

Heel Pain Caused by Plantar Fasciitis



What is Plantar Fasciitis?

Plantar fasciitis (also known as plantar fasciopathy) is a common cause of pain under the heel and sometimes into the arch of the foot. It is caused by excessive load or stresses through the foot, which can result in a thickening and structural changes to the plantar fascia. The plantar fascia is a “ligament” type structure which helps to support the arch of the foot and acts as a shock absorber. It connects the heel bone (calcaneus) to the ball of the foot.

What are the symptoms?

The main symptom of plantar fasciitis is pain in the heel, across the sole of the foot (the part that touches the ground) and sometimes it can spread into the arch area of

the foot too. The pain can be described as sharp, burning and aching. The pain is usually worst when you first place weight on your foot, for example, when you get up in the morning or after long periods of sitting. The pain can worsen as the day goes on and/or after long periods of weight bearing such as standing or walking for a long time. It can feel as though the more you do, the worse the pain gets.

Why did I get it?

Plantar fasciitis can affect anybody, but it is most common amongst people over the age of 40 and it can affect both athletic and non-athletic people. 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 and 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 i.e. those that work shifts of eight hours or more, are also linked with the development of plantar fasciitis

How is Plantar Fasciitis treated?

Plantar fasciitis is thought to be a self limiting condition, which means it will generally resolve by itself. Normally this can happen within about 18 months. Around 80-90% of patients will get better with simple interventions, such as stated below. Its important to be patient with some of these treatments as they might take a while to work.

Stretching and Insoles

Clinical research shows that many people (often around 80%) will respond well to simple treatments. These can include stretching of the calf muscles and the wearing insoles. Avoiding any barefooted walking can help treat your symptoms. Your practitioner can advise you further on these treatments options.

Ice and Activity Modification

Since the condition is often due to an overload of the ligament, a reduction in certain “impact” type activities, such as running, may be required for a specified time. Applying ice to your heel for



Heel Pain

between 5-10 minutes once or twice a day after a period of activity can help reduce any swelling and may ease your symptoms.

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 the foot, fit well and have soft inserts. High heeled shoes may lead to tightening of the calf muscles, which can aggravate this condition.

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. However, these can take some getting used to and they do need to be worn for some time before any beneficial effects are experienced.

Weight-Loss

There is strong evidence that being over-weight can be a cause of heel pain. If you are overweight, weight-loss can be an important part of this treatment plan. Your practitioner and or GP will often be able to refer you on to a weight loss programme. As such, don't be surprised if weight loss is discussed as part of your consultation.

So what happens next?

In the first instance you should give these first line treatments 6 to 12 weeks to have an effect. If you are getting improvement, you should continue these treatments until the symptoms have resolved. If however, these treatments do not give you satisfactory improvement, then other treatment options may be initiated by your practitioner. These may include some of the following:

- Injection therapy (such as a steroid injection) into the heel.
- Functional orthoses (insoles designed to alter the forces under your foot).
- Low dye taping (taping applied to support the foot position from flattening excessively and takes the strain off the plantar fascia). The information leaflet for this can be found at: www.roh.nhs.uk/patient-information/foot-and-ankle
- Immobilisation of the affected foot (using a special boot).
- Shockwave therapy - this is a relatively new treatment for patients with longstanding heel pain. It involves the application of energy waves to the affected part. The information leaflet for this can be found at: www.roh.nhs.uk/patient-information/foot-and-ankle
- Surgery - It is rare that surgery is considered for this condition.

SPECIAL NOTE

It is important to note that heel pain can be caused other conditions such as certain types of



Heel Pain

arthritis or may even be due to referred pain from your back. Therefore, it may be necessary to refer you to another health practitioner if the condition doesn't resolve or if another cause to your foot pain is suspected.