only be short lived. Furthermore, there is no conclusive evidence to show why steroid injections may be helpful for some people with plantar heel pain although one theory is that it helps to 'kickstart' the healing process.

**Extracorporeal Shockwave Therapy** can help some people by providing pain relief, and some regulation of healing the plantar fascia.

**Night splints** can stretch your calf muscles which can help ease plantar fascia pain, but some people can find these uncomfortable to use.

Treatments which have been shown to be ineffective when compared to placebo include acupuncture, ultrasound, and injections of blood and platelets.

**Surgery** is not usually performed for plantar heel pain, however in some cases an operation can be performed to release tightness in the calf muscles.

If you have any questions about the information in this leaflet, please contact Podiatry Services.

Further information about the service and how to manage a range of foot health problems yourself, can also be found on our website: <a href="http://www.livewellsouthwest.co.uk/project/podiatry">www.livewellsouthwest.co.uk/project/podiatry</a>

### **Contact Details**

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# **Podiatry Services** Patient Information Leaflet



# Plantar Heel Pain Syndrome: "Plantar Fasciitis"

(January 2023 V1)

We support people to lead independent, healthy lives

Plantar heel pain is common, affecting 15% of the population at some point in their lifetime in both athletic and sedentary people. Pain usually occurs at the bottom of the heel but can radiate around the sides of the heel and into the arch and forefoot. The cause is unknown but there are some risk factors that have been identified:

- Weight-bearing activity types such as sports, or occupations requiring a lot of walking or standing, especially on hard surfaces
- Inadequate footwear
- Overweight/obesity
- Tightness in the calf muscles

Typically, pain occurs with the first few steps in the morning or after rest. Some people find that walking or running can make it feel worse.

It has long been thought that plantar heel pain is isolated to the plantar fascia (plantar fasciitis). However, recent research has found that often multiple conditions occur at the same time which affect the bottom of the heel which is why the term 'plantar heel pain syndrome' is preferred. These conditions include stress to the plantar fascia; stress to the fat pad on the bottom of the heel; pressure to the nerve which passes by the heel; stress to the muscle attachment at the inside of the heel; and stress to the heel bone. Therefore, symptoms can vary between tingling, numbness, aching, sharpness, and shooting. In some cases, the pain can be radiated from higher in the body, for example due to pressure on a nerve in the lower back.

### Diagnosis

This is made clinically by a health care professional and does not require X-ray, Ultrasound, or MRI scans. If there is uncertainty over the diagnosis, or sometimes as part of a specific treatment modality, your health care professional may request an Ultrasound scan of the heel.

### **Myths**

It is commonly thought that flat feet are a cause of heel pain. However, we know from research that foot type and posture are not linked with this

condition. Another belief is that heel spurs are a reason for heel pain; however, there has been no conclusive evidence to suggest that heel spurs are implicated (heel spurs are an incidental finding in 30% of people). It is also commonly thought that inflammation occurs (fasci**itis**). Research involving biopsy of the plantar fascia has shown that there are no inflammatory cells present. Therefore, the use of anti-inflammatory drugs (ibuprofen) is not usually advised, although some people may find it beneficial to use these for pain relief. Usually, paracetamol is advised for pain relief if required.

#### Treatment

Many people will find that their condition resolves within 12 months without treatment. If required, treatment options can depend on which structures under the heel are painful. If the plantar fascia is painful, then exercises such as stretching and conditioning are recommended. The current research shows that conditioning the plantar fascia and calf muscles is the most effective exercise for plantar fascia stress/strain as this helps to increase the fascia's tolerance to the stress it is placed under during your daily activities and exercise. Stretching is an important exercise to try as this can help to reduce tightness and strain at the plantar fascia. The calf muscles, and the plantar fascia can both be stretched individually.

**Foot orthoses (insoles)** can be helpful for some people to reduce stress through the plantar fascia and help to reduce pressure at the heel. There is no difference between custom insoles and over the counter insoles for the treatment of plantar heel pain.

**Footwear** changes can help. Shoes with thick cushioned soles with a small heel (less than 1 inch) can help to relieve heel pressure and tension through the plantar fascia. Rocker soled shoes can further reduce tension through the plantar fascia when walking.

**Taping** can be used as a short-term option to help reduce plantar fascia stress/strain.

Cortisone injections can help reduce pain; however, the relief may