

# Plantar fasciitis

Do you suffer from heel pain?

MELBOURNE  
 ORTHOTICS

[www.melbourneorthotics.com](http://www.melbourneorthotics.com)



## Do you suffer from complaints such as, or similar to, those listed below?

- Arthritis in the foot and ankle
- Back pain
- Achilles tendonitis
- Previous foot and ankle surgery
- Previous soft tissue injuries of the foot and ankle
- The inability to support yourself without aid
- Unresolved pain in the foot not related to your plantar fasciitis

If so we recommend you seek advice from your healthcare provider, as this treatment plan may need to be modified.

*This booklet is not designed for diagnostic purposes. It is recommended that administration of treatment is preceded by accurate diagnosis and consultation with your healthcare provider.*

## > I have been diagnosed with plantar fasciitis

Most people with heel pain have usually visited their doctor or other health professional and have been diagnosed with plantar fasciitis. If this is the case, you may have been recommended to undergo a treatment program of stretching and use of a ViscoSpot® heel cushion. Undergoing treatment with a confirmed diagnosis lessens the chance of negative effects from administered treatment.

## > I think I have plantar fasciitis (Self diagnosis)

Some people have researched in books, on the internet, or spoken with friends who have suggested that they are suffering from plantar fasciitis. Without a health professional's diagnosis, self diagnosis increases the chance of negative or adverse effects from treatment administration. We understand that the internet provides individuals with a wealth of information and more people than ever are self diagnosing, however we strongly recommend you confirm your diagnosis with a healthcare professional to give you the greatest chance of rehabilitation.

## > Signs and symptoms

- ↗ Pain in the heel region on the sole of the foot, usually just forward and on the inside part of the heel. This region is the insertion of the plantar fascia on the heel bone.
- ↗ Pain at the insertion of the plantar fascia when standing after periods of rest
- ↗ Aggravated after long walks followed by periods of rest
- ↗ Aggravated by over use and walking on hard surfaces
- ↗ Thickening of the plantar fascia shown on an ultrasound of the foot
- ↗ The presence of a bone spur at the insertion of the plantar fascia (not always present)



## Melbourne Orthotics Our history

The clinicians at Melbourne Orthotics have been administering management strategies for plantar fasciitis for over 10 years. Patients are referred by health professionals and subsequently attend our clinics. To date our management strategy has shown that the vast majority of patients' symptoms are resolved within 6-8 weeks of commencing the treatment. This treatment strategy can now be accessed, without consulting an orthotist, via the plantar fasciitis pack - available as a web based order, phone direct or via your healthcare provider.



## Our management strategy

During the consultation process, the orthotist will have a detailed discussion with the patient to educate them about the condition. It has been proven that patient outcomes are better when a patient is well educated and informed about their condition. Patients who have a good understanding of the cause of the condition are more likely to understand the effect of the treatment and this encourages them to continue with the treatment until the condition is resolved.



## What is the treatment?

Plantar fasciitis is due to an underlying tightness in the plantar fascia and the posterior tissues of the leg. Patients are shown a rigorous stretching program to directly target the key tissues associated with the plantar fascia. Patients are also fitted with a ViscoSpot® silicone heel cushion. The heel cushion cradles the heel and provides cushioning and shock absorbency.

## > What if the treatment fails?

Patients who do not respond to the initial treatment strategy are reviewed. This includes checking that the patient is performing their stretches correctly and if they are using the original ViscoSpot® heel cushion and not an inferior product.

If the treatment has been implemented properly and three months have passed where there has been little or no improvement, it may be assumed that the initial approach has not been successful. At this point, other treatment options may be available.

## > Other forms of management may include:

- ↗ custom low density full length foot orthoses
- ↗ heel lithotripsy
- ↗ night stretching splints
- ↗ anti – inflammatory medications

## > Further assessment may reveal:

- ↗ an underlying flat foot deformity
- ↗ undue mechanical stress in the foot secondary to other diagnosis
- ↗ inappropriate footwear
- ↗ inappropriate type and level of activity

## > The ViscoSpot® silicone heel cushion (by Bauerfeind)

The key to cushioning the heel is to provide thick, resilient, shock absorbing material. Soft materials that are not thick enough tend to compress and become hard when weight is applied. The ViscoSpot® has been shown to provide superior cushioning ability and is the benchmark model for heel cushions worldwide.

It utilises a special medical grade silicone that does not "age harden" and incorporates an even softer silicone at the usual point of most tenderness under the heel. The heel cushions come in two sizes, small and large and are worn on both left and right feet, irrespective of which side the plantar fasciitis is affecting.





