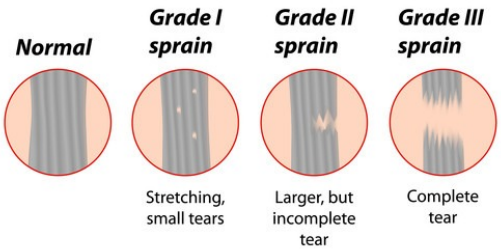
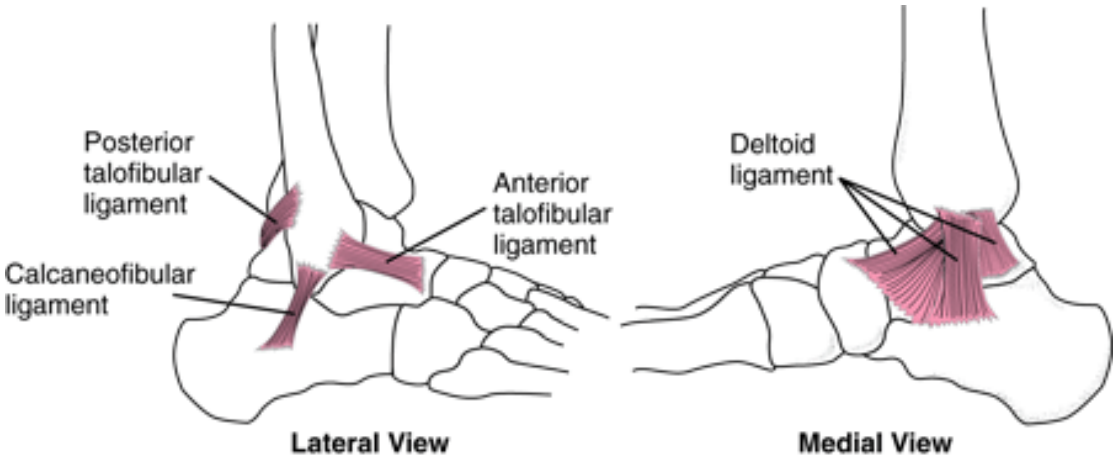
Dr Sarah Watts - Ankle Sprains

A “twisted ankle” or an “Ankle sprain” is extremely common. In Australia, 2000 ankle sprains happen every day. The mechanism of injury is that the ligaments supporting the ankle are either stretched, torn, or pulled away from their attachment, after a sudden injury. Of course, this is usually accompanied by local bleeding, bruising and swelling.



The most commonly injured ligaments are the LATERAL ligaments, the Anterior talofibular ligament (ATFL) and the calcaneofibular ligament (CFL). There are several other ligaments about the ankle that can also be torn, in addition to the most common ones.



The good news is that most of these sprains repair themselves with strong scar tissue. Usually the injury recovers with suitable rest and physiotherapy. 90% or more of ankle sprains recover, and return to normal function. Recovery usually takes place within THREE MONTHS, from the onset of the injury.

Initial (Non-surgical) Treatment

The first line of treatment for ankle sprains is rest, ice, compression, elevation (RICE) with painkillers and anti-inflammatories (if tolerated).

Rest - avoid walking where possible
Ice – A freezer bag with ice and some cold water, wrapped in a towel, applied to the painful ankle.
Compression – an elastic brace, wrap or bandage will help the ankle feel more secure.
Elevation- above the level of the heart.

Xrays are ordered only if there is concern for a bone injury or fracture. An MRI scan is not usually necessary in the early stages of an ankle sprain. If you have an MRI, it will show ruptured ligaments (ATFL +/-CFL), which is expected.

The fastest way to improve is early walking, mobility and trying to return to normal. Usage of a brace, stirrup or boot can help with mobility. Weaning from the brace/boot/ stirrup occurs when the pain resolves, usually by about 4 to 8 weeks.

Physiotherapy is then also recommended to regain range of movement, strength, balance and joint position sense (proprioception).

Finally, a targeted corticosteroid injection may offer relief from ankle inflammation and help settle symptoms so that physiotherapy can continue.

Surgical Treatment

Most ankle sprains (90%) resolve themselves, and only a small percentage of sprains go on to cause long-term problems (pain, instability).

If after three months, and a fair trial of conservative measures, if the ankle is still problematic, sometimes further treatment is indicated.

When these issues arise, further imaging is requested. This may be in the form of an xray, CT scan, or MRI scan. Depending on the scan results, surgery may be indicated. Problems that are sometimes encountered can include inflammation, cartilage damage, fractures, tendon tears, scar tissue formation. These can be seen on imaging – usually an MRI.

Surgery may be recommended, and this usually consists of an arthroscopic evaluation, and arthroscopic treatment as necessary, or ankle ligament reconstruction. Occasionally other procedures may be indicated. Only a small proportion of patients with an ankle sprain go on to require surgical treatment.