



YOUR GUIDE TO GENERAL ANKLE EXERCISES

MUSCULOSKELETAL

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Introduction

Please take note of the following before starting any of the exercises in this guide:

- The information contained in this guide is intended to assist in managing your recovery.
- This guide is based on the latest medical research in the field and contains the best advice available to the best of our knowledge.
- This guide is complimentary to other medical services and is not intended as a substitute for a health care provider's consultation. Never disregard medical advice or delay in seeking advice because of something you have read in this guide.

● Many people have found quick and lasting relief from their pain by acting upon the information provided, but everyone decides for themselves what to do with this information. Should you doubt a particular exercise in your situation, please consult your health professional.

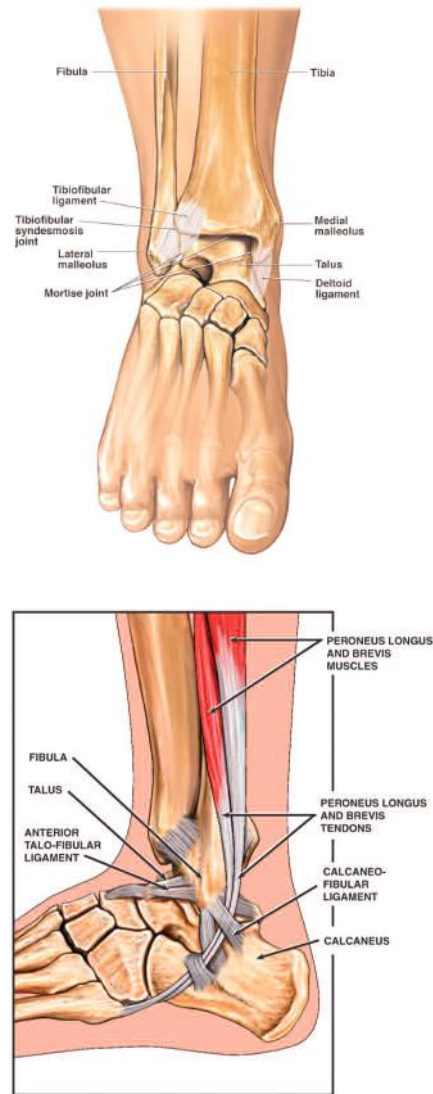
When consulting your health professional, it is wise to take this guide with you to show them.

The ankle joint

The ankle is a joint that is formed by the **tibia** and **fibula** (shin bones) and the **talus** (bone of the foot). The stability of the joint comes from several factors:

1. The unique structural arrangement of the bones forming the joint
2. The ligaments surrounding the joint

On the lateral (outside) aspect of the ankle is a complex of three ligaments. Damage to any of these ligaments will impact on the stability of the joint. It will also determine the course of treatment necessary. On the medial (inside) aspect of the joint is the deltoid ligament complex. Injury to this ligament complex is far more unlikely. Joint instability can therefore develop after any one of these structures has been injured. How many are damaged and the extent of the damage, will determine the grade of the injury and the amount of instability at the joint.



What causes ankle pain?

Ankle pain commonly occurs when one or more of the ligaments are stretched and/or torn or when you have had a previous fracture or ankle injury of some sort. Chronic ankle pain is pain that has been ongoing for a long time, and can be as a result of weak ankles, osteoarthritis or rheumatoid arthritis.

The most common ankle pain occurs when the heel or foot turn inwards in relation to the lower leg, overstretching the ligaments on the outside of the ankle. In addition to ligament damage, there may also be damage to tendons, bone and other joint tissues, depending on the extent of the injury. Less commonly the foot turns outwards, overstretching the inside of the ankle. Injuries can occur with the ankle 'giving way' causing injury to the soft tissues of the ankle.

Ankle injuries are common sports injuries, especially in sports involving running and jumping, landing from a jump, fast changes in direction or lots of stop-starts such as football, tennis or netball. Ankles are however injured just as often walking on an irregular surface, stepping off the edge of the kerb, twisting the ankle climbing stairs or losing your balance while wearing high heeled or platform shoes.

People have a greater chance of spraining their ankle if they have weak or lower leg muscles, lax ligaments in the ankle or non-neutral walking pattern. Those who have had a previous ankle injury are more likely to injure the same ankle again especially if they have not rehabilitated their first injury properly.

Injury to the ankle doesn't necessarily mean that you have torn the ligaments, or muscles, however if the pain and swelling persists for more than a week, your GP will be able to tell you if the injury is serious.

What treatment can I receive?

Treatment and rehabilitation
If a serious ankle injury is suspected you should see your GP or go to the emergency room. If your GP is still unsure regarding whether there is a fracture or any significant structural damage, X-rays may be done to confirm this, or to determine the extent of the injury. It is important to be properly evaluated so that a treatment plan can be developed. However, until you are able to be examined by your GP, the "R.I.C.E." method should be followed. This involves:

REST

Allow your injured ankle to rest for approximately 24 hours after the injury. Caution should be taken against vigorous exercise; however exercises for the uninjured leg can be performed. Isometric (static) exercises can be performed from an early stage to increase strength and decrease weakening of muscles. Exercises must be done in a pain free range of motion to prevent further damage.