## Join our research program and help us help others

We are highly committed to providing the most advanced and evidence based treatment options to our patients. By answering the questionnaire provided in the pack, your results will be logged to help form the largest subject group researched on plantar fasciitis management. Our study aims to provide comprehensive data showing the effectiveness of the outlined management as a cost effective and efficient management strategy.

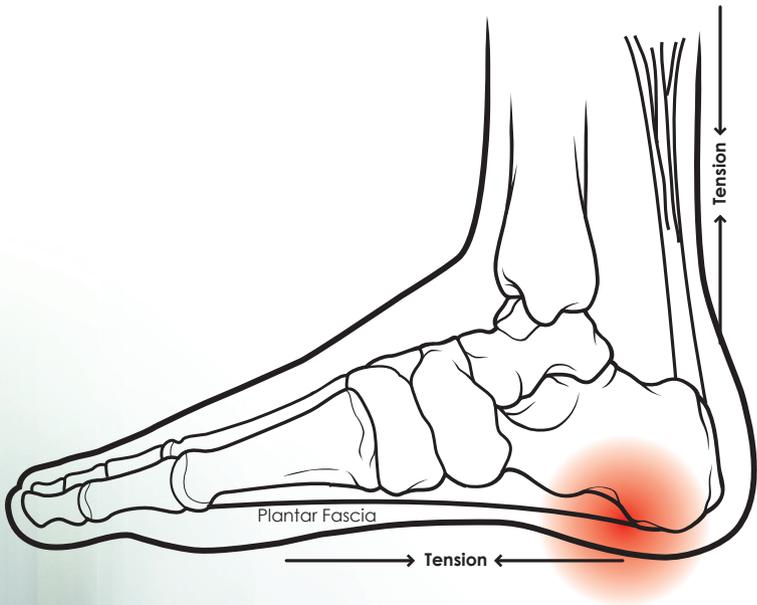
As the subject numbers grow, so to will the evidence that plantar fasciitis can be managed conservatively in the majority of cases.



## > Anatomical Explanation

As the foot bears weight, the arch of the foot applies strain on the band of fibrous plantar tissue called the plantar fascia. The plantar fascia acts like a bowstring and helps support the arch and foot structure in weight bearing.

When the plantar fascia loses its elasticity and becomes tight, the extra stress and strain cause the fibres of the plantar fascia to tear. This results in pain and a localised inflammatory response. Most commonly, this will occur at the plantar fascia insertion on the heel bone but may also occur along the course of the plantar fascia.



## > Pain

Sharp pains associated with plantar fasciitis are usually associated with fibrous tears. Dull aches, throbbing and longer lasting pain is usually associated with the inflammatory response that occurs due to the fibrous tears.

## > The treatment process

The primary objective of management is to stretch out or lengthen the plantar fascia. In doing so, when the foot bears weight, there is less tension on the plantar fascia. As you continue to stretch and lengthen the tight tissues, this will begin to allow the fibres to heal and prevent re-tearing.

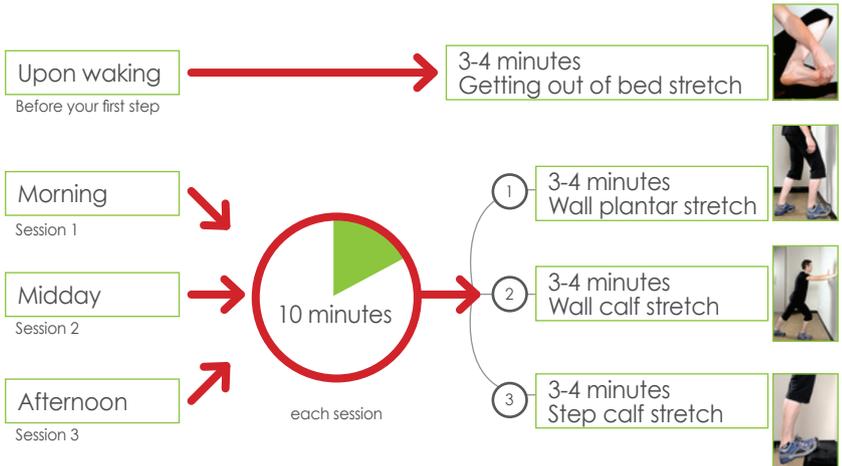
Most patients should begin to see results within 1-2 weeks, although may take longer, particularly in very painful or longstanding cases of plantar fasciitis.

### IMPORTANT

Your stretching program should be administered in a gentle and consistent manner. Aggressive and inconsistent stretching may aggravate the condition and delay your recovery.

