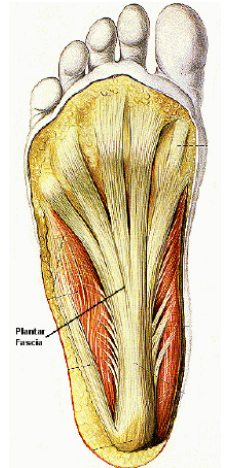


Heel Soreness - Plantar Fasciitis

Plantar Fasciitis is considered a chronic injury rather than an acute injury. It is common in runners performing repetitive plantar flexion and dorsiflexion of the foot. It is also common with sudden weight gain.

The plantar fascia provides support for the medial longitudinal arch of the foot. The plantar fascia is stretched and the arch flattens slightly to absorb the impact each time the heel impacts the ground. The fascia is not very flexible and such repetitive stretching from impact can result in small tears in the fascia.

Plantar fasciitis is traditionally thought to be an inflammatory condition. This is now believed to be incorrect due to the absence of inflammatory cells within the fascia. The cause of pain and dysfunction is now thought to be degeneration of the collagen fibres close to the attachment to the calcaneus (heel bone).



Symptoms

Heel pain during the first steps of the morning is a classic sign of plantar fasciitis. This pain is the result of the foot resting in plantar flexion overnight. This allows the fascia to shorten. When the shortened fascia is stretched pain occurs. Pain is also common at the start of exercise and when resuming activity after rest.

Pain continues due to the chronic inflammation of the torn fascia. A **heel spur** can be a sign of fasciitis, but is typically not a cause. About half of patients with plantar fasciitis have spurs.

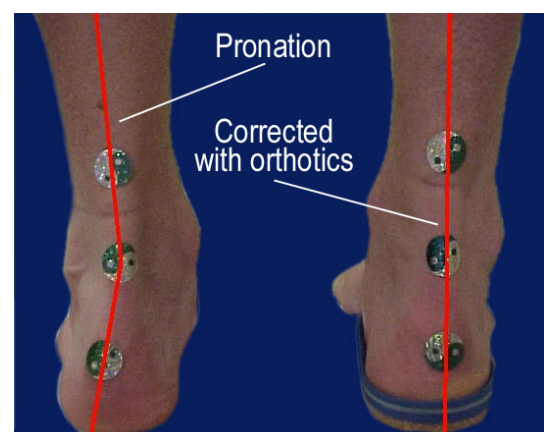


Causes

Typical causes of Plantar Fasciitis include overstretching a tight plantar fascial band or general overuse causing micro-tears to the fascia at its calcaneal (heel bone) origin. Runners who over-pronate (feet rolling in or flattening) are particularly at risk as the biomechanics of the foot pronating causes additional stretching of the plantar fascia.

Predisposing factors include:

- Flat feet
- High arches
- Excessive pronation
- Obesity or sudden weight gain
- Tight Achilles tendons
- Tight calves
- Sudden increase in activity intensity, time or type.
- Wearing shoes with poor cushioning/arch support
- Change in running or walking surface
- Prolonged standing or weight bearing



Treatment

- Avoid irritating activities
- Taping - http://www.athleticadvisor.com/Injuries/LE/Foot&Ankle/arch_tape.htm
- **Massaging** the fascia by rolling foot over a 3-4 inch diameter tube
- **Stretching** - especially calf stretches

Strengthening exercises include scrunching up a hand towel with the toes or pulling a towel weighted with a soup can across the floor. After exercising, applying a cold pack to heel at point of maximal tenderness for 15-20 minutes can relieve pain.

Proper footwear with arch support is also recommended.

Any foot injury that does not respond to treatment in 1-2 weeks may be more serious. Always consult a physician for a thorough evaluation and diagnosis. Wakefield Sports Clinic practitioners can help in a number of ways. Physiotherapists can prescribe stretching and strengthening regimes; podiatrists can correct foot biomechanics with taping techniques or orthoses; and sports doctors can administer cortisone if deemed necessary. Call Wakefield Sports Clinic on 8232 5833, or visit www.wakefieldsports.com.au

