# PLANTAR FASCIITIS

The plantar fascia runs along the length of the sole of the foot and along with various ligaments and muscles of the foot, functions to assist in maintaining its inner arch (like the string of a bow, with the bones of the foot being the bow itself).

Plantar fasciitis is an inflammation of the origin of the fascia at the calcaneus (heel bone). It is a result of a repetitive strain/tear and repair of the fascia from traction forces that have worn it out. It can be likened to an elastic band that has been left out in the sun and stretched too many times; it looses its stretch and has many micro-tears in it.

Heel spurs have long been associated with heel pain, and were originally thought to be its cause. Heel spurs occur at the origin of the flexor digitorum brevis muscle, which lies just beneath the plantar fascia. However, heel spurs are NOT the cause of heel pain associated with plantar fasciitis and for this reason, it is unnecessary for them to be removed. They probably form because of the local inflammation in the soft tissue, with the body forming bone mistakenly in its attempt to repair the plantar fascia.

## NON-OPERATIVE MANAGEMENT

Initial management of plantar fasciitis involves a multi-modal nonoperative approach. For 90% of people, this is all that is required. This initially includes analgesics, anti-inflammatories, massage, applying ice, and exercises that stretch the fascia and strengthen the muscles. Orthoses including heel pads and night splints may be helpful, along with corticosteroid injections, and other alternative modalities such as ultrasound or shock wave therapy.



#### **OPERATIVE MANAGEMENT**

For those patients who have ongoing pain despite adequate non-operative management, operative intervention is required. Conventionally this procedure has been performed through a large incision on the in-step of the foot. In recent times an endoscopic technique has been developed.

Our recent study of over 100 patients comparing the results of the traditional open procedure with the more modern endoscopic technique demonstrated the endoscopic procedure to be superior. This included improved patient satisfaction, less post-operative pain, quicker recovery times, and a lower complication rate.



The procedure involves making 2 x 10mm incisions; 1 on each side of the foot. This enables a telescopic camera and instrumentation to be inserted to complete the release of the plantar fascia. Patients are then allowed to weight bear as tolerated, and quite often have less pain than prior to the procedure within 1-2 weeks. By 4 weeks, patients are usually walking well, and may commence returning to sport by 6-12 weeks.



## COMPLICATIONS

Complications are rare with this procedure, and in our series occurred in less than 5%. There is always a small risk of infection, nerve injury and blood clots, and anesthetic problems with lower limb surgery and measures are taken to minimize these risks. A small proportion of patients may also experience a persistence of their pre-operative pain despite surgery.

Finally, and uncommonly, discomfort in the outer part of the top of the foot may occur following any technique of plantar fascia release. Very seldom is this enough of a problem to require further surgery and generally improves with the use of insoles (orthotics). Excessive scarring can be minimized with early stretching and massage. Overall, a successful outcome is achieved in approximately 90% of patients

# **RECOVERY TIMES**

Hospital stayDay SurgeryRest & elevation7 daysCrutches/Frame5 - 7 daysTime off work1 week- Seated1 week- Standing3 - 4 weeksFoot swelling4 weeksSports6 - 12 weeks

This brochure is a brief overview of the surgical management of plantar fasciitis and not designed to be all-inclusive. If you have any further questions, please do not hesitate to contact your surgeon.