

## Plantar Fasciitis

### WHAT IS THE PLANTAR FASCIA?

The plantar fascia is a ligament that attaches the heel bone to the toes. It also functions to help support the arch of the foot. There are 2 different branches: one along the arch (medial) and one along the outside of the foot (lateral).



### WHY DOES IT HURT?

Excessive stress across the plantar fascia can cause micro-tears in the fibers of the ligament causing pain and stiffness. Often, the symptoms of plantar fasciitis start without any specific traumatic injury. Some factors put individuals at higher risk of developing plantar fasciitis, including obesity, female sex, high arches, tight calf muscles, repetitive impact (running), and new impact activity.

### WHAT ARE THE SYMPTOMS?

The most common complaint is localized pain at the heel and traveling throughout the arch towards the toes. The pain is typically worse in the morning or after a long period of rest. It can also be worsened after long periods of standing or walking.

### DO I NEED SURGERY?

Although many people who have plantar fasciitis have heel spurs seen on x-ray, the spur is not the cause of the pain and does not require removal. Conservative treatment should be initiated with heel pad/lift shoe inserts and a home stretching program. The patient should minimize high impact activities, such as running. Rolling the foot over a frozen water bottle for 20 minutes 3-4 times per day may be helpful as well. For those with morning symptoms, a night splint is recommended. It helps to hold the foot in flexion, to stretch the calf and plantar fascia while sleeping. Anti-inflammatory medications (NSAIDs) can also help reduced inflammation and pain. If these methods haven't improved symptoms, a corticosteroid injection directly into the heel, casting/immobilization, or custom orthotic may be recommended. More than 90% of people will have improvement of their symptoms without surgery, however if the symptoms persist after 12 months of dedicated treatment, surgical release of the plantar fascia may be considered.

### ARE THERE ANY ADVERSE OUTCOMES?

Plantar fasciitis can cause chronic heel pain, which can affect physical activities and walking. Repetitive corticosteroid injections can cause rupture of the plantar fascia. Anti-inflammatory medications (NSAIDs) can cause stomach upset or kidney damage. You should discuss their use with your provider before starting. There are many risks from surgical measures including infection, anesthetic complications, blood clots, plantar fascia rupture, and chronic pain.