

## Plantar Fasciitis (Heel Pain)

### Fact Sheet

Plantar fasciitis describes the damage to a tissue called the plantar fascia (see explanation below). When the fascia is overloaded with pressure, is strained or incurs direct trauma, it becomes damaged and inflamed. It is this inflammation that causes the heel to become painful.

### Relevant anatomy & terminology

Your 'plantar fascia' is a thick band of connective tissue that attaches to the bottom of your heel and then spans the foot like a fan to connect to all five toes. You have connective tissues all around your body. In fact, connective tissue is one of the four main tissue types. It serves to connect, stabilise and enclose musculature and structures throughout the human body. The plantar fascia helps maintain the shape of the foot and arch by supporting the bones, joints and muscles.

### What are the symptoms of plantar fasciitis?

Common symptoms of plantar fasciitis include:

- Pain at the bottom of the heel that may radiate into the arch
- Swelling at the base of the heel
- Pain on standing up first thing in the morning
- Pain on standing up after resting
- Pain that may come and go, or be constantly present. Often pain can ease a few minutes after you start to walk around
- Pain can range from a mild discomfort to an intense stabbing pain

As the damage to the plantar fascia can worsen, this condition must be effectively managed to prevent a partial tear, or even the complete rupture, of the fascia.

It is also important to obtain an accurate diagnosis as the symptoms of other conditions may closely match the symptoms of plantar fasciitis. An example is **Abductor Hallucis Tendinopathy**, where the Abductor Hallucis muscle shares a similar insertion point at the bottom of the heel with the plantar fascia so also produces heel pain.

### What causes plantar fasciitis?

As the plantar fascia spans the arch, tension is placed on it every time we take a step. While our body is used to our regular daily use of the plantar fascia, it may not be able to accommodate significantly higher loads or increasing the intensity of our activities. If we strain the fascia past the point that it can safely handle, it will develop microtears that cause damage and inflammation.

There are a variety of causes for plantar fasciitis, including:

- A sudden increase in physical activity or the intensity of activity
- Overdoing specific activities that strain the arch such as climbing stairs
- Wearing shoes that don't support the arch and fascia - especially if you're used to wearing supportive footwear regularly
- Your foot type or foot biomechanics that put a greater load or force through the fascia (like a flatter foot)
- Trauma to the insertion of the fascia at the heel, such as jumping down from a high surface
- Faulty training technique
- Increased weight

It is important to not only look at the symptoms of plantar fasciitis but also the **cause** so that the fascia doesn't keep getting damaged in the future. This happens when the cause isn't a one-off activity but associated with the biomechanics of your feet.

## Managing plantar fasciitis at home

If you have heel pain or suspect that you have plantar fasciitis, we recommend that you book in with your Podiatrist as soon as possible as there is a risk that the damage will worsen. Until then, we recommend that you:

- Cease the activity that triggered your pain and symptoms
- Wear supportive, enclosed footwear (sneakers are preferable)
- Ice and elevate the foot to help reduce swelling and painful symptoms (apply ice for no more than 20 minutes every 2 hours)
- Avoid physical activity until you have seen your Podiatrist

## How your Podiatrist can help

By conducting a comprehensive biomechanical examination, your Podiatrist will get a complete picture of what is happening with your feet and what the cause of your plantar fasciitis is. From there, they will formulate a tailored treatment plan that takes into consideration your daily activities, lifestyle and goals.

Initially, the focus of the treatment plan will be to reduce your current symptoms, get you out of pain, and help the fascia heal. In the long-term, the goal of your treatment plan will be to prevent this injury from happening again. Once you've had plantar fasciitis, you are more likely to damage your fascia again, so this must be a primary focus.

Depending on the severity of your symptoms, your treatment may include:

- **Orthotics** - these will support the arch and reduce strain and tension on the plantar fascia so it can begin to heal as opposed to being constantly stretched during walking
- **Stretching** - once the initial pain and inflammation settle and your Podiatrist is satisfied that it is safe to do so, stretching the fascia can help reduce and prevent the onset of painful symptoms in the future
- **Strengthening** - working to strengthen the muscles of the feet and legs can improve your overall foot and leg function, helping to support the function of the plantar fascia
- **Footwear** - your regular footwear will be checked and discussed to make sure it's helping and not hindering your recovery

- **Strapping** - strapping can reduce painful symptoms by keeping your foot in a position that relieves strain and pressure from the plantar fascia

*Disclaimer: This document is an informative guide only and is not a tool for diagnosis or a replacement for a consultation with a Podiatrist. If you think you have plantar fasciitis or have developed heel pain, we recommend that you see your Podiatrist for an accurate diagnosis and an appropriate management plan. Referrals are not required to see a Podiatrist.*