
SELF-CARE INFORMATION ON PLANTAR FASCIITIS

Plantar fasciitis is a cause of pain under your heel. It usually goes in time. Treatment may speed up recovery. Treatments include rest, good footwear, insoles (orthoses), painkillers and stretching exercises.



Plantar fasciitis is a painful condition of the foot caused by repetitive strain to the plantar fascia at the base of the foot. Your plantar fascia is a strong band of tissue (like a ligament) that stretches from your heel to your toes. It supports the arch of your foot and acts as a shock-absorber in your foot. Plantar fasciitis is a relatively common foot problem affecting up to 10-15% of the population. It can occur at any age. It is sometimes known as "policeman's heel". The problem may persist for many months. However, approximately 90% of cases are treated successfully with conservative measures.

What causes plantar fasciitis?

Repeated small injuries to the fascia (with or without inflammation) are thought to be the cause of plantar fasciitis. The injury is usually near to where the plantar fascia attaches to your heel bone. You are more likely to injure your plantar fascia in certain situations.

Possible causes are:

- If you are on your feet for a lot of the time e.g. walking, standing, running.
- If you have recently started exercising on a different surface or work long shifts standing on hard surfaces
- If you have been wearing shoes with poor cushioning or lacking arch support
- If you are overweight – this will put extra strain on your heel
- If there is an overuse or stretching of your sole e.g. athletes who increase running intensity or distances or if you are try to advance too quickly in your sport.
- If you have a tight Achilles tendon. This can affect your ability to flex your ankle.
- If you have faulty foot mechanics – If you have an anatomical abnormality or injury causing you to limp this can cause abnormal weight distribution at the foot.
- Other factors – age, family history and conditions, such as arthritis and diabetes may play a part.

How common is plantar fasciitis?

Plantar fasciitis is very common. Around 1 in 10 people will get plantar fasciitis at some time in their life and it is most common between 40 and 60 years old. It is more common in those whose occupation involves standing on hard surfaces for long periods, people who are overweight or athletes.

What are the symptoms of plantar fasciitis?

Pain is the main symptom. This can be anywhere on the underside of the heel. However commonly, one tender spot is found as the main source of pain. This is often about 4 cm forward from your heel and may be tender to touch.

The pain can be associated with stiffness which is often worse when you take your first steps on getting up in the morning, or after long periods of rest where no weight is placed on your foot. It can often ease with activity but can then become more pronounced at the end of the day or after a long period of time spent on your feet.

The expectation is that the pain will go over time and, in many people, it may only last a few weeks, however it may take up to 18 months. It is impossible to predict how long it will last for each person.

How is plantar fasciitis diagnosed?

In most people, no investigations are necessary, and a diagnosis is made by the doctor talking to you and examining your foot. Occasionally, if your symptoms have persisted or to rule out other causes of foot pain other tests may be used. These can include X-rays, an ultrasound or MRI scan.

You may be diagnosed by your GP, a podiatrist, musculoskeletal podiatrist or foot and ankle orthopaedic consultant. Your GP may refer you to a specialist if your plantar fasciitis is not settling or if another cause for your pain is suspected.

Preventing heel pain

Usually, the pain will ease in time. 'Fascia' tissue, like 'ligament tissue, heal quite slowly. It may take several months and a combination of different treatments.

Initially, try to minimise the things that cause the heel pain:

- Lose weight.
- Where possible, reduce the amount of time spent on your feet.
- Wear shoes which have some padding or shock absorbing material in the heel. You can buy heel pads in most good chemists, and these will reduce the impact of walking.
- Wear shoes that fit well and aren't worn down on the heel or soles.
- Avoid walking bare foot and especially on hard ground. Try to take smaller steps.
- If you are taking part in sports, wear appropriate shoes and warm up (and down) properly before and after exercising.
- If you do regular exercise, try to do low impact activities such as cycling or swimming to allow the tissues to rest.
- If the heel pain is associated with a particular shoe, avoid wearing that pair for a while.

Initial treatments for plantar fasciitis

Treatment is aimed at resting the plantar fascia. The problem is you still need to walk and carry out your daily activities. Plantar fasciitis is a ***self-limiting condition***, which means that generally it will resolve on its own.

Listed below are some of the main treatments for this condition.

