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# Plantar Heel Pain Information and advice on self-management

## What is plantar heel pain?

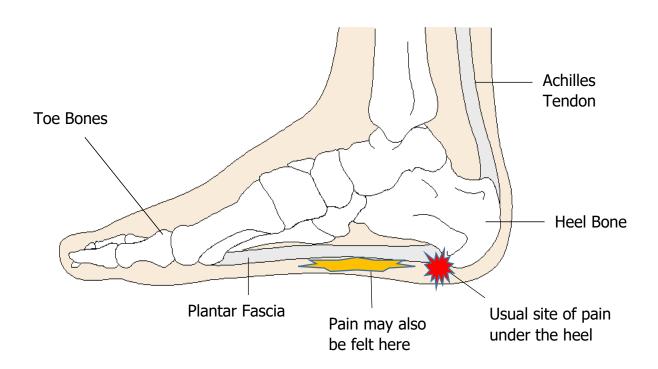
Plantar heel pain refers to tenderness and pain under your heel. Plantar heel pain is sometimes caused by and often called plantar fasciitis.

# What is the plantar fascia?

The plantar fascia is a tough and flexible band of tissue that runs under the sole of the foot. It connects the heel bone with the bones of the toes, and acts as a kind of shock absorber to the foot.

# What are the symptoms of plantar heel pain and plantar fasciitis?

The symptoms tend to be pain under the heel which can also spread throughout the length of the foot. The pain can be most severe on activity after prolonged rest, for example, taking the first steps after getting out of bed in the morning, and may be made worse by a long walk or being on your feet for a while. Sometimes the pain can be constant.



## What causes plantar heel pain/ plantar fasciitis?

The exact cause is not known. It is possible that the cause is too much load or stress on the plantar fascia which results in pain within the plantar fascia and surrounding tissues.

Some situations which may be linked to the cause are:

- If you are on your feet a lot, for example walking, standing, or running.
- If you have recently started an activity which you are not used to or started exercising on a different surface, increased running/walking intensity or distances.
- If you have been wearing shoes with poor cushioning, that are worn out and offer little support or are very stiff.
- If you are overweight, this will put extra strain on your heel.
- If you have tight calf muscles or a tight Achilles tendon (the big tendon at the bottom of your calf muscle just above your heel). This can affect your ability to bend your ankle.
- If you have altered foot posture for instance being flat-footed or having high foot arches or an abnormal walking pattern (for instance due to pain in other joints) can put added stress on the plantar fascia.

# How long will it last?

This is difficult to say and often depends on how long you have had it for already and whether you are able to avoid the activities that make it worse. It can take weeks and sometimes months to fully resolve.

# How common is heel pain /plantar fasciitis?

Plantar fasciitis is very common. Around 1 in 10 people will get plantar fasciitis at some time in their life. It is most common in people aged 40-60 years old but can occur at any age. It is much more common in women than men.

## How is it diagnosed?

Your health care professional can usually diagnose plantar fasciitis just by talking to you and examining your foot. Very rarely, additional tests are needed if the diagnosis is uncertain or if another cause needs to be ruled out.

## What can I do to help my heel pain /plantar fasciitis myself?

There are several ways that you can help yourself if you have heel pain. The best way to resolve heel pain is by doing a few of these things at once.

#### **Avoid weight bearing for long periods**

Try to avoid high impact activities such as running or jumping. Reduce prolonged periods of walking or standing. Short rests with gentle walking and the exercises described below are fine you, should aim for a balance between rest and activity.

#### **Check your Footwear**

Wear well-fitted shoes that support and cushion your feet and heel, trainers are particularly useful. Avoid open sandals and old or worn shoes that may not give a good cushion to your heel. Avoid walking barefoot especially on hard surfaces. Regularly replace shoes used for walking or trainers used for running to ensure good support.

#### Make sure your slippers fit properly

Many people prefer to wear slippers in the house however the soles of slippers often lack adequate support, cushioning and grip. Like outdoor shoes slippers should fit properly and shouldn't be too loose. Backless slippers should be avoided. The features of the ideal slipper are generally the same as ideal shoes.

#### **Arch supports**

There is some evidence that foot arch supports which you can buy from your local chemist may provide relief for heel pain. These supports work by reducing the amount of load and stress on the plantar fascia and they work best if you wear them in your shoes all the time.

