



Orthopedic Associates OF PORT HURON

What is Plantar fasciitis?

One of the most common problems of the adult foot is plantar fasciitis (PF). Although there is a type that affects the region of the arch, the vast majority of cases involve the area where the plantar fascia attaches to the calcaneus. The plantar fascia is a broad band of fibrous tissue that connects the toes to the heel. You can see the plantar fascia distinctly if you have a good arch, by standing on the tips of your toes; the arch of your sole that is accentuated in this position represents the mid-portion of the plantar fascia.

Symptoms of PF mainly involve pain in the heel area, especially when taking the first couple steps when one arises from bed in the morning. It can be seen in long-distance runners, but also frequently affects individuals between the ages of 30-55 who do not have a regular exercise schedule. It can be associated with systemic diseases like diabetes or gout, and usually affects one side, but can affect both about 10% of the time.

What Causes Plantar fasciitis?

We have no clear answers currently. Theories involve minor trauma to the area, new shoe use, rapid weight gain, poor biomechanic alignment, prolonged standing, among many others. The pathology involves microscopic tears of the plantar fascia that set up a chronic inflammatory process. Inflammation affects both the periosteum of the heel as well as the fibers of the plantar fascia itself, resulting in edema, fibrosis, and sometimes calcification of the structures.

There is some controversy as to whether heel spurs, or projections of bone off the calcaneus, are related to plantar fasciitis. So far, evidence shows a correlation, but no definite causation: only 50% of patients with plantar fasciitis have a heel spur, whereas 15% of asymptomatic patients have one. Heel spurs occur within the attachment of a muscle of the foot called the flexor digitorum brevis; they do not occur within the plantar fascia. Heel spurs rarely cause symptoms themselves, and in those patients that have them, the pain usually resolves with successful treatment of the plantar fasciitis. Therefore, many consider heel spurs as incidental findings on x-rays and therefore their presence alone usually does not mean that treatment is indicated.

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Treatment is divided into conservative and surgical categories. Nearly all patients with PF respond well to a program of anti-inflammatory agents, stretching exercises, and orthotics. Steroid injections are also used at 3-4 month intervals for those not improving with this program.

Conservative treatment may be helpful by speeding the healing process. The rate of success of conservative treatment approaches 95%. This conservative approach consists of such treatment interventions as stretching exercises, anti-inflammatory modalities, orthotics and night splints.

The stretching exercises are meant to increase the length of the plantar fascia, therefore, increasing its flexibility. This enhanced flexibility helps to prevent undue stress with everyday activities. Achilles tendon and calf stretching are also integral to the stretching regime for plantar fasciitis.

In addition to a comprehensive stretching program, physical therapy modalities such as phonophoresis, iontophoresis, soft tissue mobilization and cryotherapy can help to decrease the inflammation and to restore more normal tissue function.

Normalizing the planes of movement at the ankle with orthotics, helps to reduce the stress on the plantar fascia and its attachments. Also, night splints, which maintain a neutral foot position while sleeping have proven to be successful in reducing the amount of tissue trauma caused by those first few steps in the morning.

A comprehensive evaluation by your doctor is necessary to determine the source of your symptoms as well as to create a treatment plan that is best for you.

We Keep You on the Move!

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