
Plantar Fasciopathy

Introduction

You have been diagnosed with plantar fasciopathy. This is a very common foot problem and is the most commonly reported cause of heel pain. It is characterised by pain at the heel bone (where the plantar fascia originates from) and results in thickening of the plantar fascia. The condition occurs in both active and less active people. The cause is poorly understood but is thought to occur due to changes in the structure of the plantar fascia.

This leaflet explains what plantar fasciopathy is, how it is diagnosed, potential causes and possible treatment options.



What is plantar fasciopathy?

Plantar fasciopathy affects the ligaments that lie underneath the bones in the sole of your feet. The strongest ligament is the plantar fascia or aponeurosis that runs from the heel bone to the ball of the foot. This ligament is divided into three bands; the central and inside (medial) portions are the strongest. Weight bearing causes the foot to flatten and the ligament stretches. Sometimes this ligament becomes overstretched/overloaded around the heel with time or increased activity. Changes can occur within the plantar fascia resulting in reduced elasticity and pain. The pain is usually over the heel area but can also be around the middle of the foot.

What are the symptoms of plantar fasciopathy?

- Pain is often worse on first weight bearing in the morning and after rest.
 - Pain is often a deep aching pain but can also feel sharp.
 - Pain is normally felt either under the heel or on the inside of the heel by the arch area.
 - Pain usually improves in time and with gentle activity. The expectation is that the pain will go within 18 months. In many people it lasts just a few weeks. It is impossible to predict how long the pain will last for each person but there are things you can do to help with the pain and treat the problem.
-

What causes plantar fasciopathy?

Sometimes the symptoms start after an injury and sometimes there seems to be no specific cause. Things that have been linked to plantar fasciopathy are:

- altered foot posture and lower limb alignment.
- trauma.
- being overweight (this increases the load through the feet, especially the heel).
- extended periods of weight-bearing on your feet i.e. walking, running, standing.
- tightness in the calf or Achilles tendon (which affects the ability to flex the ankle upwards).
- footwear that provides the foot with poor cushioning/support through the arch of the foot.
- recently starting to exercise on a different surface.
- overuse or stretching of your sole i.e. athletes who increase running intensity or distances.

Some initial strategies to help treat plantar fasciopathy.

Lifestyle Modification:

- Keep barefoot walking to a minimum.
- Wear footwear with good thick but flexible soles (wear them around the house). Footwear should be supportive but should not compress your feet too much, fit well and have cushioned soles, especially in the heel area.
- Reduce long periods of standing.
- Omit high impact exercise i.e. running, jumping, aerobics. Continue to do activities of daily living but try and do these activities in a paced way (i.e. regular amounts of activity each day but in smaller more manageable chunks.)
- Try to align knees over your feet when going from sitting to standing to sitting and on stairs also.

Plantar fascia cold therapy:

- Fill a plastic bottle with cold tap water. Keep this in the fridge so it can be used regularly.
- Place the cold bottle on the floor and use the sole of the foot to roll the cold bottle back and forth along the sole of the foot. Do this for 15 mins 2 or 3 times per day.

Stretching Exercises:

[Video](#)



©Physiotools

Calf Stretching exercises – Gastrocnemius

- Stand in a walking position with the affected leg stretched straight behind you with the knee straight and the other leg bent in front of you.
- Lean on something for support like a chair or the wall.
- Hold the stretch for between 20-30 seconds and repeat 3 times.
- Aim to do the stretch twice daily on both legs if possible (and at least the affected leg). Repeat the daily stretches 5 days a week for 8 weeks.

[Video](#)



©Physiotools

Calf stretching exercises – Soleus

- Stand in a narrow walking position, the affected leg behind you and the foot pointing straight forwards and the knee bent. The forward leg is also bent in front of you.
- Lean against something for support (i.e. a wall or a table).
- Bend the affected leg and let your body weight stretch your calf keeping your heel on the floor.
- Hold this stretch for 20-30 seconds and repeat 3 times.
- Repeat stretch twice daily and at least 5 days out of 7 days in the week.

[Video](#)



©Physiotools

Sitting plantar fascia stretch

- Sit down and cross your legs so that your bad foot can be placed on top of your other knee.
- Place your fingers on the base of your toes on the sore foot and gently pull them back upwards towards your shin until you feel a comfortable stretch.
- Hold for 15 to 20 seconds.
- Repeat 3 times, once or twice a day (depending on symptoms).

You may feel some short lasting discomfort during and after these exercises. However if you feel a lasting increase in your symptoms then seek advice from the physiotherapist before continuing.

For further information

Please email ghnt.newcastlegatesheadtims@nhs.net, ring on **0191 2138800** or visit our website at: www.tims.nhs.uk which provides online guidance and support on managing your musculoskeletal (MSK) condition effectively.

The NHS website also provides trusted online information and guidance on all aspects of health and healthcare to help you manage your condition and/or inform your choices about your health: www.nhs.uk.

Useful links

The Patient Advice and Liaison Service (PALS) can offer on-the-spot advice and information about the NHS. You can contact them on freephone **0800 032 02 02** or e-mail northoftynepals@nhct.nhs.uk.

<http://www.aofas.org/footcaremd/conditions/ailments-of-the-heel/Pages/Plantar-Fasciitis.aspx>



**Tyneside
Integrated
Musculoskeletal
Service**

TIMS is a partnership between Newcastle upon Tyne Hospitals NHS Foundation Trust and Gateshead Health NHS Foundation Trust

Information provided by **David Hearne**, Senior Physiotherapist
Review Date: Feb 2021