Plantar heel pain

This leaflet explains about pain in the bottom of your heel (plantar heel pain). If you have any further questions or concerns, please do not hesitate to contact the foot health team.

What is plantar heel pain?
The plantar fascia is a 4mm thick band of tissue that reaches from the heel to the toes. It stretches with every footstep to support the arch. Over stretching the arch due to tight calf muscles, foot shape, unsupportive footwear or increased activity, strains the fascia, causing it to swell, and then shorten at rest.

On standing after rest, the contracted fascia pulls at the heel bone where it attaches. This causes sharp, burning pain on the inside of the heel especially getting out of bed in the morning or after walking long distances.

Why do I have it?
Plantar heel pain (sometimes called plantar fasciitis) can affect almost anyone. One in 10 people will be affected during their lifetime, and one in three of these people will get it in both feet. Those who are overweight, stand for excessive periods, runners and people over age 40, are more likely to have plantar heel pain.

What are the signs and symptoms?
Usually, there is a sharp, burning pain on the bottom of your heel which is worse when you get up after a period of rest. This pain can persist for some time, although generally it gets better as you move around. Sometimes the pain can be more constant and can come on during activity such as walking or standing. The pain is usually worse in the morning. Plantar heel pain can take a long time to heal as the fascia has a poor blood supply, so the pain can persist for some time.

Do I need any tests to confirm the diagnosis?
Plantar heel pain is usually diagnosed clinically. Your podiatrist will take a detailed history and perform a physical examination. Sometimes, the podiatrist may request imaging such as ultrasound or MRI scans to confirm the diagnosis, but this is usually not required. The podiatrist may also request blood tests via your GP if they suspect a systemic cause to the symptoms, such as inflammatory arthritis.
What treatments are available?
Plantar heel pain can go away without treatment, but it is generally painful and can take up to a year. In some cases it can go on for longer. Generally, the treatment aims to stretch the calf muscles and fascia, reduce tension in the fascia, and to relieve pain. There is no one treatment that cures plantar heel pain, and it can take some time to get better, usually a combination of the following treatments is effective.

1. **Footwear**
   Shoes or trainers with a fastening and thicker soles stop the arch overstretching (see our leaflet, *Choosing shoes*). Avoid slip-on shoes, slippers or sandals for over five minutes of walking or standing, including indoors. If you are given insoles to rest the arch, wear them in the shoes we advise.

2. **Massage roller**
   You can buy massage rollers or use a household item such as a golf ball or bottle of frozen water. Sit on a chair with your knee bent and foot flat on the ground. Press on the roller as hard as bearable and roll backward and forward under the arch.

3. **Calf stretches**
   **Seated**: Before you get up in the morning, use a towel to stretch the calves. Loop it around the ball of your foot and pull towards you for 30 seconds, and release. Repeat this two or three times.

   **Standing**: Face a wall and place your right leg behind you (feet facing forwards). Lean forward, bending the front leg, and push your right heel into the floor keeping leg straight. Hold for 30 seconds and relax. Repeat three times. You should feel the stretch in the calf of your back leg. Repeat this stretch with the back knee bent, making sure the back heel stays on the ground.

4. **Plantar fascia loading exercises**
   Place a rolled towel approximately 4cm (1½ inches) away from the edge of a step or you can do this exercise without the towel. Make sure you have something to hold on to. Place the ball of one foot on the edge of the step with the rest of your heel hanging off the edge, onto the towel. Slowly lower your heel, and then raise yourself up, and repeat. Build gradually from 10 repetitions, to 50 repetitions, twice a day.

5. **Low dye strapping**
   Supportive strapping is useful in relieving heel pain. Your podiatrist will show you how to apply this.

6. **Insoles and foot orthoses**
   Cushioned heel pads can be purchased from pharmacies and are often effective in relieving heel pain. Your podiatrist can also prescribe specially designed foot orthoses (insoles) to support your foot and take the strain from your plantar fascia.
7. Other treatments

Sometimes, particularly in severe or chronic (ongoing for several months) heel pain, your podiatrist will recommend other treatments. These may include steroid injections into the heel or extra corporal shock wave therapy. These will normally not be used as a first line treatment, and you will usually have to have further tests, such as imaging, first to confirm the diagnosis.

The podiatrist may also suggest that you purchase a night splint to stretch the calves and fascia as you sleep. In some cases, they may also suggest referral to other specialties such as podiatric or orthopaedic surgery, physiotherapy, rheumatology or the pain management service.

What happens if I do not receive treatment?
While plantar heel pain can go away on its own, this can be painful and can take a long time. Usually it is best to have it treated so that you can resume normal activity as soon as possible.

Is there anything I can do to help myself?

Lifestyle changes
If you happen to be overweight, losing weight will help as it will reduce the amount of load going through the heel and fascia as you walk. If you think you need more help with weight loss, please discuss this with your podiatrist or GP.

Exercise and physical activity
While the heels are painful, you should temporarily reduce weight-bearing activities such as running and strenuous walking. It is, however important that you remain physically active. Activities such as swimming, cycling and rowing can be useful to stay active until your heel pain improves. It is important that as the pain improves, you gradually increase running or walking to prevent the pain recurring.

Massage
Massaging the fascia can be very useful. While seated, cross your leg over your knee and pull the toes back towards the shin until you feel a stretch in the arch of the foot. You can usually see the fascia stick out. With some moisturiser (such as hand lotion, Vaseline® or e45) use the thumb to massage as hard as you can, along the length of the fascia. Try to do this for two minutes, two to three times a day.

Useful sources of information

Versus Arthritis (formerly Arthritis Research UK)
web: www.versusarthritis.org/about-arthritis/conditions/foot-and-ankle-pain

College of podiatry web: www.cop.org.uk/
Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline. 
**t:** 020 7188 8748, Monday to Friday, 9am to 5pm

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.
**t:** 020 7188 8801 (PALS)  
**e:** pals@gstt.nhs.uk
**t:** 020 7188 3514 (complaints)  
**e:** complaints2@gstt.nhs.uk

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch.
**t:** 020 7188 8815  
**e:** languagesupport@gstt.nhs.uk

NHS 111
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day. **t:** 111

NHS website
Online information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing. **w:** www.nhs.uk

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**t:** 0800 731 0319  
**e:** members@gstt.nhs.uk  
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We want to make sure the information you receive is helpful to you. If you have any comments about this leaflet, we would be happy to hear from you, fill in our simple online form, **w:** www.guysandstthomas.nhs.uk/leaflets, or **e:** patientinformationteam@gstt.nhs.uk

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