## > The stretching program

- Stretching is performed for a minimum of **30 minutes per day**.
- 30 minutes per day is broken down into three sessions of 10 minutes each
- Additionally, the "getting out of bed stretch" should be performed before weight is applied to the foot.



# Getting out of bed stretch



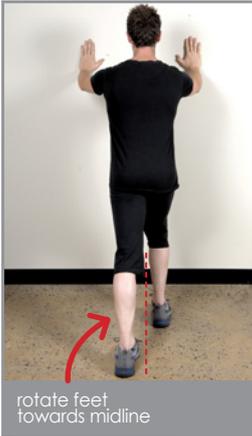
This stretch is best done without shoes. Sit down and cross one foot over the knee of the other leg. Using the hand of the affected side, place fingers across the base of the toes. Pull the toes back towards the shin until you feel a stretch in the arch of the foot. To confirm that you are performing the stretch correctly, use your other hand to feel the tension in the plantar fascia. Hold for 60 seconds and then rest. Repeat sequence 2-3 times on each foot.

# Wall plantar fascia stretch



This stretch is best done with shoes on. Dig your heel into the floor near a wall and lock your toes in against the wall. Slowly bring your knee towards the wall until you feel a stretch. Your knee should not be able to reach the wall. If your knee touches the wall, place your heel closer to the wall and your toes higher on the wall. Then slowly bring your knee towards the wall until you feel a stretch. Hold for 60 seconds and then rest. Repeat sequence 2-3 times on each leg.

# Wall calf stretch



hips in

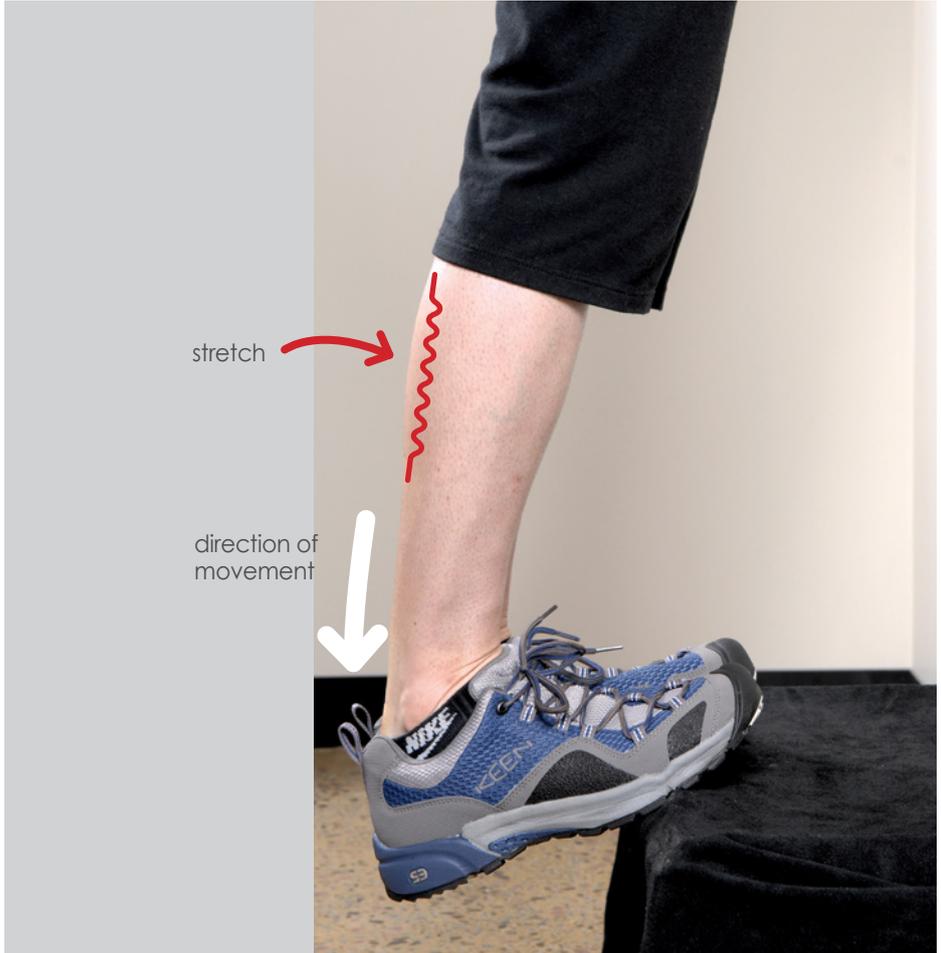
Straight knee

stretch



Assume the position of pushing against a wall with one foot in front of the other. You will be stretching the back leg. Ensure that the heel of your back leg remains on the floor and that the foot is rotated to point the foot in front. Keep the back knee straight and the lower hips towards the base of the wall. It is very important that your heel stays on the ground and that your knee is straight. Hold for 60 seconds and then rest. Repeat sequence 2-3 times on each leg.

