

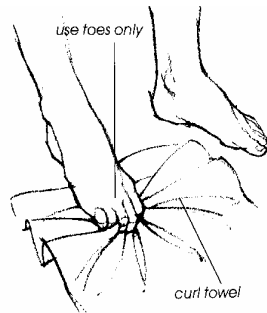
some of the tension off the plantar fascia. It may also help in prescribing orthoses

EXERCISES

The following exercises are designed to strengthen the small muscles of the foot to help support the damaged areas. If performed regularly, they will help prevent re-injury. It may be several weeks before any benefit is felt.

TOWEL CURLS

A) Place towel on a floor. Curl towel toward you, using only the toes of your injured foot. Resistance can be increased with a weight on the end of the towel. Repeat 20 times.

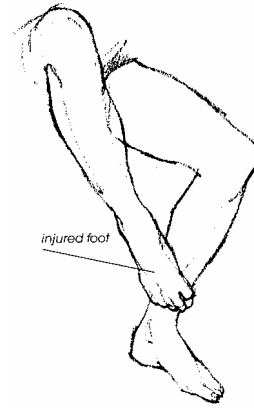


SHIN CURLS

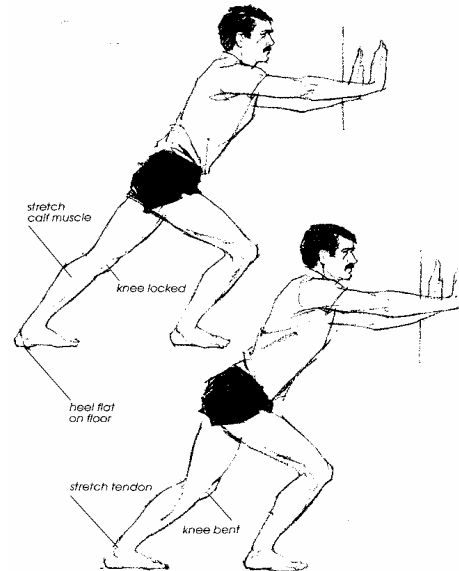
B) Run your foot slowly up and down the shin of your other leg as you try to grab the shin with your toes. Repeat 30 times. A similar exercise can be done curling your toes around a tin can.

STRETCHES

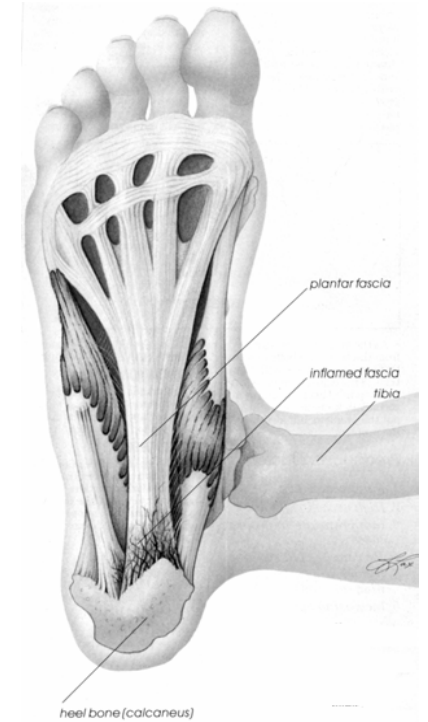
C) Lean against wall with your back knee locked. Press forward until a stretch is felt in your calf muscle. Hold 15 seconds.



D) Then bend your knee until a stretch is felt in your Achilles tendon. Hold a further 15 seconds. Repeat 3 times. You should feel a pull in your muscle and tendon, but no pain.



PLANTAR FASCIITIS



INJURY DESCRIPTION

Plantar Fasciitis means inflammation of the plantar fascia a thick band of connective tissue that spans the arch of the foot from the calcaneus (heel bone) to the bases of the toes. It helps support the arch and helps propulsion. It is a common cause of foot pain in both sports and older active people.



THIS BROCHURE HAS BEEN PREPARED
FOR
THE AUSTRALIAN ORTHOPAEDIC FOOT AND
ANKLE SOCIETY

THE PROBLEM

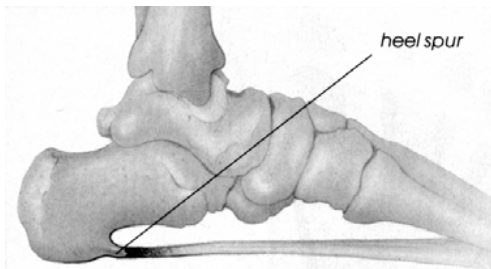
Fasciitis starts as a dull intermittent pain in the heel which may progress to a sharp persistent pain. Classically, it is worse in the morning with a few steps or at the beginning of sporting activity.

The plantar fascia is a thick fibrous material on the bottom of the foot. It is attached to the heel bone (calcaneus) and fans forward toward the toes. It is responsible for maintaining the arch of the foot.

The problem usually occurs when part of this inflexible fascia is pulled away from the heel bone. This causes an inflammation and this, pain. Plantar fascia injury may also occur at midsole or towards the toes.

Since it is difficult to rest the foot, a vicious cycle is set up with the situation aggravated with every step. In severe cases, the heel is visibly swollen. The problem progresses rapidly and treatment must be started as soon as possible.

As the fascia is pulled away from the bone the body reacts by filling in the space with inflammatory tissue or new bone. This causes the classic "heel spur". This heel spur is a secondary x-ray finding and is not usually the problem but a result of the problem. It lies just above and not in the fascia.



Heel pain can also be caused by nerve entrapment, stress fracture or bursitis.

PREDISPOSING FACTORS

1. Flat pronated feet.
2. High arched rigid feet.
3. Inappropriate/improper shoes
4. Toe running, hill running.
5. Soft terrain (i.e. running on sand).
6. Increasing age.

TREATMENT

REST

Use pain as your guide. If your foot is too painful, weight bearing sports can be temporarily replaced by swimming and/or cycling to maintain cardiovascular fitness. Weight training can be used to maintain leg strength.

ICE

Icing your heel (frozen peas) for 15 minutes several times a day will reduce the inflammation. You should also ice your heel after activity for 15 minutes.

MEDICATION

Your doctor may prescribe anti-inflammatory pills. These are important in reducing the inflammation in your foot. They can however cause gastric side effects.

PHYSIOTHERAPY

The initial objective of physiotherapy (when needed) is to decrease the inflammation. Later, the small muscles of the foot will be strengthened to support the weakened plantar fascia.

CORTISONE

A cortisone injection is usually quite beneficial if the above have not solved the problem. It is a local

injection and it is very safe in this area.

SURGERY

Surgery is rarely required for plantar fasciitis.

SPORTS

Plantar fasciitis can be aggravated by all weight bearing sports. Repetitive foot landing such as occurs in running and jogging will aggravate the problem. When the problem is severe the best sports are ones which are non weight bearing (i.e. swimming, cycling). Go back into other sports slowly. If you have a lot of pain either during the activity or the following morning, you're doing too much. The following adjustments may help the problem.

HEEL PADS

A heel pad of felt, or sponge, or of newer materials (i.e. Sorbothane, Spenco) can help to absorb the shock as the heel lands and ease the pressure on the plantar fascia. It may be necessary to cut a hole in the heel pad so the painful area will not be irritated. Heel pads and heel cups are available at sport stores and medical supply stores.

SHOES

It is possible for shoes to cause the problem. You may need different or new shoes. A knowledgeable salesperson can be invaluable.

ORTHOSES

These are inserts for your shoe which your doctor will prescribe if necessary.

TAPING

Taping your foot to maintain the arch will take