Ankle Instability

“I don’t trust my ankle”
“I have to be very protective of my ankle to stop it going over”

The ligaments that stabilize the ankle can be divided into three main groups. The outer (lateral) ligaments are most commonly injured. An ankle “sprain” generally means that these outer ligaments have been injured although all 3 three sets of ligaments can be injured depending upon the type of sprain injury (determined by the position of the ankle when twisted and in which direction it is twisted and with how much force).

When the ligaments are sprained this means they are stretched and may be either partially torn or completely torn depending upon the severity of the sprain. Usually these ligaments heal well following a sprain but if they do not then the individual may experience instability and the ankle may give way on them, especially on uneven ground. Patients with instability often report difficulty with sport but sometimes they report that the ankle gives way when simply walking. When this happens, it can be like suffering another sprain with pain and swelling but if chronic (over several years) then there may not be much swelling on each occasion.

The outer (lateral) ligaments themselves also have three components which stop the ankle from rolling inwards and sliding forward. These ligaments are attached to the fibula (slim bone lying next to the shin bone in leg), the talus (an ankle bone) and calcaneus (heel bone). As well as tearing the ligaments in a sprain, the tiny nerve fibres within the ligaments are also torn. These are called proprioceptive nerve fibres and they normally constantly report back to the brain about where the ankle is in space – a kind of GPS system which helps the brain coordinate muscle function to keep the ankle stable. Thus when these are damaged, this can also affect the stability of the ankle.

Ankle instability makes you more prone to ankle sprains, which in turn can exacerbate ankle instability. With each ankle sprain, the ligaments are increasingly weakened.

Diagnosis
To confidently make the correct diagnosis you should be seen by a foot and ankle surgeon who will go through a thorough examination of your ankle including gently testing the ligaments. There are other causes of giving way of the ankle which are not necessarily due to problems with the ligaments themselves and so it is important that you undergo a detailed examination by a specialist who can also organise special imaging such as x-rays and an MRI scan if required.
Treatments for Ankle Instability

Treatment
1. The treatment depends upon several factors:
2. The exact cause of the instability
3. The severity of the symptoms
4. Previous treatments already tried
5. The patient’s required level and type of activity (e.g., sports)

Physiotherapy
This is the first line of treatment and is often very effective for many patients. This is directed at retraining the damaged proprioceptive nerve fibres in the damaged ligaments as well as encouraging the ligaments themselves to heal (in the acute phase) and strengthening the muscles around the ankle which is increased by specific exercises and activities.

Podiatry
Sometimes your foot shape can make you prone to suffering sprains and can increase the stress on the ankle ligaments. In this circumstance, a custom made corrective inner sole for your shoe may also be advised to correct this.

Supports: Various ankle supports are available and may be helpful in controlling instability symptoms. These are usually worn inside your shoe and restrict certain movements in the ankle to improve stability. These can be discussed with your surgeon or physiotherapist.

Surgery: This may be considered if other non-operative treatments (as above) have not worked and the ankle remains unstable. There are two main types of surgery to treat ankle instability:
1. The most common form of surgery is to tighten and re-attach the damaged ligaments to the bone often using specialized anchors. This type of operation is very successful and sufficient for the vast majority of patients requiring such surgery. It is often combined with keyhole surgery to the ankle joint and is performed through very small incisions under anaesthetic. The patient is usually able to take full weight on the operated ankle after 3 weeks from surgery.
2. In a small number of patients, a tendon transfer type of reconstruction may be required when part of a nearby tendon (or a hamstring graft) is used to reconstruct the ligaments. This type of surgery can also be very successful but often results in some restriction of flexibility of the hindfoot region (a necessary “trade” in such situations to achieve stability).