

## Plantar Fasciitis (Heel Pain)

Heel pain can be caused by numerous conditions, but the most common is plantar fasciitis. The plantar fascia is a thick band of tissue that spans the length of the foot on the inner arch. It is composed of 3 parts that support the arch and provide some shock absorption.



Swelling or inflammation of the plantar fascia occurs due to constant pulling on the fascia which causes changes in the elasticity of the fascia over time.

There are many potential reasons for the development of plantar fasciitis but in essence it is due to a slight alteration in walking pattern. Over time, the continuous impact of the heel on the ground when walking (or a sudden impact from e.g. a jump) aggravates the fascia and pain develops.

### Risk factors

- High or low arches.
- Activities that require repetitive pushing off of the foot; e.g. dancing, running.
- Poor footwear.
- Reduced movement in the ankle.

### Symptoms

Pain is normally worse in the morning. The pain reduces with exercise in the early stages and is aggravated by standing. Normally aches after moving around. As the condition worsens, pain is present continuously and is worse when putting weight on the foot.

### Treatment

- Rest, particularly from activities that increase pain.
- Ice to reduce inflammation/ swelling.
- Stretches of calf to regain ankle movement.
- Massage of the fascia.
- Strengthening exercises for the smaller foot muscles.
- Orthotics (Shoe inserts).

Ultrasound and MRI may be used to assist in diagnosis of plantar fasciitis.

If the pain persists or is severe, a corticosteroid (anti-inflammatory) injection can reduce pain, but this is done in conjunction with the other treatment options.

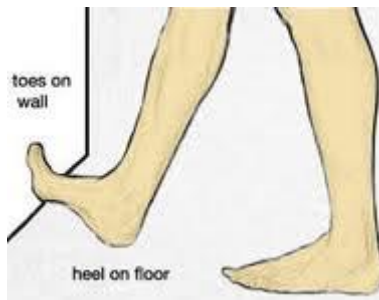
Other common sources of heel pain:

- Heel spurs (bone protrusions).
- Fat pad bruising on the sole of the heel.



## Exercises for Plantar Fasciitis

### 1. Calf stretch



- Place sore foot up against a foot rest or against the wall
- Keeping the heel on the floor and move your body forward over the foot.
- Hold for 30 seconds.

### Massage with a ball



- Use a tennis ball or small firm ball.
- Slowly roll the arch over the ball for a few minutes a time.
- Repeat a few times a day.