



# Plantar Fasciitis

Healthshare Information for Guided Patient Management

## Index

Introduction .....	2
What is Plantar Fasciitis? .....	2
Signs and Symptoms .....	2
Who experiences Plantar Fasciitis? .....	2
What causes Plantar Fasciitis? .....	3
How long will Plantar Fasciitis last? .....	3
How should Plantar Fasciitis be managed? .....	3
Do I really need to change my footwear? .....	4
• What should I look for in a shoe? .....	4
• What should I avoid? .....	5
Summary .....	5
Self-Management .....	5
Exercises for Plantar Fasciitis .....	6
Contact Us .....	9

## Introduction

Healthshare is committed to improving your health and wellbeing. This information leaflet is produced by health professionals who are expert in improving musculoskeletal conditions. The information is based on the latest available evidence from research in the field. If you are not sure of any of the given information, please contact our physiotherapy helpline for further information.

## What is Plantar Fasciitis?

Plantar Fasciitis is a painful but very common condition resulting from damage to a band of tissue on the bottom of the foot. This tissue is a fascia, specifically called the plantar fascia, and is a strong, fibrous structure that connects the heel bone to the base of the toes. One of its functions is to help maintain the arch. Plantar Fasciitis is sometimes called "Policeman's heel" and can be confused with heel spurs. Often heel spurs are unconnected with Plantar Fasciitis.



## Signs and Symptoms

Most commonly pain and stiffness are felt around the heel and this may extend towards the arch of the foot. The pain may be dull or sharp, or it may be of an aching nature. The pain is usually worse first thing in the morning, following periods of rest, or during intense activity. It may be severe enough to cause you to limp causing you difficulty walking.

## Who experiences Plantar Fasciitis?

Plantar Fasciitis is a very common problem that tends to occur more commonly in women than in men, and often affects those within a certain age range. However, anyone can get it and it may affect both the sporty and sedentary alike. The overweight, or those that have unusually high or low foot arches may also be particularly vulnerable.

## What causes Plantar Fasciitis?

Suddenly increasing activity levels, or being overweight, can increase your likelihood of getting Plantar Fasciitis. A tight Achilles Tendon or the inflexibility of the surrounding foot and leg musculature can contribute, as can poor footwear (for example wearing ballet pumps). Heel “spurs” generally do not cause Plantar Fasciitis. Your Podiatrist may request x-rays or imaging to rule out other causes of your heel pain.

## How long will Plantar Fasciitis last?

This is a very difficult question to answer - it depends on many factors and will differ from person to person. Following clinical advice, changing your footwear and losing some weight will all contribute to hastening recovery. It is often encouraging when the patient begins to experience a decrease in their pain first thing in the morning. Plantar Fasciitis can sometimes resolve spontaneously.

## How should Plantar Fasciitis be managed?

<b>Painkillers</b>	Painkillers can help in the short term to break the cycle of pain.
<b>Stretching</b>	The rationale behind stretching is to improve the flexibility of the calf muscles in order to reduce the load transferred from the Achilles Tendon to the associated Plantar Fascia. The two structures work very closely together. Stretching is an activity that is often overlooked but is a very important part of helping you recover.
<b>Resting</b>	Activity modification is an important part of the treatment programme. Understandably, responsibilities and jobs mean that you may have to be on your feet for long periods of time. This has the potential to aggravate Plantar Fasciitis and your clinician may request that you consider rest a part of your treatment plan. This may also apply to sport and activity related Plantar Fasciitis but each case is treated individually.
<b>Icing</b>	Icing is a good short term way of reducing pain levels and is simple to apply. It may also reduce any swelling that may be present.
<b>Change in Footwear</b>	A key part of treatment is a change in footwear. A lot of patients seen at the clinic have Plantar Fasciitis because of the footwear they choose to wear. It is understandable that footwear is an important aspect of a persons image or dress sense, but not changing your footwear will greatly delay the recovery of Plantar Fasciitis.
<b>Night Splints</b>	The principle behind the use of night splints is the same as that behind calf stretching. The difference is that a night splint is strapped to the leg and used when you rest or go to bed.
<b>Strapping</b>	Strapping can be a useful short term method for reducing pain. It is a method of immobilising the foot and can be beneficial for some patients. Your Podiatrist may be able to show you a technique for applying strapping.
<b>Insoles</b>	Insoles are indicated when there is a biomechanical problem causing your Plantar Fasciitis. As part of your assessment, your Podiatrist will check the mechanical workings of your feet and make a judgement as to whether insoles may be beneficial to you.

If these treatments do not work, we may recommend the use of immobilisation and/or steroidal injections. Surgery is rare, but may be worth considering in stubborn, long-standing, or very severe cases.