ICE

Ice the ankle every two hours for 15-20 minutes to decrease pain and swelling for the first 48-72 hours. Do not place ice directly on to the skin and do not use for over 30 minutes at a time.

COMPRESSION

Use ankle brace, strapping or a bandage to provide both support and pressure to the area to help decrease the swelling.

ELEVATION

Elevate as much as possible with ice and compression. Elevate the foot higher than the waist to reduce swelling and pain

Exercises

When your doctor decides you are ready, start range-of-motion and strengthening exercises. Many of the exercises can be done easily on your own at home, however, occasionally you may be referred to a physical therapist to assist you with these exercises. Remember that your balance will also be affected after an injury. Try to incorporate some simple, safe balance exercises into your daily

routine, such as standing on one leg, or weight shifting. Make sure that your ankle is fully healed before returning to sport or strenuous activity. It may take several weeks before you can return to intense physical activity. Remember to use the RICE principle, should you have some slight swelling following any of exercises.

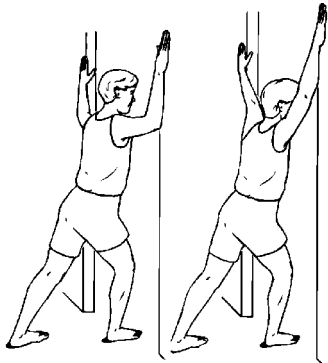
Exercises phase 1

STRETCHING EXERCISES

You can start with Phase one exercises when the swelling and the pain starts to decrease. Pain is your guide as to when you can start, and how much activity is enough. Some discomfort is often felt while doing exercises, and if your muscles are very tight, stretching can be uncomfortable. BUT don't let this put you off continuing with the exercises and this will get easier the stronger your ankle gets! The goal of this phase is to increase the range of motion and flexibility, which will aid in circulation and help eliminate swelling. These exercises can be done on both sides, if applicable.

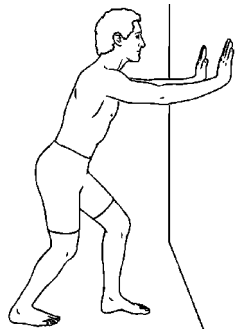
- **Hold each stretch for 30 seconds and repeat 3 times each**
- **Repeat stretches 3x 30sec 2-3 times a day. Perform them in a slow and controlled manner, pull the leg until you feel the stretch and do not pull it into the pain threshold.**
- **You may use an old stocking if you do not have tubing.**

Exercises phase 1



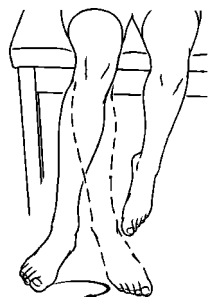
GASTROCNEMIUS STRETCH

Stand about a meter away from a wall. Place both hands against the wall with one foot further back than the other. Now lean in towards the wall, bending the front knee and keeping the back knee straight and the heel on the floor.



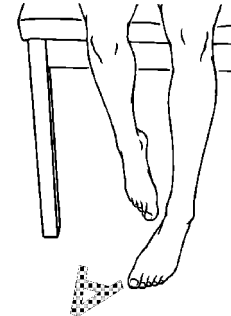
SOLEUS STRETCH

In the above position, now keep the back leg slightly bent, with the heel on the floor and toes pointing in a straight line to the wall. Lean into the wall until a stretch is felt in the lower calf.



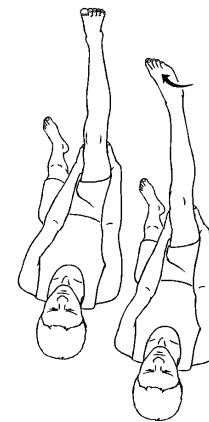
ANKLE CIRCLES

Slowly rotate foot/ankle clockwise and counter clock-wise. Gradually increase range of motion. Avoid pain.



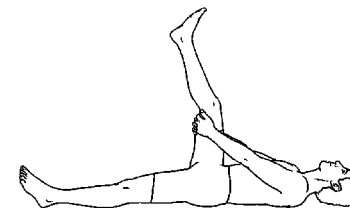
ANKLE ALPHABET

Sitting/lying with your leg outstretched in front. Now raise the leg, keeping knee straight and leg still. Paint the alphabet in the air, with ankle using capital letters, slowly to get full range of movement in ankle. The movement should not be from your hip, only your ankle and range should be pain free.



TIBIALIS ANTERIOR STRETCH

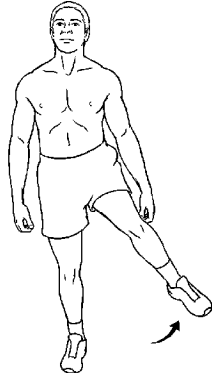
Lay on your back with one knee bent and the other straight. Raise the straight leg up holding behind your knee. Now point your toes forwards and inwards, and you should feel a stretch along the front of your leg. Only rotate to a pain free position.



HAMSTRING STRETCH

Lie on your back and support your thigh behind the knee. Slowly pull the leg towards your chest and then straighten the knee until a stretch is felt in the back of the thigh.

