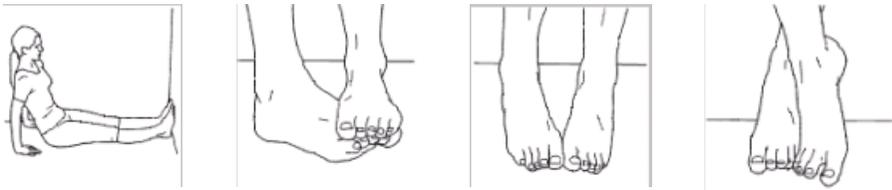


Isometric Strengthening Exercises:

Gently push against an immovable object in the 4 directions of ankle movement – away from you, towards you, inwards and outwards. Hold for 5 seconds. Repeat 10 times, 3 times a day.



Towel Curls:

Stand or sit with your foot on a towel.
Curl your toes and crumple up the towel.
Repeat 10 times.



Balance and Proprioception Exercises:

These exercises are designed to help regain balance and control of the ankle joint. They can be started once you are able to fully weight bear on your ankle.

Single Leg Balance:

Try to stand on one leg for 10 to 30 seconds. Increase the intensity by doing this with your eyes closed.

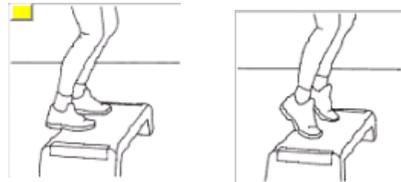


Dynamic Strengthening Exercises:

Strengthening exercises can be started once joint swelling and pain is controlled and the ankle range of movement has improved.

Toe Raises

Stand with your heel over the edge of a step. Raise up on the ball of your foot, hold for 3 seconds and slowly lower your heel to the start position. Repeat 20 repetitions, 3 times a day.



Single Leg Squat

Stand on your injured leg on a step facing down. Slowly lower your body by bending your knee to 30 degrees. Return to starting position. Repeat 10 times, 3 times per day.



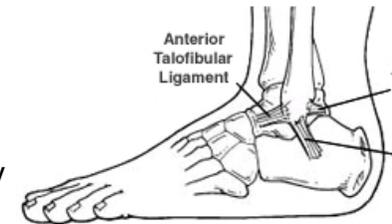
Step-ups:

Stand in front of a 20 - 40 cm step. Step up 10 times with one leg leading and then repeat with the other leg leading. Repeat 3 times a day.



THE SPRAINED ANKLE

An ankle sprain is a condition characterised by damage and tearing to soft tissues and ligaments of the ankle. The most commonly affected ligament in the ankle is the lateral ligament.



What happens ?

The function of the ligaments is to prevent excessive movement of a joint, for example, the lateral ligament prevents the foot and ankle from turning inwards (inversion) and pointing downwards (plantar-flexion). When this movement occurs excessively during weight-bearing, tearing of the ligament occurs. This is a sprained ankle and can be classified as follows:

- Grade I: Stretch and/or minor tear of the ligament without any instability.
- Grade II: Tear of the ligament with some instability.
- Grade III: Complete tear of the affected ligament with instability.

Any activity which makes the ankle 'tip over' increases the chances of an ankle sprain, for example, rapid changes in direction, walking on uneven ground etc.. The following factors predispose to ankle sprains:

- Poor rehabilitation of a previous ankle sprain.
- Poor proprioception (i.e. the ability to sense where a joint is. If you do not know where your ankle is the muscles will not be able to prevent the ankle sprain).
- Weak muscles

Symptoms:

- Audible snap or tearing sound at time of injury.
- Pain over the bony prominence on the outside of the ankle
- Swelling —often extending as far as the toes and into the calf.
- Difficulty in taking weight through the injured leg
- Stiffness and bruising over the coming days.

TREATMENT

As with any sprain or strain, the initial 48-72 hours is the most crucial. It is during this time that the inflammatory response (which causes the swelling) is at its strongest. It is therefore important to reduce this swelling as soon as possible, so as to minimise joint stiffness and weakness once healing has taken place.

The most effective way of reducing swelling is to follow the **RICE** regime (Rest, Ice, Elevation and Compression) for a minimum of 3 days.

Rest:

Rest is important for the initial 48-72 hours. After this, gentle exercises can be introduced to prevent stiffness of the ankle and minimise scar tissue. It is important to understand that the severity of sprains can vary significantly, and that any return to activity must be guided by pain.

Active REST: This is rest from any activity that aggravates your pain but continuing to move your ankle to prevent stiffness and minimise swelling. Generally aggravating activities include the following:

- Pain increases during activity.
- Pain increases upon rest after the activity.
- Pain increases in the morning after the activity.

ICE: If you do not have an ice pack, a bag of frozen peas will suffice. A piece of damp towelling should be used between the ice and the skin so as to prevent any skin burns. Ice should be applied for 20 minutes (any more may do more harm than good) every 2 hours for the first 48 hours.

People who are sensitive to cold or have circulatory problems should be cautious of ice treatment.

COMPRESSION: By using a bandage, compression can be maintained at all times and help prevent excess swelling.

If on applying the compression bandage you experience pins and needles, numbness or any colour change in the foot, the bandage is too tight and must be loosened or taken off. Remove the compression bandage for sleeping.

ELEVATION: By keeping your ankle raised above the rest of your body, you are encouraging swelling away from the injured area.



If you have swelling in your leg. Lie with your leg well supported and your foot above your hip.

What to expect:

- Within 2-3 days following injury, you should be able to gradually increase your walking. It is important to walk as normally as possible. If you have sustained a more serious injury you may have been given crutches. You should be able to walk without the aid of crutches within a week..
- After 6 weeks you should have;
 - Full pain free movement of your ankle
 - Returned to normal activities .
- If not, return to your GP , as further treatment may be necessary.

EXERCISES

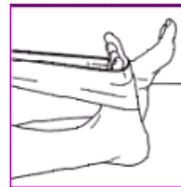
The following exercises can be used for a Grade I or II ankle sprain.

Range of Movement Exercises:

- Move the ankle through its entire range – up and down, in and out, circle clockwise and anticlockwise. Repeat 5 times in each direction, 3 times a day.
- With your leg out in front of you. Write the alphabet in the air with your toes.

Flexibility;

Gentle stretching and range of movement exercises can be started as soon as the swelling in the ankle has subsided and movement of the



Sit with leg out in front of you. Put a band around your foot.

Gently pull the band and feel a stretch in your calf. Hold for 30 seconds. Repeat 5 times, 3 times a day



Stand in a walking position with the leg to be stretched straight behind you and the other leg bent in front of you.

Lean your body forward and down until you feel the stretching in the calf of the straight leg. Hold for 30 seconds – relax. Repeat 5 times, 3 times a day



Stand in a walking position with the leg to be stretched behind you. Hold onto a support.

Bend the leg to be stretched and let the weight of your body stretch your calf without lifting the heel off the floor. Hold for 30 seconds – relax. Repeat 5 times, 3 times a day.