

## Ankle Sprain - Lateral ligament injury (rolled ankle)



### What is it?

A lateral ligament injury usually refers to a tear of one or more of the ligaments on the outside (lateral aspect) of the ankle. The lateral ligaments consist of three ligament bands which provide stability to the outside of the ankle joint. These ligaments as a group are referred to as the lateral ligament complex.

### How does it happen?

The lateral ligaments are injured when they are overstretched (sprained). This commonly occurs when the foot and ankle are forcibly rolled inwards. This injury is often referred to as a 'rolled ankle'. The ankle may be rolled during rapid changes in direction, on uneven surfaces, or treading on a ball or opponent's foot.

### How does it feel?

The first sensation after a lateral ligament sprain is pain on the outside and front of the ankle. There may also be an audible snap, crack or tear. Depending on the severity of the injury, the outside and front of the ankle may swell and you may have difficulty walking due to pain. Swelling may be immediate or occur over a period of hours. The ankle may also feel weak. Over the coming days, bruising may develop which may extend up the leg and down to the toes.

### What should you do?

To limit the severity of this injury, it is advised that you stop your activity immediately and start initial treatment. The most important time in the treatment of any injury is the first 24–48 hours. Swelling is a necessary step in the healing process; however too much swelling can delay healing and cause further tissue damage. To control the amount of swelling and limit the degree of damage to the lateral ligament complex, the RICE regime should be commenced (Rest, Ice, Compression, Elevation). This will help to reduce blood flow to the injured area, thereby, reducing the extent of swelling and tissue damage.

*Rest* involves ceasing your activity or sport, and limiting the amount of weight you put through your ankle.

Crutches may be required if you are having difficulty walking.

*Ice* should be applied to the injured site for 15–20 minutes every 1–2 hours. Ideally, it should be applied using crushed ice wrapped in a moist cloth or towel.

*Compression* involves the application of a firm elastic bandage around your ankle.

*Elevation* involves lying with your ankle resting comfortably on a chair or pillows so that it is above the level of your heart.

### What shouldn't you do?

Following injury to the lateral ligament complex you shouldn't undertake activities which may increase blood flow to the injured site and, therefore, swelling to the area. These include hot showers, heat rubs, alcohol and excessive activity.

### Could there be any long-term effects?

Most lateral ligament injuries heal without complication within a matter of weeks. However, a proportion of injuries can result in longer-term effects depending on the severity of the injury and extent of damage. When the ankle is rolled, a number of structures in the vicinity of the lateral ligaments may also be injured. These include bone, cartilage and muscle tendons. Injuries to these structures can produce persistent pain and swelling which can slow recovery. An incorrect diagnosis or poor management of your injury may result in reduced range of movement, weakness and an increased chance of reinjuring the ankle.

## What NORTH CITY PHYSIO CAN DO TO HELP:

After the initial RICE treatment, the aim of subsequent treatment is to restore the ankle to full function. This involves restoration of full range of motion, strengthening the muscles around the ankle, improving the proprioception (balance) with specific exercises and graduated return to full activity. A North City Physiotherapist will also be able to advise you on other preventive measures such as the use of strapping tape or ankle braces.