

PLANTER FASCIITIS

National Athletic Trainers Association

WHAT IS PLANTER FASCIITIS?

Planter Fasciitis is pain on the bottom of the heel that is usually felt on the first step out of bed in the morning or when walking again after resting from a walking or running activity. However, planter fasciitis pain can, if it persists, soon be felt any time you are walking, running, or jumping.

Although the pain is mostly felt at the bottom of the heel, it can radiate down the entire bottom of the foot towards the toes.

THE ANATOMY OF PLANTER FASCIA

The planter fascia consists of dense bands of tissue deep below the skin that extend out in a fan like fashion from the heel bone to your toes. If you pull your toes and foot towards you head, you will feel the tissue tighten.

WHAT CAUSES PLANTER FASCIITIS?

Planter fasciitis is thought to be caused by repetitive stretching of the tight bands of the planter fascia which results in microtears in these bands as they arise from the heel. Because these tears don't occur from a single traumatic event, they do not result in an immediate healing reaction, but instead result in chronic irritation and inflammation which increases with activity. A sudden weight gain may also increase stress to an otherwise normal planter fascia.

Pulling on the tight planter fascia on the heel bone during activity can result in the formation of a bone spur off the tip of the heel bone at the origin of the planter fascia tissue. This bone spur itself is not the cause of pain, but rather the result of chronic irritation to the bone caused by the stretching of the tight tissue.

TREATMENT TIPS

Surgery is rarely necessary to treat planter fasciitis. To decrease your pain and symptoms, you may want to:

- Tape the heel and arch. Custom shoe inserts may be needed to support the arch and the heel.
- Increase the flexibility of the planter fascia and calf muscles by doing stretching exercises. Tight calf muscles increase the stress on the planter fascia and predispose you to planter fasciitis.
- Stretch the calf muscle as well as the planter fascia by standing on a step with only the front of the foot supported on the step and the heel free. Hold onto the rail for support and then slowly lower your heels toward the lower step. You should feel this in the calf muscle and in the planter fascia. Hold the stretch for a count of 10, and then slowly return the heel to the level of the rest of the foot. Repeat slowly ten times.
- Massage the planter fascia by rolling your foot over a round tube-like object with a diameter of 3 to 4 inches. A rolling pin works nicely for this.

- Strengthen the muscles of the foot and ankle that support the arch. One way to do this is to scrunch up a hand towel with your toes or use your toes to pull a towel weighted with a food can across the floor.
- Warm up well before stretching. Cold tissues cannot stretch as effectively. After stretching, ice your heel for 20 -30 minutes at the point of maximum tenderness to decrease any inflammation that may result from too rigorous of a workout.
- Take oral anti-inflammatory medications such as aspirin or ibuprofen to decrease inflammation caused by irritation of the planter fascia and decrease your symptoms so you can stretch and increase your flexibility. In some cases, your physician may recommend a prescription anti-inflammatory for you.
- Try a night splint. These devices, prescribed by your physician, keep the foot flexed at 90 degrees instead of the typical relaxed foot position of toes pointed down that occurs during sleep. Wearing a splint may lessen the pain of the first step in the morning.
- Massage the heel with a sports cream which may lessen the symptoms. A variety of therapeutic treatments can also be administered by a physical therapist.

HOW TO PREVENT PLANTAR FASCIITIS

- Don't try running to lose weight after a rapid weight gain. Walk first, and stretch the muscles of the foot and calf to help condition your body before running.
- Wear good, supportive shoes for your athletic activities.
- Always warm up well and stretch before participating in sports.
- Keep the muscles of your feet and ankles strong to support your arch.
- Rest from activities that cause pain to the heel. Ice and support the heel. Begin the appropriate exercises as soon as possible.
- See your physician if pain persists despite these measures.

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