

Plantar Fasciitis (Common Cause of Heel Pain)

What is it?

- Plantar Fasciitis is the most common cause of heel pain
- The plantar fascia is a strong fibrous band of tissue connecting the heel bone (calcaneus) to the base of the toes on the bottom of the foot
- The plantar fascia often tightens over time and/or with activity
- With repetitive weightbearing activity painful microscopic tears of the fascia can occur
- Pain occurs due to the body's natural inflammatory response to microtearing (normal healing response)

Pain in the heel is the classic symptom, particularly:

- At the bottom of the heel and along the arch of the foot (Figure 1)
- First thing in the morning after one takes his or her initial steps
- With sudden use after sitting after sitting for a prolonged period
- At the base of the heel and along the mid arch
- Tends to initially improve with use, but worsens after prolonged standing

Risk factors for plantar fasciitis include:

- Recent change in activity level (ex. New workouts)
- Job or lifestyle requiring prolonged standing or walking on hard surfaces
- Tight calf muscle
- Middle aged (natural wear and tear and tightening of fascia over time)
- Overweight (increases pressure on the fascia)
- Runners or pregnancy
- Very flat feet or very high arches
- Poorly supportive shoe wear

Treatment

Plantar fasciitis can be successfully treated without surgery in the VAST MAJORITY of cases (if treatment is performed consistently).

Non-Operative treatment includes:

- *Stretching: Calf & Plantar Fascia (Figures 2 & 3)*
- *Activity modification* including:
 - Stop any aggravating activity (ex. running on hard surfaces)
 - Looking for opportunities to sit more
 - Change to more supportive shoe wear if necessary
- *Weight Loss*
- *Anti-Inflammatory Medication (NSAIDs)*
- *Comfort shoes* with a stiff sole
- *Orthotic* with arch support & soft surface
- *soft-tissue massage / ice massage / foot roller*
- *Plantar fascia night splint* x 2-3 weeks
- Local corticosteroid injection (if part of a coordinated program)
- Due to the high rate of success of non-operative treatment surgical treatment is usually reserved for patients that have failed 6-12 months of *appropriate* and consistent non-operative treatment

Figure 1: Typical Pain location in Plantar Fasciitis



Figure 2: Calf stretching -knee straight

Hold knee straight, foot forward for a total of 3-5 minutes per day (ex. 6-10sets of 30sec) x 6 weeks

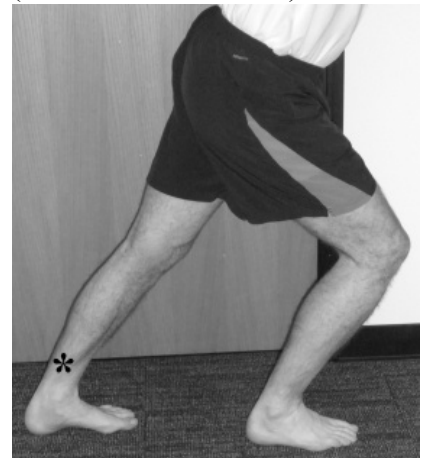


Figure 3: Plantar Fascia Stretch



Pull the toes and foot back towards the shin.

Rub the thumb over the arch of the affected foot. The plantar fascia should feel firm, like a guitar string.

Hold the stretch for 10 seconds and repeat 10 times.