#### **Pain relief**

Pain relief which can be purchased over the counter may ease the pain. Sometimes anti-inflammatory medicines such as ibuprofen are also useful. Speak to your pharmacist about what is best for you and don't use any pain relief for more than 2 weeks without seeking medical advice. Some people find that rubbing a cream or gel that contains an anti-inflammatory medicine on to their heel is helpful. You should consult your pharmacist about this too.

An ice pack (such as a bag of frozen peas wrapped in a tea towel) held to your foot for 15-20 minutes may also help to relieve pain.

#### **Weight loss**

People often experience plantar heel pain after an increase in weight, and those who are overweight are at greater risk of having plantar heel pain. Reducing weight can help alleviate the pressure on your heel, which will reduce your pain. It can be difficult for some people to reduce their weight, so speaking with a GP maybe helpful to get proper advice.

# Stretching Exercises for the plantar fascia and Achilles tendon

Stretching is an important treatment for plantar heel pain, and has been shown to be effective. Try to perform the exercises below at least twice a day, every day.

## Achilles tendon and plantar fascia stretch

First thing in the morning, loop a towel, a piece of elastic or a tubigrip around the ball of your foot and, keeping your knee straight, pull your toes towards your nose, holding for 30 seconds. Repeat 3 times for each foot.

# 2. Wall push-ups or stretches for Achilles tendon

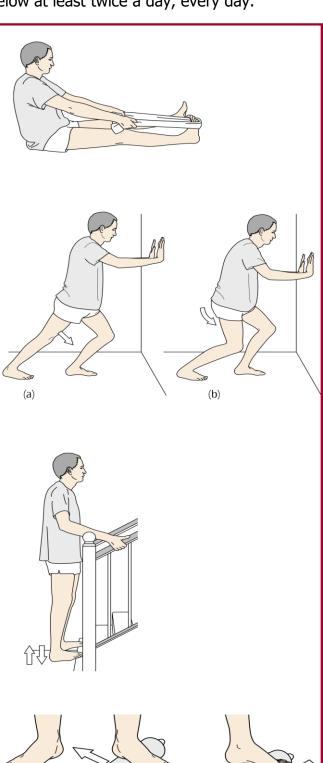
The Achilles tendon comes from the muscles at the back of your thigh and your calf muscles. These exercises need to be performed first with the knee straight and then with the knee bent in order to stretch both parts of the Achilles tendon. Twice a day do the following wall push-ups or stretches: (a) Face the wall, put both hands on the wall at shoulder height, and stagger the feet (one foot in front of the other). The front foot should be approximately 30 cm (12 inches) from the wall. With the front knee bent and the back knee straight, lean into the stretch (i.e. towards the wall) until a tightening is felt in the calf of the back leg, and then ease off. Repeat 10 times. (b) Now repeat this exercise but bring the back foot forward a little so that the back knee is slightly bent. Repeat the push-ups 10 times.

# 3. Stair stretches for Achilles tendon and plantar fascia

Holding the stair-rail for support, with legs slightly apart, position the feet so that both heels are off the end of the step. Lower the heels, keeping the knees straight, until a tightening is felt in the calf. Hold this position for 20–60 seconds and then raise the heels back to neutral. Repeat 6 times, at least twice a day.

# 4. Dynamic stretches for plantar fascia

This involves rolling the arch of the foot over a rolling pin, a drinks can or a tennis ball etc, while either standing (holding the back of a chair for support) or sitting. Allow the foot and ankle to move in all directions over the object. This can be done for a few minutes until there is some discomfort. Repeat this exercise at least twice a day. The discomfort can be relieved by rolling the foot on a cool drinks can from the fridge.



If any of the exercises in this booklet make your pain worse STOP and if the increased pain continues for a few days, seek advice from your GP. If you feel that your condition is deteriorating, and you have persevered with the advice and exercise given in this leaflet for 8 weeks you should seek further medical advice from your general practitioner (GP).

#### Where can I find out more?

Below are some addresses of organisations that provide some helpful advice for people who have plantar heel pain.

#### **Versus Arthritis**

Copeman House St Mary's Court St Mary's Gate Chesterfield Derbyshire S41 7TD

Tel: +44 (0) 300 790 0400 enquiries@versusarthritis.org

#### NHS choices web site

http://www.nhs.uk/Conditions/heel-pain/Pages/Introduction.aspx

#### **College of Podiatry**

Quartz House 207 Providence Square Mill Street London SE1 2EW https://cop.org.uk/

#### **Chartered Society of Physiotherapy (CSP)**

14 Bedford Row, London, WC1R 4ED

Further information, exercise and some useful videos about the stretching exercises can be found at the CSP website

https://www.csp.org.uk/

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