Ankle sprains

What is an ankle sprain?

Ankle sprains happen to people of all ages. They occur when you 'roll your ankle', which over-stretches the ligaments, which are the fibrous bands that hold the ankle bones together (see Figure 1).

What are the symptoms?

When ligaments are damaged, there is pain, swelling and sometimes bruising. Too much swelling can slow the healing process. Pain is usually worst in the first two to three days.

Figure 1: The ligaments supporting the ankle



Treatment

You may require an x-ray to determine if you have a broken bone (fracture).

Most ligament injuries of the ankle will heal within four to six weeks. It is important to decrease swelling of the ankle as quickly as possible. This will begin healing and avoid stiffness.

It is very important to regain ankle movement and normal walking as soon as possible following an ankle injury. You might need crutches for a few days if there is pain while you walk; however, early return to normal walking is encouraged.

If you have pain, medications such as paracetamol may help. Antiinflammatory medications can also help to reduce the swelling and pain, but speak to your healthcare professional to see if this is best for your injury.

Occasionally, very painful and swollen ankle injuries may require an ankle brace to support the ankle as the ligaments heal, while also allowing movement and walking. Physiotherapy will often be recommended to help recover from this injury as well as to prevent future injury.

An ankle injury can interrupt or interfere with sporting activities. You may benefit from referral to Cabrini's Sport Injury Clinic, based at the Cabrini Emergency Department, for specialist review and ongoing management. Let your emergency doctor know if you would like this follow up to be arranged for you.

Some people who have repeated ankle sprains may need surgery to stabilise the weakened ligaments. Referral to an orthopaedic (bone) doctor can be arranged from the Emergency Department when required.

Prevention

There are simple measures you can take to reduce the risk of an ankle sprain:

- Warm up before exercise
- Wear supportive shoes
- If you have previously injured your ankle, physiotherapy will lessen your chances of re-injury. You may also need to tape or brace your ankle before sport. Speak to your physiotherapist or sports physician for further information.

First aid for sprains

The initial treatment (first 72 hours) for ankle sprains is based on the 'RICE' principles: rest, ice, compression and elevation. RICE is most effective in conjunction with specific exercises (see over the page).

Relative rest

Avoid activities that cause pain. If you are unable to put weight through your ankle comfortably, use crutches.

Ice

Wrap ice cubes or a sports ice pack in a damp towel and apply it to the injured area for 15–20 minutes up to every two hours while you are awake. Never apply ice directly to the skin.

Compression

A firm bandage from the toes to above the ankle may help to alleviate pain. Ensure the bandage does not increase your pain or restrict blood flow to your toes.

Elevation

When resting, raise your foot so it is above the level of your heart.



Avoid 'HARM' in the first 48-72 hours – heat, alcohol, running and massage.



Heat

Increases blood flow and swelling.

Alcohol

Increases blood flow and swelling and can make you less aware of aggravating your injury.

Running/activity

An increase in heart rate increases blood flow and swelling. Protect your joint until it has healed adequately.

Massage

Promotes blood flow and swelling. Massage can increase damage if begun too early.

Exercises

It is important to maintain flexibility and strength as you recover. Progress down the list of exercises as you are able. Perform each exercise three times, twice a day.

Exercise 1

Using a towel, pull your toes back as far as comfortable, and hold for 30 seconds.



Exercise 2

Keeping your foot flat on the ground, slide it back under the chair and hold for 30 seconds.



Exercise 3

Ankle pumps: bend your foot up and down at your ankle joint, moving the toes and foot towards you then away. Hold for 1 second before changing direction each time. Repeat 10 times.

Ankle circles: move your ankle in a circle for several repetitions and then reverse the direction.

Exercise 5

Keeping your foot flat on the ground, bend your knee towards the wall and hold for 30 seconds.



What to expect

Most people fully recover in one to six weeks. If you are no better after a week, see your local doctor or physiotherapist, or return to Cabrini ED. For more significant injuries, a sports physician and/or physiotherapist can provide assistance with healing and rehabilitation. As the pain settles down after the first few days, gradually increase your level of activity

Seeking help

Cabrini Emergency Department (ED) is staffed by experienced emergency doctors and nurses 24 hours a day, 7 days per week. If you have any questions about your ED treatment our qualified ED staff can be contacted on (03) 9508 1500 at any time. If you need to return to Cabrini ED for ongoing care we would be glad to take care of you again and if this occurs within a week of your initial consultation the doctor's fee will be bulk-billed.

You can also expect to receive a phone call or SMS message from one of our emergency nurses the day after you have been discharged. The nurse will be able to clarify any aspect of your diagnosis, treatment, or follow-up.

In a medical emergency return to Cabrini ED if it is safe to do so or go to the nearest hospital emergency department or call an ambulance - dial triple zero (000).

Return to Cabrini ED if you have not improved at all after a week, especially if you are still unable to put weight on your ankle and foot.

Want to know more?

- Contact Cabrini ED on (03) 9508 1500
- Ask your local doctor or healthcare professional
- Visit the Better Health Channel at www.betterhealth.vic.gov.au



