

A thick heel pad – typically eight to ten millimetre thick silicon (for instance a Viscospot insert) should be used to provide cushioning in the shoe and protect the heel. If this program is used the fascia heal and condition slowly improves typically over a twelve-week period – complete healing will take at least six months.

#### **Other options.**

The heel may not respond to this simple first line approach. Often the use of non-steroidal anti-inflammatory medication will assist in speeding recovery. Alternative treatment techniques are then used in addition to the stretching. These include night splints (which keep the fascia out to length over night), steroid injection, ultrasound lithotripsy treatment or specially made insoles. If such techniques fail casting may be required and very occasionally surgical release.

#### **Surgery is rarely required.**

Surgical treatment involves the excision of the inflamed tissue and usually release of nerves in the heel (which are often effected in severe cases). I do not (or at least extremely rarely) excise the bony “heel spur” often associated with this condition as it is an unusual cause of pain and its’ excision increases the risks of surgery.

Surgery is not used as a first line treatment. Results can be excellent, but there is a significant group of patients in whom it fails to improve the condition, or in whom it may even make the problem worse. Generally I recommend non-operative options first.



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## **Plantar Fasciitis**

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# Plantar Fasciitis

## Heel Pain

### Symptoms

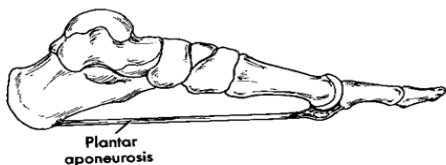
**It causes heel pain particularly when standing after rest or with prolonged standing.**

Plantar Fasciitis is a common condition. It causes heel pain, which may be debilitating. Usually it is worse when standing after a period of rest – for instance when standing or arising from bed after sleep. It is also worse after walking or standing for an extended period particularly on rigid surfaces. If left untreated the condition typically lasts two years or more and then leaves residual discomfort. This time course often can be shortened with appropriate treatment

### Anatomy

**The Plantar Fascia is in the sole of the foot & prevents the arch of the foot spreading.**

From the heel to the toes of a foot there is a longitudinal arch; the plantar fascia. It is a thick cord of fibrous tissue, which bridges this arch. It is like a tie-bar – it prevents the arch from spreading just as a tie bar would in a building. Whenever there is weight put through the foot the plantar fascia is under tension and stretched.



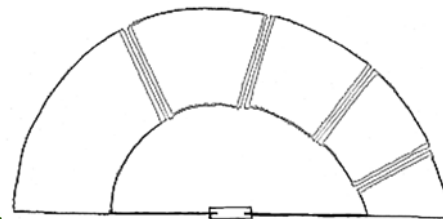
## Pathology

**Fatigue failure of the fascia causes fasciitis – “wear gets ahead of repair”.**

Repeated stretch of the fascia is like bending a wire coat hanger. As the hanger is repeatedly bent, it fatigues – “becomes hot” – it eventually breaks. In the foot a repair mechanism prevents fatigue failure. With age this repair mechanism fails. In a sense, the problem in plantar fasciitis is that “wear gets ahead of repair” and “hot” inflammatory tears develop in the fascia at the heel.

**Tension or repeated compression of fascia causes pain.**

Pain is experienced when the “hot” or inflamed and partially torn fascia is stretched from the resting or shortened state to its’ natural length (as in standing and walking after rest). It is also caused when this inflamed or bruised area suffers recurrent pressure (such as with standing or walking for an extended time). Nerves in close association with the fascia may be involved in the inflammatory process and contribute to the pain.



## Treatment

Treatment should initially be aimed at keeping the fascia at its natural length (rather than having it repeatedly change length and hence suffer fibre disruption) & to cushion it. The first line treatment is to stretch the fascia and keep it stretched allowing it to heal at its “natural” length.

**Stretching is best done at least four times a day. It must be performed every day.**

It can be done on a step or stool or against a wall. Whilst standing with the balls of your feet on the step and with the knees kept straight the heels are then gently dropped as you count to ten, do not bounce.

You then lift the heel and count to five or ten and repeat the cycle. Tightness will be felt both in the sole or heel of the foot and at the back of the leg (as the tendo-achilles is also stretched).