# Step calf stretch



Stand on the edge of a step and hold on to something for balance. Keep both knees straight and let both heels drop below the step. Hold for 60 seconds and then rest. Repeat sequence 2-3 times.

# Frequently asked questions

## Can I run?

Running applies a lot of stress to the affected area. It is not recommended that you run while undergoing treatment. If you do choose to run, reduce your activity to a level that does not flare up the heel pain too much. Also, run using the ViscoSpot® and keep to softer surfaces such as grass.

## Should I rest?

Resting usually allows the plantar fascia to tighten and when activity resumes, the tissues have tightened which results in more pain. Keep doing your regular activity, but aim to minimise the stress on the heel. There is no evidence to suggest that rest will resolve your plantar fasciitis faster.

## The pain is getting worse, should I persist?

Some patients experience an increase in pain in the first few days of treatment. This occurs due to the efforts to stretch the plantar fascia. Try to persist for at least a week. If the pain does not decrease, seek advice from your healthcare provider.

## What type of shoes should I wear?

Ensure the ViscoSpot® fits into the shoe. Your footwear should have a low to moderate heel height, soft cushioning heel and lace-up is preferred. Your feet should be comfortable with the ViscoSpot® in place.

## Can I exercise?

If you do not regularly exercise, introducing exercise will not aid in the healing process. If anything, it may add more stress to the tissues and delay resolution.

If you would like to exercise, swimming and cycling are recommended as there is less stress on the plantar fascia during these activities.

## I have tried something similar before, how is this different?

Previous studies have shown that the ViscoSpot® is the superior product combined with 30 minutes of stretching. There are inferior products and stretching variations that do not equate to this specific program. It is difficult to rule out this treatment program until it has been correctly implemented in its entirety.

## Do I still use my custom foot orthoses?

If you wear custom orthoses for other foot conditions, they can not be worn with the ViscoSpot®. It is highly recommended that you seek advice from your healthcare provider before discontinuing using your foot orthoses.

## How long do I use the ViscoSpot® for?

The ViscoSpot® should be used until symptoms are resolved to your personal level of satisfaction. This may be 4-6 months.

## Will I always need to stretch?

No. Long term stretching is usually not required. If you have stopped stretching and your pain begins to return, you may have stopped too early. Begin the stretching program again until complete resolution of your symptoms.

## Can I get plantar fasciitis in the other foot?

Yes. If you have suffered planter fasciitis in only one foot, the other foot may be at risk of developing it. This is why stretches are performed on both left and right sides irrespective of which side the primary complaint is on.

## Can I wear dress shoes on special occasions?

Some occasions may require you to wear dress shoes. This is ok, however try to avoid them wherever possible. Wearing inappropriate footwear is not recommended while undergoing treatment.

## Treatment program based on evidence provided in the following papers:

- DiGiovanni, B. F., Nawoczenski, D. A., Lintal, M. E., Moore, E. A., Murray, J. C., Wilding, G. E. and Baumhauer, J. F. (2003) Tissue-Specific Plantar Fascia-Stretching Exercise Enhances Outcomes in Patients with Chronic Heel Pain. *J Bone Joint Surg* 85(7):1270-1277.
- Pfeffer, G., Bacchetti, P., Deland, J., et al. (1999) Comparison of Custom and Prefabricated Orthoses in the Initial Treatment of Proximal Plantar Fasciitis. *Foot Ankle Int* 20(4):214-221.
- Beischer, A. D., Clarke, A., de Steiger, R. N., Donnan, L., Ibuki, A. and Unglik, R. (2008) The Practical Application of Multimedia Technology to Facilitate the Education and Treatment of Patients With Plantar Fasciitis: A Pilot Study.
- *Foot & Ankle Specialist* 1:30-38.

## ViscoSpot® Size Chart

Size	Shoe size				
	Eur	USA		UK	
		Men	Women	Men	Women
<b>1</b>	32 - 40	5 - 6 <sup>1/2</sup>	3 - 8	3 - 7	2 <sup>1/2</sup> - 7 <sup>1/2</sup>
<b>2</b>	40 - 47	7+	8 <sup>1/2</sup> +	7 - 12	6 <sup>1/2</sup> - 12

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