

Preventing and Managing Plantar Fasciitis

Plantar fasciitis is a painful condition involving tissue (fascia) that connects the toes to the heel on the sole of the foot.

Risk Factors

The cause of plantar fasciitis is often not clearly apparent. Repetitive stretching and contraction of calf muscles and plantar fascia may contribute to the development of heel pain. Other potential risk factors for this condition include:

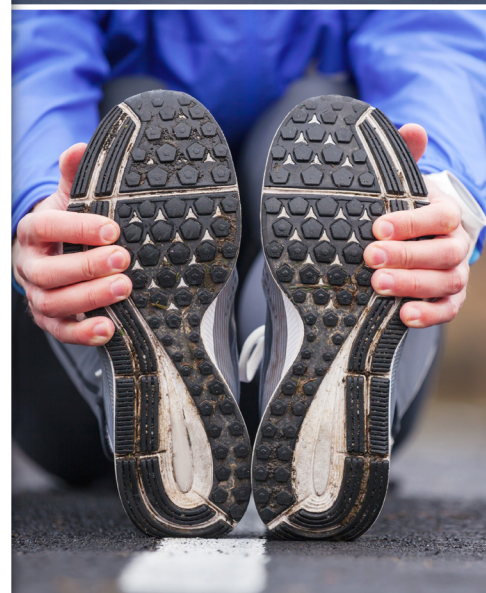
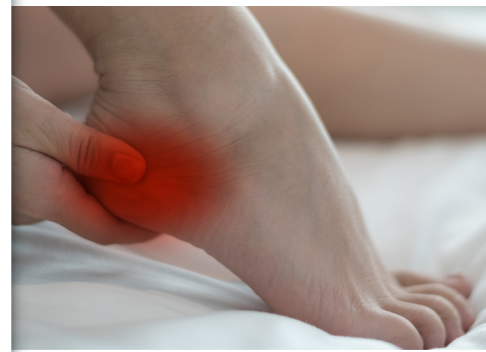
- Age, most commonly among those 40 to 60 years old
- Activities that put stress on the feet (running, dancing, jumping, prolonged standing)
- Sedentary lifestyle
- Being overweight or obese
- Wearing high heels or footwear without support
- Tight Achilles tendons (heel cords)
- Abnormal gait or foot position, high arch, flat feet
- Having certain types of arthritis

Symptoms

The primary symptom associated with plantar fasciitis is heel pain when bearing weight. The pain may be especially acute after waking up and taking the first steps of the day, and following rigorous exercise. Some people experience a feeling of burning or sticking along the side of the foot. Attempts to relieve discomfort by changing one's natural way of walking may lead to other problems. Knee, hip or back discomfort can develop when weight-bearing is avoided..

Prevention

There are a number of ways to reduce the chance of developing plantar fasciitis. They include wearing shoes and slippers with sufficient support, managing body weight and doing low-impact exercises such as swimming and cycling instead of high-impact activities such as those that involve running or jumping.



Gently stretching legs, ankles and feet two to three times a day helps improve flexibility and reduce tightness. For example:

1. Curl and relax your toes.
2. Make circles with your feet and ankles.
3. While seated, grasp your toes and gently pull them toward you until you feel a stretch in the arch of your foot.
4. Stand with one leg forward and one back with the heel down until you feel a stretch in your calf. Switch legs and repeat. Hold the stretch for at least 30 seconds and do not bounce.

Diagnosis and Treatment

Tenderness when applying pressure during flexion where plantar fascia enter the heel is used to reproduce discomfort and rule out other complaints such as bursitis, gout or nerve pain caused by a disk herniation in the low back. An X-ray may be taken in some cases.

Treatment may include the use of in-shoe heel and arch cushioning, calf-stretching exercises and night splints worn during sleep that encourage calf muscle elongation by keeping feet at a 90-degree angle rather than extended. Prefabricated or custom-made insoles or foot orthotics may be recommended. Other treatments may include activity modifications, over-the-counter nonsteroidal anti-inflammatory medications (NSAIDs), applying ice, and as needed, losing weight.

For recalcitrant cases, physical therapy, oral corticosteroids and cast immobilization may be recommended. According to medical findings, repeated corticosteroid injections are less likely to be used because they may damage the fascia or the fat pad under the heel. Extracorporeal pulse activation therapy (EPAT), a technique in which low-frequency pulse waves are delivered locally using a handheld applicator, is a newly developed, non-invasive technique that may be offered as an option.

Did You Know?

Plantar fasciitis may also be referred to as plantar fasciosis. The term plantar refers to the soul of the foot. Fasciitis refers to inflammation of the fascia. Plantar fasciosis is a disorder in which the fascia is repeatedly stressed rather than inflamed.

Other terms used to describe plantar fasciosis include calcaneal enthesopathy and calcaneal spur syndrome (heel spur). A heel spur is a pointed growth of extra bone on the heel. It usually develops over time as a result of increased pull on the fascia and foot dysfunction. A heel spur may or may not be present with plantar fasciitis or plantar fasciosis.

PLANTAR FASCIITIS

