT, ANKLE & TRAUMA SURGEON.
SUITE 10, LEVEL 1, 235 DARBY ST, COOKS HILL, NSW, 2300.
PH: (02) 4911 2303 FAX: (02) 4006 3081



COMMON PITFALLS

The injury is often underestimated and presumed to get better on its own. However **40%** of patients in the general population report residual symptoms

Studies have shown that all ankle sprains are difficult to assess clinically in the first 48 hours, and hence a **repeat review** should be undertaken **at 5-7 days**

There needs to be a high degree of suspicion of syndesmotic injury with any ankle sprain, however syndesmotic injuries should be particularly suspected in the ankle sprain that is caused by **eversion** INSTEAD of **inversion** or a sprain that is not improving after 4-6 weeks

KEY FACTS

Surgery has not been shown to be beneficial in acute ankle sprains and conservative management should always be first line treatment

Ultrasounds have been shown to be accurate in some centres, but are user-dependent, and are rarely used in specialist decision-making, hence are generally **NOT recommended**

The classic mechanism is an ankle inversion & plantar flexion injury pattern (pictured right)

The ligament most commonly injured is the ATFL, followed by the CFL



EXAMINATION

- The patient will generally have bruising or swelling around the **lateral malleolus** and just **distal to the fibula**
- Check the patient from behind (when standing) to see whether the heel is pointing towards the midline (varus), sitting in neutral, or pointing toward the little toe (valgus). A **varus hindfoot (see below - marked by the RED line)** will pre-dispose the patient to **further sprains** and warrants an earlier specialist referral
- 60% of patients with **LOW ANKLE SPRAINS** will be tender over the syndesmosis, even though there is no injury to the syndesmosis



BUT THE ULTRASOUND REPORTS A RUPTURED ATFL & CFL?

This is commonly reported on ultrasounds & MRIs but would be present if we scanned most ankle sprains

Such a result on imaging makes **NO DIFFERENCE** to treatment

All isolated low ankle sprains (ATFL and/or CFL injuries) are generally treated **conservatively**, despite severity

The only indication for surgery is **ongoing ankle instability** despite physiotherapy or ongoing pain from an **associated injury**

WHAT SHOULD I DO

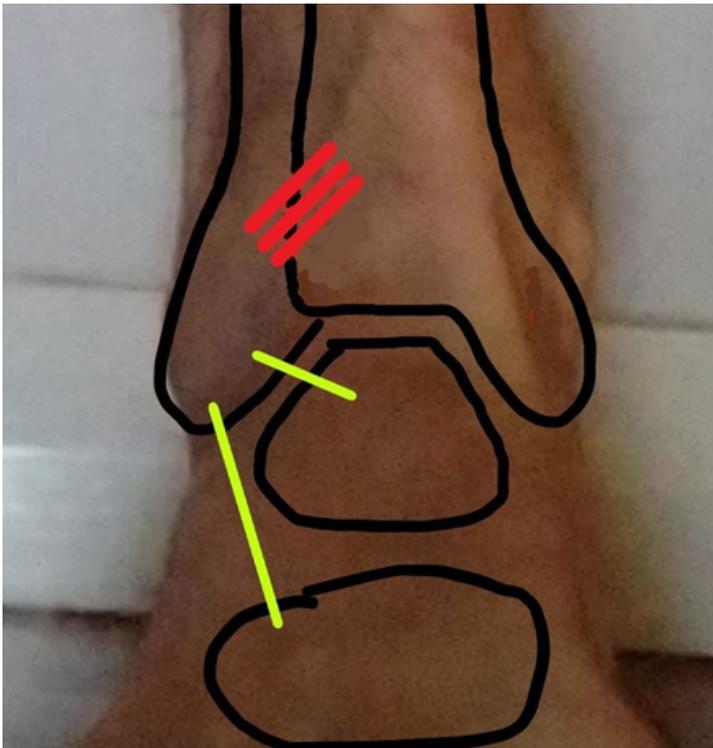
If a patient is seen within the **first 48-72hrs**, and is diffusely tender everywhere, with no localising areas of pain to palpation, then place them in a CAM Boot & perform a repeat review in 1 week.

Use the **Ottawa Ankle Rules** as a guide to whether an X-ray is required **acutely**. If the patient is not improving 3-4 weeks after the injury, then a weight-bearing X-ray is recommended

A patient that is not improving 5-6 weeks after the initial injury, with **normal X-ray imaging**, may have another injury. A **specialist referral** or **MRI** is recommended at this point

Physiotherapy for ankle **range of motion, proprioception & strengthening exercises** is recommended to reduce the risk of recurrent instability.





WHERE ARE THE ATFL & CFL?

They are located distal to the fibula over the lateral aspect of the ankle (pictured in **GREEN** on the left-sided diagram). The **CFL** is the more distal of the two ligaments

A high ankle sprain (known as a syndesmosis injury) which is a more sinister injury, affects the **AITFL** and is pictured in **RED**

WHAT ASSOCIATED INJURIES MAY CAUSE ONGOING PAIN & WARRANT EARLIER SPECIALIST REFERRAL

- 1. Osteochondral defect to the talus or tibia** (ongoing deep ankle pain)
- 2. Peroneal tenosynovitis or tear** (persistent posterolateral ankle pain despite physiotherapy)
- 3. Anterolateral ankle impingement** (ongoing anterior ankle pain despite physiotherapy)
- 4. Peroneal tendon subluxation** (persisting clicking over the posterior aspect of the distal fibula following the ankle injury)



An Osteochondral lesion of the Talus

REFERENCES

- Al-Mohrej OA, Al-Kenani NS. Acute ankle sprain: conservative or surgical approach? EFORT Open Rev. 2017 Mar 13;1(2):34-44. doi: 10.1302/2058-5241.1.000010. PMID: 28461926; PMCID: PMC5367574.
- Chaudhry H, Simunovic N, Petrisor B. Cochrane in CORR ®: surgical versus conservative treatment for acute injuries of the lateral ligament complex of the ankle in adults (review). *Clin Orthop Relat Res* 2015;473:17-22.