

Plantar Fasciitis



What is it?

The most common cause of heel pain is plantar fasciitis. The plantar fascia is a broad band of fibrous tissue, which runs along the bottom surface of the foot from the heel to the toes. 'Plantar fasciitis' is a condition in which the plantar fascia is inflamed. Long standing inflammation may cause the deposition of calcium at the point where the plantar fascia inserts into the heel. This results in the appearance of a sharp thorn like heel spur on x-ray. The heel spur is a-symptomatic (not painful), the pain arises from the inflammation of the plantar fascia.

Why did i get it?

Plantar fasciitis can affect anybody, but it is most common in people over the age of 40.

There are many theories as to the development of the condition, these include:

- Over using the ligament by doing too much standing/walking
- Excessive body weight
- Altered biomechanics e.g. people with flat feet or high arched feet or those with tight calves (causing limited upward movement of the ankle)
- Occupations that require extended periods of weight bearing.

Signs & symptoms

Pain usually starts gradually without any injury to the area. Often it is triggered by wearing a flat shoe (e.g. flip flops on summer holidays). This stretches the plantar fascia (thick band of tissue that connects the heel bone to the toes) too far and begins the inflammation of the area. Typically, pain is felt under the foot towards the front of the heel. It is common for it to start in one heel only and normally it is most painful when standing up first thing in the morning. It can often ease with activity but then become more pronounced at the end of the day, or after a long time spent on your feet.

How can i treat my plantar fasciitis?

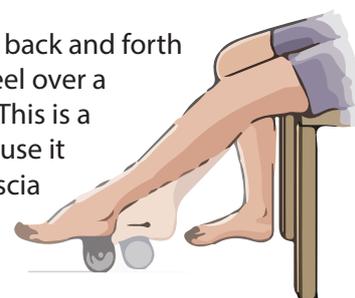
As with many foot and ankle conditions, plantar fasciitis can in most instances be treated by you, at home, without the need to see a health professional.

Rest/modified activity: Plantar fasciitis is a mechanical overload and the treatments revolve around reducing this overloading. For this reason, the pain may take a while to fully resolve. Pain when you first put weight on your foot, such as getting up in the morning or standing after a long period of sitting, is a common symptom that can be used to help monitor your progress.

This sensation may not fully go, but it will get to a point where you feel pain of a certain intensity for a few steps, but then it goes and you're fine for the rest of the day. Use this as your benchmark. If you get up one morning and the pain lasts longer or is more intense - then you know that you've over done it. Ease off if you can for a day or two to let it settle and do some of the other self-help treatments if you've not done them for a while.

Medication: Non steroidal anti-inflammatories (such as Ibuprofen or Neurofen) can help the pain. Ask your GP or pharmacist for medication advice.

Ice massage: Roll your bare foot back and forth from the tip of the toes to the heel over a frozen juice can or water bottle. This is a good exercise after activity because it not only stretches the plantar fascia but provides cold therapy to the injured area.



Stretching: Regular gentle stretching of the Achilles tendon and the plantar fascia can ease the symptoms. This is because most people with plantar fasciitis have a slight tightness of the Achilles tendon. This tends to pull at the back of the heel and have a knock-on effect of keeping the plantar fascia tight. Also, when you are asleep overnight, the plantar fascia tends to tighten up (which is why it is usually most painful first thing in the morning). The aim of the exercises is to gently loosen up the tendons and fascia above and below the heel.



Assume position shown, pulling the toes up toward your body so that you feel a stretch. Hold 20 seconds

Position your body against a wall as shown with the painful foot behind. Point toes directly toward wall and hold heel down. Lean into wall as shown so that you feel a stretch. Hold 20 seconds





Begin in a half-lunge position with your front leg bent, hands supported on the wall. Lower your body towards the wall. Hold for 20 secs



Once your pain has settled your physio may advise you to start 'strength training' with single heel raises with a towel under your toes.

To prevent your pain returning it is advised you do these Every 2nd day for 3 months
 -go up for 3 seconds
 -pause at the top
 -3 seconds go down
 12 reps 3 x

Night splints: Night splints are basically an extension of stretching as they both work on the same principal. However, a night splint is worn for longer periods, applying a constant stretch to the plantar fascia. Ideally they should be worn all night, but this is often impractical. If they can be worn for periods of 15-30 minutes at a time, several times a day, then this should have a similar effect. Be warned these can take some getting used to and they do need to be worn for some time before any beneficial effects are experienced. Night splints can be very helpful with the pain on first weight bearing (e.g. getting out of bed/standing after a long period of sitting) and can help ease this symptom - particularly if worn before first weight bearing - i.e. put it on 10 minutes before you get out of bed.

Footwear: Poor footwear has been found by several studies to cause plantar fasciitis. Therefore, it is important to evaluate your current footwear and, if necessary, change your regular footwear to something more suitable. Footwear should be supportive, not compress your feet too much, fit well and have cushioned soles, especially in the heel area. Do not walk around bare footed.

What happens next?

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

the future the same symptoms return, then restart the first line treatments. Again, if the symptoms improve, continue until the symptoms resolve. More than 98% of patient's symptoms will resolve with this conservative self management. If they do not improve then see your GP. They may refer you to see a physiotherapist or podiatrist

Physiotherapists can use a number of treatment options including

- Ultrasound (electrotherapy)
- Massage
- Specific rehabilitation
- Taping
- Acupuncture can all help to speed up recovery from plantar fasciitis.

Podiatry

Your physiotherapist or GP may refer you to see a Podiatrist if you have ;

- biomechanical problems such as flat feet or high arches
- You have fat-pad atrophy (decreased cushion on bottom of heel)

A Podiatrist will be able to give you guidance on appropriate footwear and may issue with some insoles/orthotics.

Injection

A steroid (cortisone) injection is sometimes tried if the pain does not improve. It may relieve the pain in some people for several weeks but, does not always cure the problem. It is not always successful and may be sore to have done. Steroids work by reducing inflammation. Once the pain has subsided you must start the stretching exercises.

Surgery

Surgery is rarely required. There are associated risks and possible complications including infection and 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.

Patient Experience Team

If you have any concerns or need advice about accessing NHS services, you can speak in confidence to the Patient Experience Team on [0800 085 7935](tel:08000857935).

or you can email epunft.pals@nhs.net

This leaflet can be produced in large print, audio cassette, Braille and other languages on request.

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