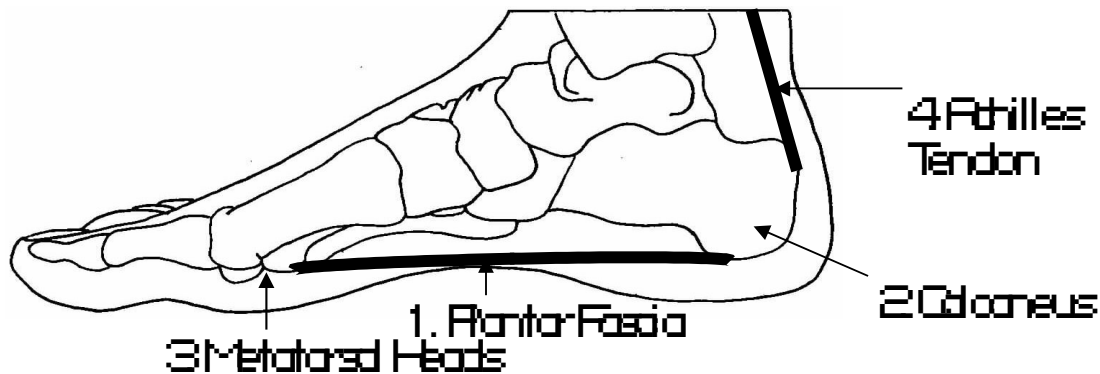


PLANTAR FASCIITIS / HEEL SPURS



DEFINITION:

The plantar fascia¹ is a tough fibrous ligament on the sole of the foot. It extends from the calcaneum² (heel) to the metatarsal heads³ (toes) and acts to maintain the arch of the foot. Plantar fasciitis is the term used to describe inflammation of the plantar fascia¹.

SYMPTOMS:

Pain at the origin of the plantar fascia¹ at the calcaneum², particularly when:

- Standing after rest (the inflamed/torn area of the plantar fascia¹ stretches)
- Prolonged standing or exercise (the plantar fascia¹ is bruised from pressure)

The area is markedly tender and often also slightly swollen.

A spur at the calcaneum² (a bony growth on the heel).

CAUSES:

Whenever weight is put through the foot, the plantar fascia¹ is under tension and stretched. Repeated stretch of the fascia fatigues it. The natural repair mechanism cannot keep up with the fatigue. This can be due to:

- An increase in weight or activity level
- Age causing general wear and tear
- Ill-fitting shoes, or shoes with inadequate support
- Tight calf muscles / Achilles tendon⁴ (Achilles tendon pulls on the calcaneum², hence causing tension on the plantar fascia¹)
- Excess pronation (rolling in) or flat feet (the arch lowers, placing excess strain on the arch and subsequent inflammation of the plantar fascia¹)
- Pregnancy (due to the weight increase and elastic ligaments)

SURGERY:

In extreme cases a surgical release (excision of the inflamed tissue and a release of nerves in the heel) is the last option available. Rarely will a heel spur be excised, non-surgical options should be exhausted first.

TREATMENT:

Don't wait for it to get better – there are many things which can be done!

- Rest and ice (see ice program below)
- Exercises and stretches (see stretching program below)
- Assessment and correction of any underlying biomechanical causes (e.g. flat feet, pronation) and prescription of Orthotic arch supports to remedy this
- Physiotherapy treatment
- Cortisone injections

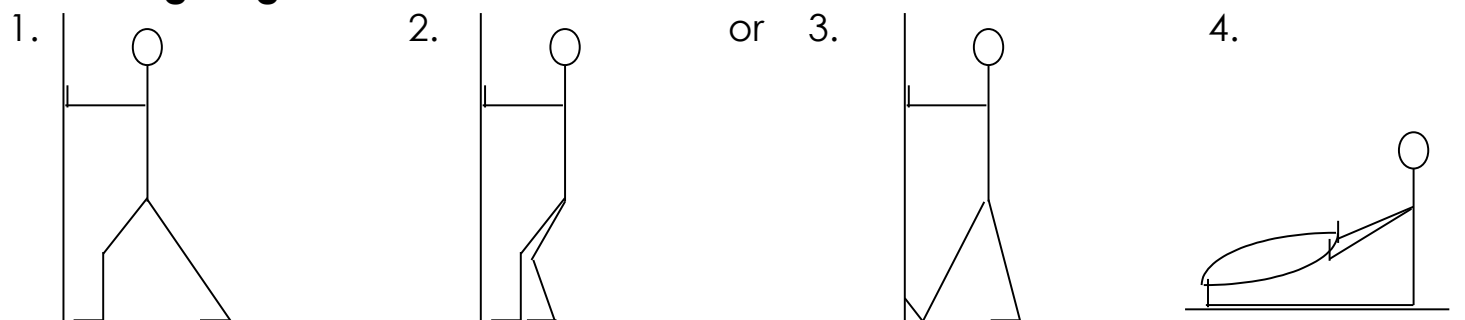
Treatment should be initially aimed at decreasing the inflammation, keeping the fascia at its natural length (to decrease fiber disruption) and to cushioning.

Ice Program:

Place a can of drink, straight from the fridge, onto the floor. Place your foot on top of the can so the curved surface of the can sits in the arch of your foot. Roll your foot back and forth over the can. This will gently stretch your plantar fascia to its natural length, create an arch in your foot and decrease the inflammation of the plantar fascia due to the very cold can.

Frequency: 10 minutes morning and night

Stretching Program:



Place your hands on the wall and have your feet pointing forward. Keep your back leg straight and heel on the ground. You then bend your front knee stretch forward. You should feel of the stretch all the way down your calf muscle & tendon.

Place your hands on the wall your feet close together, as well as close to the wall, pointing forward. Keeping both heels on the ground, bend both knees forward. You should feel the stretch toward the bottom of your calf muscle & Achilles tendon.

Place your hands on the wall. Place one foot up against the wall and keep the leg straight. Lean forward toward the wall. You should feel the stretch all the way down your calf muscle.

Sit with your legs straight in front of you. Place a belt or towel around your foot and pull it toward you. You should feel the stretch toward the bottom of your calf & Achilles tendon.

Frequency: 30 seconds each side, four times a day

Assessment & Correction of Underlying Biomechanical Causes:

Consult your **Orthopaedics Australia** Orthotist for an opinion. A full examination of your feet including palpation, gait analysis, lifestyle and footwear analysis will be completed to ensure accurate diagnosis. Orthotics are the best treatment modality for this particular condition. A thick heel pad is a good start in determining whether an Orthotic will be needed. If the pain is relieved with a heel pad, an Orthotic will offer a better permanent solution. Orthotics distribute the weight of your body to other areas of the foot, unloading the heel as well as cushioning the painful area. Careful consideration should also be given to footwear (supportive shoes with a soft sole are the best type of footwear for this condition).