Inflammation and pain management:

- *Anti-inflammatory* medications such as ibuprofen may help. (Check with your GP or pharmacist if you are unsure, you can take these)
- *Heat*: can be beneficial. Warm up, stretch and apply heat to the sole of your foot first thing in the morning or before activity
- *Cold / ice*. Applying ice wrapped in a damp cloth to your heel for 10-15 minutes once or twice a day and after periods of activity. Alternatively, fill a plastic 500l drinks bottle with water and freeze it then roll your foot over the bottle with a layer of towel between the bottle and your foot to prevent an ice burn. (Avoid this if you have circulation issues)
- *Massage*: Rolling your foot over a small hard ball e.g. a golf or tennis ball may also help.
- *Acupuncture*: There is some evidence to suggest that acupuncture can be beneficial in the treatment of plantar fasciitis.

Stretching and strengthening

- Stretching the Achilles tendon / calf muscles and plantar fascia and strengthening the intrinsic muscles of the foot can improve foot biomechanics and reduce stress on the foot.
- At the end of the leaflet, we will show you some regular calf and foot stretching exercises and strengthening exercises that should be done regularly every day. In most people this simple regime is enough to help significantly with the pain.

Taping techniques/ strapping

- Certain taping techniques can help the pain experienced on the first few steps of walking. It can be helpful in more short-term flare ups.
- Start the tape on the outside of the foot just behind the little toe and when you are at the point just behind the heel, ***pull*** the tape firmly up towards and finish just behind the big toe. Then applying tape widthways, start just in front of the pad of heel and pull the tape across the arch. Repeat with widths of tape overlapping the first up to just behind the ball of the foot. 2.5 cm ***micropore*** from most Chemists or ***Strappal*** (stronger more durable tape).
- For further advice on this ask the physiotherapist. Taping should not be used if you have poor skin sensation or poor skin condition.



Rest / activity modification

- Avoid walking on hard surfaces for long periods of time.
- Avoid wearing flat, unsupportive shoes.
- Try and avoid walking bare foot. A shoe or slipper with a small heel will help especially first thing in the morning.

Support of the arch of the foot

- Wear comfortable supportive shoes such as trainers and wear insoles.
- Use insoles and orthotics with arch and heel support such as AOL or Orthoheel insoles, which can be bought online or from the chemists. It is important that you wear these insoles in all your shoes (they are interchangeable between shoes).
- Your doctor may recommend custom fit orthotics if the cause of your problem is primarily biomechanical/you have a foot deformity or gait abnormality.

Night splints

- A night splint applies a constant stretch to the plantar fascia. These can be bought online.
- They can be worn at night or for periods of 15-30 minutes at a time, several times a day.
- Night splints can take some getting used to and they do need to be worn for some time before any beneficial benefits are experienced.

In the first instance you should give these first line treatments 6-12 weeks to have an effect. If you are getting improvement, you should continue these treatments until the symptoms have resolved.

Further treatment options

If the above these treatments do not give you satisfactory improvement, then other treatment options may be considered:

- ***Immobilisation:*** If the pain persists, immobilising the heel might be required. This may be in a plaster cast or a removable boot. This could be for anything up to 6 weeks.
- ***Steroid injection:*** This can bring about dramatic relief to your heel pain. Unfortunately, the benefits can be short lived and there are risks associated with steroid injections. Side effects include thinning of the fat pad under the heel and rupture/ tear of the fascia which could cause long-lasting effects. For this reason, steroid injections are not used as the first line of treatment.
- ***Surgery.*** This is rarely needed, and the results are not very predictable. The aim is to reduce calf muscle tension by partially lengthening the muscle or detaching a portion of the plantar fascia from the heel bone to relieve some of the pressure and pain.

Home Exercises

Plantar Fasciitis Rehabilitation Exercises



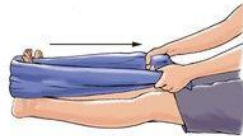
Prone hip extension



Side-lying leg lift



Frozen can roll



Towel stretch



Standing calf stretch



Seated plantar fascia stretch



Plantar fascia massage



Achilles stretch

These exercises should be held for 30 seconds and repeated 6 times.

Useful contacts

- Ask your pharmacist
- Patient UK - www.patient.co.uk
- NHS Choices, www.nhs.uk/conditions/

If you have further questions:

Call the ***practice*** on *01285653184* or *01285653122*

If you require ***urgent*** medical advice *111 (24 hours)*

In an ***emergency*** call ***999***