

# Plantar Fasciitis

## What is it?



Plantar fascia

Plantar fasciitis involves a localized swelling, irritation, and/or bursitis of the thickened fibrous bands supporting the bottom of one's foot. These tendon like bands run length wise from underneath the heel and fan out into the metatarsal heads or fat pad area of the foot. In most cases, painful symptoms arise at or near the point at which the bands are attached to the heel. When a person stands, these fibrous bands stretch and elongate under the pressure and pull on the heel. Eventually, a heel spur or calcium deposit may actually form in response to this constant pulling. Many of the patients who have this condition seem to have a similar presentation. There is frequently pain upon rising out of bed in the morning. The first few steps are excruciating but reduce quickly in their intensity. Later in the day, the individual with plantar fasciitis will notice pain after sitting and then getting up again. The pain is mostly localized to the heel and arch areas with occasional radiation of discomfort up the back of the leg. Well-padded shoes are helpful but rarely rectify the condition.

## What causes it?

We are unsure as to why certain people get plantar fasciitis while others do not. Trauma, repetitive stress and strain, overweight conditions, hereditary tendencies, and various soft tissue abnormalities can all play a causative role but as of yet, a clear and identifiable culprit has not been found. We can however, discuss why the pain onset seems to follow with rising or weight bearing periods after sitting. In a lying down or sitting position, the

long plantar fascial bands are relaxed and contracted. There is little to no pulling on the heel and therefore, absent pain in most cases. Once we stand, these bands suddenly elongate or stretch, thus putting a strain on the bottom of the heel. Considering the fact that this pulling pressure is of a cumulative nature, sooner or later, symptoms may arise.

### **How is it treated?**

The treatment of a plantar fasciitis condition initially includes stretching exercises, shoe modifications, foot taping and padding, possible injection of an anti-inflammatory medication, physical therapy, and the use of oral medications. Orthotics, which provide support and stability to the foot and ankle, improve weight distribution, and increase lower extremity function are in most cases, is the most important part of therapy. Controlling the arch during weight bearing along with conservative care can make 90% of true plantar fascial pain become asymptomatic. In certain cases where conservative care has failed to relieve the involved discomfort and disability, surgery might then become a consideration.