## Do I really need to change my footwear?

One of the biggest challenges Podiatrists face in treating foot problems is getting the patient to agree to adopt more appropriate footwear. This usually doesn't preclude you from wearing fashion shoes or high heels on special occasions - it's what you wear for the majority of the time that's important.

By virtue of the fact you are attending a Podiatrist suggests you are in discomfort and this in turn may well be linked to your footwear. We know that ill-fitting shoes can be particularly damaging to feet and that by simply changing your footwear can result in drastic improvements to your overall foot health. However, we are acutely aware that fashion and style in our image conscious society play a big factor in the patient's choice of footwear - unsurprisingly, this is particularly pertinent to our female patients.

## What should I look for in a shoe?

There are a lot of factors that go into making the "ideal" shoe – that is, ideal from a Podiatrist's perspective! In essence, a good shoe should have some means of secure fastening - laces or velcro, for example.

Shoes without fastenings can encourage the toes to "claw" in an attempt to keep them from sliding around when walking (you may not even be aware of this). In addition, shoes that aren't secure will rub and this friction often results in painful blisters, callus or corns.

Problems are particularly common during the warm weather when sandals are often worn. However, closed-in shoes need to be breathable and well-fitting - you should look for around 1cm of room between your toes and the end of the shoe and ensure that your foot isn't squeezed at the sides.

If you have a bunion you may need wider fitting shoes to accommodate the forefoot. If you have hammered toes look for a deep toe-box so the prominent joints don't rub on the top of the shoe. If you suffer discomfort, or have callus and corns on the underside of your feet, it may help to choose a shoe with a cushioned insole.

Your Podiatrist will advise you on what aspect of footwear is most important for your condition. Always try shoes on before you buy, and try buying them later in the day to allow for the slight swelling in your feet that naturally occurs as the day goes on.



### What should I avoid?

Avoid wearing shoes with narrow or high heels (over 4cm) for prolonged periods.

If you're diabetic, make sure you regularly check the insides of your footwear to ensure there are no prominent seams or sharp wear patches that may cause an injury – this is particularly important if you have lost some feeling in your feet - again, your Podiatrist will advise you on this.

#### Important

Inappropriate or poor fitting footwear, particularly slippers, are one of the major causes of falls in the elderly. If you, or a relative, have slippers make sure they are replaced when they get worn, and that they fit well and don't "slop" up and down when you walk.

### Summary

Plantar Fasciitis is caused by a number of factors. There is no single treatment that is successful - this is why it is best treated with a number of options and often involves your active participation in self-management.

It is important to approach the treatment as a rehabilitation programme and full participation will provide the best and longest term results which often includes a change in your footwear choice.

### Self-Management

- Aggressive ice use
- Footwear advice and change
- Foot mobilisation as directed by your specialist
- Pain medication if medically directed
- Stretching as directed by your specialist
- Strengthening as directed by your specialist
- Weight loss; possible involvement in recommended local health programme
- A realistic expectation and set goals

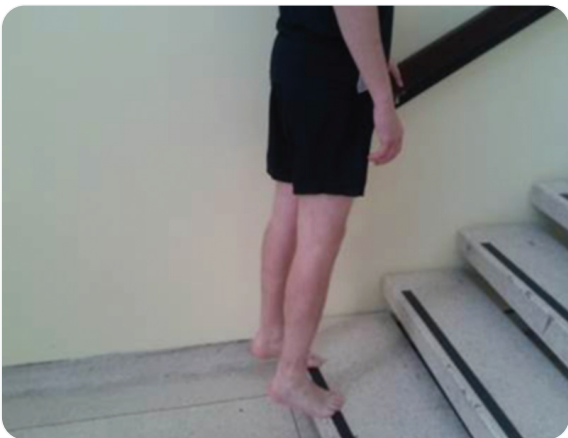
### Exercises for Plantar Fasciitis



Raise up onto toe tip toes on a single leg. Hold on for support.



Raise up onto tip toes on a single leg on the edge of a bottom step. Slowly lower your heel to level below the step.



Raise up onto tip toes on the edge of a bottom step on both legs. Slowly lower your heel to level below the step. Hold on for support.



Place legs shoulder width apart, place one foot half a pace behind the other. Bend leading knee and keep knee of back leg straight as you lean towards the wall.

### Exercises for Plantar Fasciitis



Either sit on the floor or a chair. Wrap a theraband around the bottom of your foot as shown. Push your foot as hard as possible against the band.



Bend one knee (with towel placed under it) and outstretch opposite leg, keeping the knee straight. Lean forwards with arm towards foot keeping back straight (left hand for left foot and vice versa).



Place one foot on a level at knee height as shown. Support yourself if necessary. The weight bearing leg should be pointing towards the direction of the stretch. Keep both knees straight. Feel the stretch in the elevated leg.



Raise onto tip toes on both legs. Hold on for support.





