

## Plantar Fasciitis

Plantar fasciitis is a frequent cause of foot pain, which is typically related to overuse of the plantar fascia. The plantar fascia is located on the bottom of the foot beginning at the heel (calcaneus) and extends to the proximal phalanges or toe bones. The plantar fascia is a thick connective tissue that supports the medial longitudinal arch when walking. Plantar fasciitis can be found in people with both low and high arches. In those with low arches or who have hyperpronated feet (flat feet), the plantar fascia is put on stretch due to collapse of the arch, therefore, placing increased stress on the plantar fascia. In those with high arches it is usually caused by having decreased flexibility in the posterior calf muscles, which can also lead to hyperpronation during ambulation to achieve proper push off. The increased stress on the plantar fascia pulls on the calcaneus at the origin of the fascia and can ultimately cause heel or bone spurs.

Individuals with plantar fasciitis note pain along the bottom of the foot, typically beginning at the heel. Pain is usually worst with the first step out of bed in the morning or after sitting for prolonged periods, which eases up after walking for a short time. Pain can also be significant at night or after standing/weight bearing for an extended period of time.



***Inflammation of the plantar fascia***

Plantar fasciitis can be conservatively treated with physical therapy, mitigating the need for more invasive methods such as injections or surgery. The skilled physical therapists at Lakeshore Physical Therapy will perform an initial evaluation assessing ankle strength, ROM, standing posture, gait patterns, and footwear. Physical therapy may consist of strengthening exercises for the ankle and intrinsic foot muscles to increase support of the plantar fascia. Soft tissue mobilization techniques or massage can also be performed to the plantar fascia to reduce tightness and inflammation.

Patient education may also be necessary to prevent biomechanical abnormalities during gait. Use of shoe inserts, a night splint, or orthotics may be recommended depending on the severity of the diagnosis. Physical therapy is generally extremely effective for management and treatment of plantar fasciitis for full return to daily and athletic activities.