

Plantar Fasciitis

What causes plantar fasciitis?

Plantar fasciitis is one of the most common causes of heel pain. Plantar fasciitis involves pain and inflammation of the plantar fascia, a flat band of tough tissue supporting the arch of the foot that runs from the heel to the base of the toes. It looks sort of like a series of fat rubber bands, but the plantar fascia is made of collagen which is rigid and non-stretchy. Plantar fasciitis is common in middle-aged people, but also occurs in younger people who are on their feet a lot. When the plantar fascia is strained, it becomes weak, swollen, and irritated.

Repeated microscopic tears of the plantar fascia cause pain that is most notable in the morning after getting out of bed. Putting weight on the injured area after periods of rest (such as sleep) will cause stress on the area and a more sudden, aching pain. Once the foot loosens up, the pain generally decreases. The pain may return, however, after long periods of standing, or after another period of rest. Plantar fasciitis may also be called “heel spurs,” but this is not always accurate because bony growths on the heel may or may not be involved.

Traditional recommendations and the patient frustration

- The first line of treatment is usually to recommend cutting back on the activity that is causing the pain.
- Massaging the foot with a tennis ball and application of ice are commonly recommended.
- Inject steroids (see above) into the foot or to prescribe [anti-inflammatory medications](#) in order to relieve the pain associated with the weakened plantar fascia.
- Often taping, orthotics, and night splints are used as well.

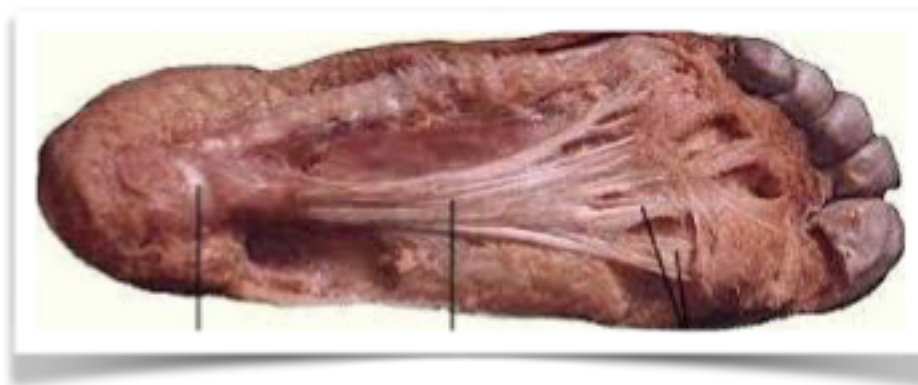
However, in the long run, these treatments do more damage than good. Cortisone shots and anti-inflammatory drugs have been shown to produce short-term pain relief benefit, but both result in long-term loss of function and even more chronic pain by actually inhibiting the healing process of soft tissues and accelerating cartilage degeneration. For example, cortisone will eventually weaken the fascia. If they are not strengthened, a painful heel spur will result.



Prolotherapy in Plantar Fasciitis

Prolotherapy repairs plantar fasciitis by strengthening the fascia and providing support to the arch of the foot. Prolotherapy is a treatment that regenerates and strengthens the weakened structures, such as the weakened plantar fascia ligament. Instead of weakening and boosting degeneration as with cortisone, Prolotherapy injections to the weakened fascia will repair and strengthen the arch. When the fascia is injected with a Prolotherapy solution, the body's own mechanism for healing is stimulated, causing an influx of blood and regenerative cells to the area. The plantar fascia becomes strong again, and the pain resolves.

When you receive Prolotherapy to your foot, there will be some soreness, so looser fitting footwear is encouraged on treatment days. You will however be able to walk out of the office as well as be encouraged to walk and move your feet during the Prolotherapy treatment period. No prolonged downtime is required, rather you can engage in activities such as cycling, running in a pool, and using the elliptical. Your Prolotherapist will provide you with guidelines for activities, and give you exercises to strengthen your feet.



Exercise Prescriptions

If you are a runner, our Prolotherapists, being avid runners as well, will guide the runner through a rehabilitation program that includes getting the runner back to running as quickly as possible. Running on soft surfaces such as soft tracks can accelerate the process, as well as wearing proper running shoes. They will also provide the runner with foot strengthening exercises that will help prevent development of a recurrence in the future.

