

Plantar Fasciitis

If your first few steps out of bed in the morning cause severe pain in the heel of your foot, you may have plantar fasciitis (fashee-EYE-tiss), an overuse injury that affects the sole of the foot. A diagnosis of plantar fasciitis means you have inflamed the tough, fibrous band of tissue (fascia) connecting your heel bone to the base of your toes.

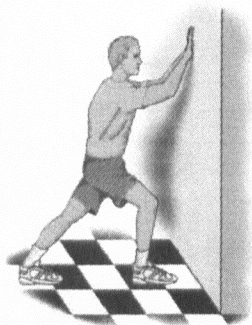
You're more likely to develop the condition if you're female, overweight or have a job that requires a lot of walking or standing on hard surfaces. You're also at risk if you walk or run for exercise, especially if you have tight calf muscles that limit how far you can flex your ankles. People with very flat feet or very high arches also are more prone to plantar fasciitis.

The condition typically starts gradually with mild pain at the heel bone often referred to as a stone bruise. You're more likely to feel it after (not during) exercise. The pain classically occurs right after getting up in the morning and after a period of sitting.

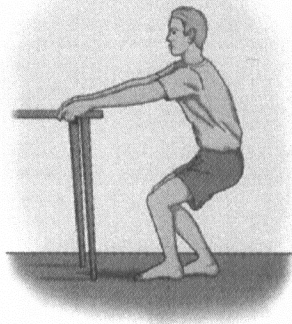
If you don't treat plantar fasciitis, it may become a chronic condition. You may not be able to keep up your level of activity, and you may develop symptoms of foot, knee, hip and back problems because plantar fasciitis can change the way you walk.

Treatment

Stretching is the best treatment for plantar fasciitis. It may help to try to keep weight off your foot until the initial inflammation goes away. You can also apply ice to the sore area for 20 minutes three or four times a day to relieve your symptoms. Often a doctor will prescribe a nonsteroidal anti-inflammatory medication such as ibuprofen or naproxen. Home exercises to stretch your Achilles tendon and plantar fascia are the mainstay of treatment and reduce the chance of recurrence.



In one exercise, you lean forward against a wall with one knee straight and heel on the ground. Your other knee is bent. Your heel cord and foot arch stretch as you lean. Hold for 10 seconds, relax and straighten up. Repeat 20 times for each sore heel. It is important to keep the knee fully extended on the side being stretched.



In another exercise, you lean forward onto a countertop, spreading your feet apart with one foot in front of the other. Flex your knees and squat down, keeping your heels on the ground as long as possible. Your heel cords and foot arches will stretch as the heels come up in the stretch. Hold for 10 seconds, relax and straighten up. Repeat 20 times.

About 90 percent of people with plantar fasciitis improve significantly after two months of initial treatment. You may be advised to use shoes with shock-absorbing soles or fitted with an off-the-shelf shoe insert device like a rubber heel pad. Your foot may be taped into a specific position.

If your plantar fasciitis continues after a few months of conservative treatment, your doctor may inject your heel with steroidal anti-inflammatory medication.

If you still have symptoms, you may need to wear a walking cast for two to three weeks or a positional splint when you sleep. In a few cases, surgery is needed for

chronically contracted tissue.

Plantar Fascia-Specific Stretching Program

1. Cross your affected leg over your other leg.
2. Using the hand on your affected side, take hold of your affected foot and pull your toes back towards shin. This creates tension/stretch in the arch of the foot/plantar fascia.
3. Check for the appropriate stretch position by gently rubbing the thumb of your unaffected side left to right over the arch of the affected foot. The plantar fascia should feel firm, like a guitar string.
4. Hold the stretch for a count of 10. A set is 10 repetitions.

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Treating Plantar Fasciitis
Before considering surgery, try other options first

Plantar fasciitis (fashee-EYE-tiss) is pain in the heel or arch of the foot. It is caused by the inflammation of the plantar fascia—the band of tissue that runs from the heel bone to the ball of the foot. Plantar fasciitis is a common condition. It is also called "runner's heel." The most common symptom is the heel pain you feel first thing in the morning or after sitting for a long time. The pain usually goes away when you walk around.

This condition takes time to heal. It usually goes away on its own in three to six months. But some doctors recommend surgery. Surgery can lead to complications, and it doesn't always work. There are some things you should know before you consider surgery.

Plantar fasciitis is usually easy to diagnose. Your health care provider can usually diagnose it with a physical exam of the foot. You don't need X-rays unless you have symptoms for longer than six months.

Non-surgical treatments often work best.

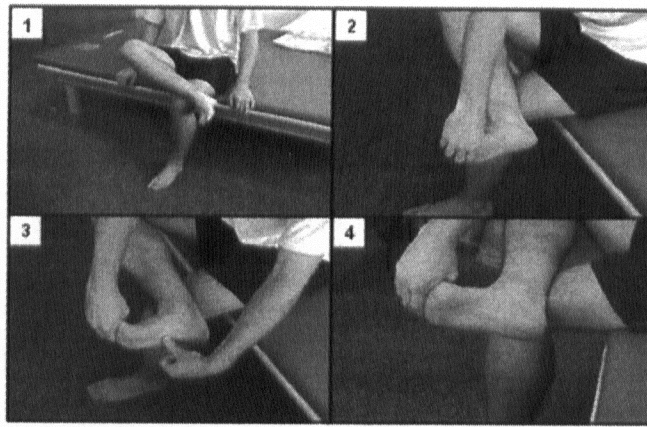
- Find a good exercise routine and continue to strengthen the foot. Your doctor will help.
- After surgery, wearing shoes with good arch support and foot cushioning.

Other doctors might also suggest:

- Anti-inflammatory drugs, such as ibuprofen or naproxen.
- Wearing a splint at night. This keeps your plantar fascia from getting tighter at night.
- Using the counter-arch supports with a heel cushion.

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Perform at least three sets of stretches per day. You cannot perform the stretch too often. The most important times to stretch are before taking the first step in the morning and before standing after a period of prolonged sitting.

Anti-inflammatory Medication

Anti-inflammatory medications can help decrease the inflammation in the arch and heel of your foot. These medications include Advil®, Motrin®, Ibuprofen, and Aleve®.

1. Use the medication as directed on the package. If you tolerate it well, take it daily for two weeks then discontinue for one week. If symptoms worsen or return, resume for two weeks, then stop.
2. You should eat when taking these medications, as they can be hard on your stomach.

Arch Support

1. Over the counter inserts (Spenco® Cross Trainers®) provide added arch support and soft cushion.
2. Based on the individual needs of your foot, you may require custom inserts.

Additional Stretch: Achilles Tendon Stretch

1. Place a shoe insert under your affected foot.
2. Place your affected leg behind your unaffected leg with the toes of your back foot pointed towards the heel of your other foot.
3. Lean into the wall.
4. Bend your front knee while keeping your back leg straight with your heel firmly on the ground.
5. Hold the stretch for a count of 10. A set is 10 repetitions.
6. Perform the stretch at least three times a day.



Photo courtesy of the Department of Orthopaedic Surgery, Strong Foot and Ankle Institute, University of Rochester Medical School

Additional Resources

[Plantar Fascia Injection](#)

[Plantar Fascia Release](#)

This material was codeveloped by the American Academy of Orthopaedic Surgeons.

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