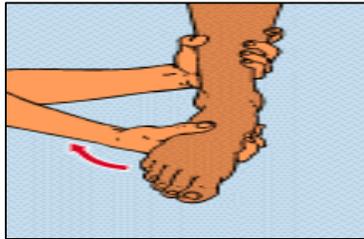


Management of Acute Ankle Sprains

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Acute ankle sprains are an extremely common injury in both sport and the general community. The 'garden variety' ankle sprain involves the lateral ligament complex. It generally occurs in a position of plantar flexion and inversion, where the foot 'rolls under' the ankle. Clinical assessment of the ankle is very important as it should not be assumed that all ankle sprains are lateral ligament sprains. Important conditions to exclude are:

1. Syndesmosis sprains - This injury is a disruption of the inferior tibiofibula ligaments. It is important to differentiate this injury as it runs a more protracted time course (roughly twice as long as a lateral ligament sprain) and occasionally requires surgery. On history the patient describes a dorsiflexion and external rotation mechanism, which is quite different to the plantar flexion inversion mechanism of a lateral ligament injury. Clinically pain is felt with forced external rotation of the foot with the ankle in a neutral position.



(Fig.1 – External rotation test)

2. Fractures – The common fractures accompanying an ankle sprain include either medial or lateral malleoli, the base of 5th metatarsal or one of the midfoot bones, such as the navicular. Imaging guidelines known as the Ottawa ankle rules provide guidelines for when to x-ray an injured ankle and have been shown to reduce radiology requirements for emergency departments by 30%.
3. Peroneal tendon subluxation – The peroneal tendons are held in place by the peroneal retinaculum, which may be ruptured in an acute ankle sprain. This leads to instability of these tendons. Clinically this may be diagnosed by asking the patient to actively dorsiflex and externally rotate the foot, whilst palpating for the tendons snapping from posterior to anterior over the malleolus. This may require surgical repair.

If these conditions are excluded, then almost all ankle sprains may be treated with functional rehabilitation. This may include partial immobilization in a stirrup brace, weight-bearing as tolerated, anti-inflammatory measures (ice, compression, NSAIDS) and physiotherapy which has both a 'hands-on' and an exercise component.

(Fig. 2 – Stirrup brace)

