

ASD FAST FACTS:

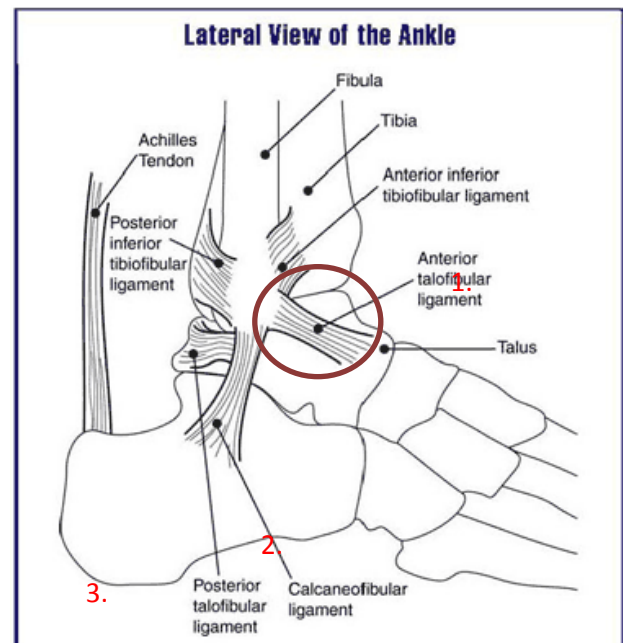
Quick guide to Ankle Sprains

Ankle sprains are common and sometimes can lead to ongoing instability or slow recovery. The most common sprain occurs 80% of the time to the outside of the ankle (lateral side), when the foot rolls inwards whilst jumping, twisting or being off balance - sometimes from uneven ground or even a direct run-in with another player.

Ankle anatomy

The lateral (outside) ankle has 3 stabilising ligaments that attach the fibula (thinner bone on the outside of shin) to the talus bone underneath. The anterior talofibular ligament at the front is the most commonly injured. (Labelled as 1. on the diagram)

In contrast, the medial (inside) ankle has a wide fan-shaped deltoid ligament that attaches to the tibia (thicker shin bone) and hence is much more difficult to sprain. Higher impact is usually needed eg. A motor vehicle accident or fall from a height.



Immediate treatment: RICE and No HARM!

RICE for 48-72 hours

Rest – take the weight off your foot, avoid walking on it, use crutches if needed

Ice – 20 mins every 2 hours (not directly to skin)

Compression – Use a bandage to limit swelling (avoid being over- firm and causing cold or tingling toes)

Elevate – put your leg up!

No HARM for 48 hours -72 hours

Heat – avoid hot bath/showers, heat pack/bag, deep heat – this can worsen swelling and slow healing

Alcohol – worsens swelling by opening blood vessels

Running – avoid running or exercising as this will aggravate the injury

Massage – can make swelling and pain worse initially

Paracetamol can be used for pain relief. Current guidelines (2018 Ankle Sprains Consensus Statement) suggest that anti-inflammatories (ibuprofen or diclofenac) can be used for pain relief but best for a short-time only as they may interfere with the natural healing process.

Assessment

Prompt assessment with your sports doctor or physiotherapist is recommended if:

- you are unable to put your weight through the injured ankle
- have marked swelling or pain
- have had previous ankle sprains or injury
- have bony tenderness on the outside of the ankle
- have pain that is not over the outside (eg inside of ankle, over the shin or in the foot)
- you are aged under 18yrs (bones are still growing and fractures can occur more easily)

Your doctor can determine the severity of the sprain and whether imaging (Xray) is needed to exclude an ankle or foot fracture. If there is a fracture – treatment will involve immobilisation with a CAM boot or cast, and sometimes a referral to a specialist surgeon.

Severity of Lateral Ankle Sprains		
Grade 1 (Mild) Minor ligament tear	Grade 2 (Moderate) Some ligament tearing	Grade 3 (Severe) Complete ligament tear
<ul style="list-style-type: none"> ▪ Minimal pain and swelling ▪ Mild pain with weight bearing ▪ Slight loss of balance ▪ Minimal joint instability 	<ul style="list-style-type: none"> ▪ Moderate to severe pain ▪ Pain with weight bearing ▪ Swelling and stiffness ▪ Poor balance ▪ Moderate joint instability 	<ul style="list-style-type: none"> ▪ Severe pain followed by minimal pain ▪ Possible pain on weight bearing ▪ Severe swelling ▪ Poor balance ▪ Marked joint instability

Management Plan

Most lateral ankle sprains take 2 to 6 weeks to heal, but Grade 3 sprains can take as long as 12 weeks. You may need crutches for 2-3 days to start. Evidence shows that starting rehabilitative exercises early as soon as you are able with ankle support (a semi-rigid brace or air brace) leads to better results and return to play. Ankle rehabilitative exercises can be recommended by your physio or doctor that involves ankle movements and stretching, calf exercises, and working up to balance and sport specific exercises. It is rare that surgery will be required for an ankle sprain unless there is ongoing instability or repeated injury.

A rehabilitation program that targets balance, flexibility, and strengthening reduces the chance of repeat injury. After a Grade 2 or 3 ankle injury, you may be advised to use bracing or protective taping for a minimum of 6 to 12 months when playing sport. Always seek medical advice if your ankle is continuing to be problematic or painful.

Sources:

Vuurberg G, et al. Br J Sports Med Consensus Statement: Diagnosis, treatment and prevention of ankle sprains: update of an evidence-based clinical guideline 2018;52:956. doi:10.1136/bjsports-2017-098106

Image used is supplied via Wikimedia Commons public domain
<https://commons.wikimedia.org/wiki/File:Ankle.PNG>