Exercises phase 1 (continued)



WEIGHT SHIFTING

Stand up straight and shift your weight from one leg to another in a slow and controlled manner.

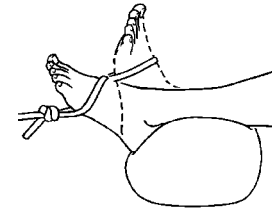
Exercises phase 2

MOBILITY & STRENGTHENING EXERCISES

- Repeat two sets of 10-12 repetitions of each exercise.
- Make sure that you work in a pain free range of movement and gradually increase your range as you get stronger, and the exercises get more comfortable.

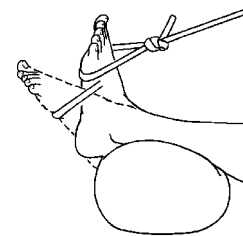
This phase of exercise can be started when you are able to complete phase 1 exercises pain free and with control. You should no longer have swelling or pain and if this is not the case it is important that you consult your allied health professional to ensure that there are no other problems and that

you are completing the exercise programme correctly. Do not be afraid to go back to phase 1 if you feel that you are unable to safely continue with the phase 2 exercise or you can overlap the phases if you are not completely confident to do all the exercises in phase 2 yet. Be aware of pain as your marker of doing too much. It is helpful to incorporate some of the stretches in Phase 1 to your Phase 2 exercise programme. The stretches can also be used as a warm up when you are ready to start your sport or physical activity.



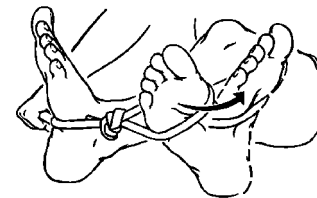
RESISTED DORSIFLEXION

With the tubing (or an old stocking) anchored to a fixed object (table leg), and attached around your foot, pull the foot towards you. Return slowly to your starting position.



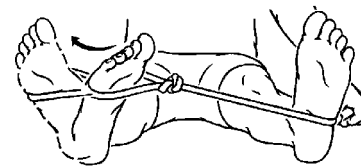
RESISTED PLANTAR FLEXION

Whilst holding one end of the tubing and the other tied around your ankle, press the foot downwards towards the floor. Return slowly to starting position.



RESISTED INVERSION

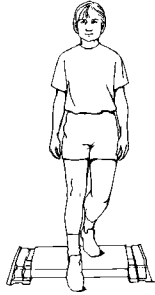
Tie ends of the band together, and anchor the band around a table. Sitting side on to the table, loop the band around the foot of your injured ankle which should be closest to the table. Move toes up and in toward opposite knee. Be sure to only use your ankle.



RESISTED EVERSION

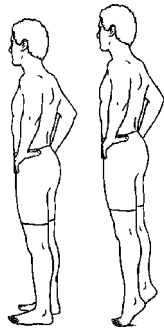
Now turn around so your injured ankle is furthest from the table, with the band attached around the foot. Now move the toes of the foot up and out toward outer shin, pulling the band away from the table.

Exercises phase 2 (continued)



STEP STRENGTHENING EXERCISES

Stand on a step and tighten the quads (the thigh muscle) as you bend and straighten the knee. Don't let the leg being lowered become weight bearing.



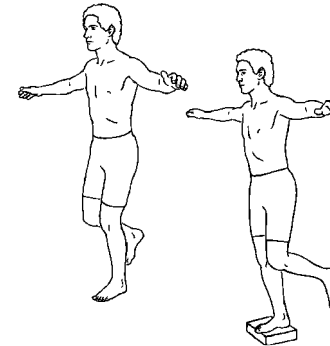
CALF RAISES

Supporting yourself against a wall, raise up onto your toes in the following manner: First onto your big toe, then onto the middle of your foot and then onto your little toe. This sequence equals one repetition.



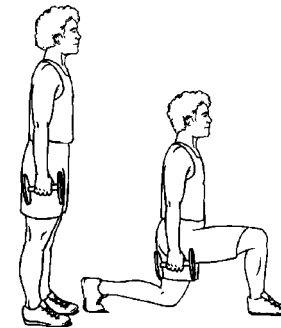
STANDING TOE RAISE

Standing with your weight now on your heels, raise your toes off the ground in the same sequence as the calf raises, i.e. middle of your heel, outside and inside.



STORK STANDING

Balanced on one leg for 30 seconds and repeat with the other leg. Repeat with your eyes closed. Progress the above standing to an unsteady surface e.g. a cushion or a narrow piece of wood.



LUNGE

Lunge with one foot forward keeping the knees 90° (or at least attempt to reach 90°). Ensure that your front knee does not go over your front foot when bending to 90°. Return to the starting position. Perform 10 reps with the one foot forward before changing to the other foot forward. Try to be as stable as possible during the exercise. Now try and perform in various directions i.e. diagonally to either side.

Contact us

This guide is designed to assist you in the self-management of your injury/condition.

We are here to assist your recovery in the shortest but safest possible time. If you have any uncertainties or queries regarding the information, please do

not hesitate to contact us on:

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