

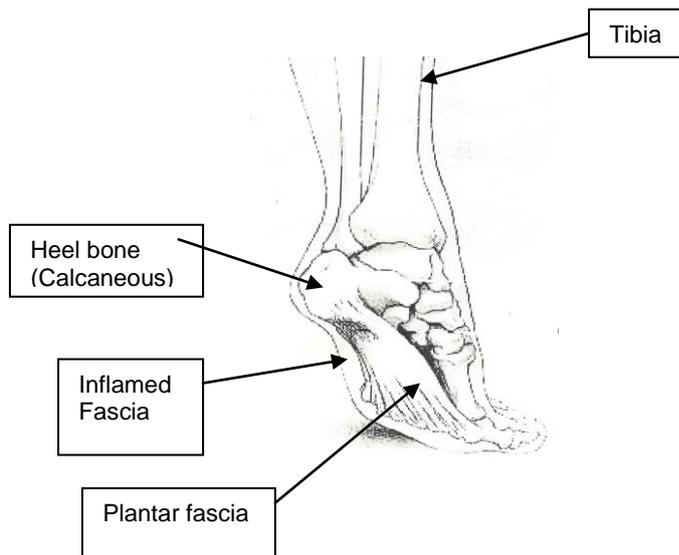
## Orthopaedics Department

# Plantar Fasciitis

### What is Plantar Fasciitis?

Plantar fasciitis is a common condition caused by inflammation of the plantar fascia. The plantar fascia is a fibrous sheet in the sole of your foot which helps maintain the arch.

It causes pain under the heel. It usually goes in time but treatment speeds up recovery.



### Symptoms

Heel pain (sometimes intermittent) is usually worse in the morning (when rising) after periods of prolonged sitting, and at the start of sporting activity. The pain has been described as a nail being driven into the heel or a burning sensation. Pain may also occur in the mid part of the foot.

### Common causes

**Constant stress:** this condition is more common in people who spend the majority of the day on their feet.

**Recent weight gain:** being overweight may be a contributing factor of plantar fasciitis.



## Patient Information

**Tightness of the Achilles tendon:** this can cause stress on your heel.

**Change in activity:** if you have recently changed your exercise routine, such as increasing mileage when running, running on different surfaces or even walking on hard surfaces such as cement/concrete floors.

**Unsuitable footwear:** if your shoes have non-cushioning soles or are worn out.

**Rheumatic conditions:** if you suffer from rheumatoid arthritis or ankylosing spondylitis you may be prone to inflammation anywhere a ligament is attached to a bone, therefore plantar fasciitis may be part of the general condition.

**High arched (cavus) or flat feet:** if you have high arched feet you are more at risk of developing plantar fasciitis as you are less likely to absorb the stresses of walking.

**Heel spurs:** occasionally extra bone forms producing a small bony prominence. Many people have a bony spur on the heel bone, but this is not the cause of the pain. This may be more common in those with plantar fasciitis, but does not cause plantar fasciitis.

### Treatments

**Non-steroidal anti-inflammatory drugs:** for example, ibuprofen or neurofen. Ask for advice from your doctor or pharmacist before taking any medication.

**Appropriate footwear:** wear shoes with extra cushioning such as running trainers. Do not walk bare foot or on hard surfaces.

**Orthotic devices:** arch supports and/or heel cushions.

**Stretching of the Achilles tendon (physiotherapy):** refer to the exercises below.

**Shockwave Therapy (ESWT):** high amplitude shock waves similar to sound waves are focussed on the painful area to promote better healing response. The procedure is usually carried out in 3 sessions at weekly intervals as an outpatient procedure.

**Platelet Rich Plasma (PRP) injection:** this is a day case procedure which involves drawing 10-30ml of your own blood and centrifuging to separate platelet rich plasma. The platelet rich plasma is injected at the painful spot in the heel to promote healing.

**Night splints:** To hold the foot upright to keep the Achilles tendon stretched in order to reduce your early morning pain.

**Steroid injection:** A mixture of local anaesthetic with steroid administered at the painful site (heel) to reduce your symptoms. However the pain relief might be temporary and only last for a few weeks.

**Cast application:** occasionally a below-knee plaster cast or walker boot is applied to rest the foot for 4 to 6 weeks.

Over 98% of patients will have resolution of their symptoms with this treatment. However your symptoms may take up to 18 months to resolve. Occasionally symptoms recur and treatment is again necessary.

## Patient Information

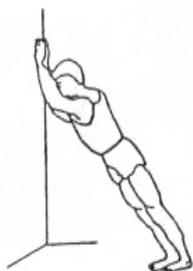
**Surgery is rarely required** and there are associated risks and possible complications, including infection, persistent pain and damage to the small nerves in the heel causing tingling and numbness. Division of the plantar fascia can result in a flat foot.

### Exercises



Stand on a step – support yourself only on the front of your feet, keeping your knees straight. A moderate stretch of the calf muscles should be felt. **Hold for 15 seconds.**

**Repeat six times, six times a day.**



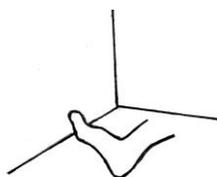
Stand at arm's length from a wall, feet together. Lean to the wall keeping your heels on the ground and your knees straight. **Hold for 15 seconds.**

**Repeat six times, six times a day.**



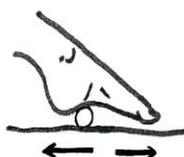
Stand at arm's length from a wall with your back knee locked and your front knee bent. Keep both heels on the ground and bend your straight leg. **Hold for 15 seconds repeat with your other leg.**

**Repeat six times, six times a day.**



Place your forefoot (toe) against the wall and lean forward and apply gentle pressure. **Hold for five seconds.**

**Repeat six times, six times a day.**



Place a can of previously cooled **but not frozen** soft drink under the heel of your foot and roll backwards and forwards **for four minutes.**

**Repeat twice a day.**

## Patient Information

It may take time but do not get discouraged; you will get better.

### Further Information

For further information or if you have any questions, please contact the Orthopaedic Secretaries on 024 7696 5095.

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact 024 7696 5095 and we will do our best to meet your needs.

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Department:	Orthopaedics
Contact:	25095
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