CONDITION

Plantar fasciitis

Plantar fasciitis causes pain near the heel when the strong tissue band beneath the foot becomes irritated or damaged.

WHAT IT IS
Painful degeneration of tissue supporting the foot arch

BODY SYSTEM
Muscles, bones, and joints

MAIN SYMPTOMS
Heel pain, first-step pain, tenderness, pain after rest

WHAT CAUSES IT
Repeated strain and gradual tissue degeneration

HOW IT IS DIAGNOSED
History and foot examination; imaging if unclear

MAIN TREATMENT
Stretching, activity changes, supportive footwear, and pain relief

CAN IT BE CURED?
Yes, though symptoms can return

IS IT AN EMERGENCY?
Sometimes, after injury with inability to bear weight

LONG-TERM OUTLOOK
Most improve over months; recurrence is possible

Overview

Plantar fasciitis is a common cause of pain on the bottom of the heel. It affects the plantar fascia, a strong band of tissue running from the heel bone to the toes. This tissue supports the arch and helps absorb force when you stand, walk, or run.

Despite its name, plantar fasciitis is not always mainly an inflammatory problem. In many cases, repeated strain causes small areas of damage and gradual degeneration where the fascia joins the heel bone.

The pain is often worst with your first steps after getting out of bed. It may also return when you stand after sitting or resting. Some people feel better once they start moving, only for the pain to increase again after prolonged walking or standing.

Plantar fasciitis can limit work, exercise, and everyday movement, but it does not usually cause permanent disability. Most people improve without surgery, although recovery may take several months.

"Foot pain" is sometimes used as another name, but this is a broad term. Pain in other parts of the foot, or heel pain with unusual symptoms, may have a different cause.

Symptoms

The main symptom is pain beneath the heel, usually slightly toward the inside of the foot. It may feel sharp, stabbing, aching, or like a deep bruise.

Typical features include:

The pain may ease after a few minutes of movement as the tissue warms up. It can then return later in the day or after exercise. Pain often develops gradually, although it can sometimes begin after a sudden increase in activity.

Plantar fasciitis usually affects one foot, but both feet can be involved.

Numbness, tingling, burning pain, marked swelling, or pain spreading from the back are not typical. These symptoms may suggest nerve irritation or another condition.

- Pain with the first steps after waking
- Pain when standing after sitting for a while
- Tenderness where the arch meets the heel
- Pain after prolonged standing, walking, or running

Causes and risk factors

The plantar fascia carries force every time your foot contacts the ground. Plantar fasciitis can develop when the strain placed on this tissue is greater than it can comfortably recover from.

There is not always one clear cause. Factors that can increase strain include:

Runners can develop plantar fasciitis, but it is not limited to athletes. It can affect anyone whose daily activity places repeated stress on the plantar fascia.

A heel spur may appear on an X-ray, but it is not usually the cause of the pain. Heel spurs can exist without symptoms, and many people with plantar fasciitis do not have one.

- A sudden increase in walking, running, or other weight-bearing exercise

- Work that involves prolonged standing, especially on hard surfaces
- Tight calf muscles or limited upward movement at the ankle
- Higher body weight, which increases load through the feet
- Shoes that are worn out or do not suit the activity
- Very high or low foot arches
- Changes in training surface, speed, distance, or hills

Diagnosis

Plantar fasciitis is usually diagnosed from your symptoms and a foot examination. There is no single blood test or scan required to confirm a typical case.

A clinician may ask when the pain is worst, how it began, and whether your work or activity level has changed. They may press around the heel, examine your arch, and check movement in the ankle and toes. Pain near the inner underside of the heel, especially when the toes are gently lifted, supports the diagnosis.

Scans are not routinely needed. An X-ray may be used if there has been an injury or if another bone problem is possible. It can show a heel spur, but that finding does not prove the spur is causing pain.

Ultrasound or MRI can show changes in the plantar fascia. These tests may be considered when symptoms are unusual, severe, or not improving as expected.

Other possible causes of heel pain include a stress fracture, irritation of the heel's natural fat pad, a trapped nerve, Achilles tendon problems, and some forms of inflammatory arthritis. The pattern of symptoms and examination findings helps distinguish these conditions.

Treatment and management

Treatment aims to reduce strain on the fascia while maintaining safe movement. Improvement is usually gradual rather than immediate.

Temporarily reduce activities that clearly worsen the pain, such as running, jumping, or long periods of standing. This does not always mean complete rest. Lower-impact activities, such as cycling or swimming, may be more comfortable while the heel settles.

Stretching is an important part of treatment. Plantar fascia stretches target the arch, while calf stretches improve ankle movement and may reduce tension through the heel. A

physiotherapist or other clinician can show you how to perform these safely.

Supportive, well-fitting shoes can reduce discomfort. Shoes with cushioning and a stable sole are often more comfortable than thin, hard, or worn footwear. Heel cups or shoe inserts may help some people. Custom-made inserts are not necessary for everyone.

Rolling the arch gently over a cold bottle or massage ball may provide short-term relief. Avoid pressing so firmly that pain is worse afterward.

Pain-relieving medicine may help for a limited period. Anti-inflammatory medicines are not suitable for everyone, including some people with stomach, kidney, heart, bleeding, or pregnancy-related concerns. A pharmacist or clinician can help you check whether a medicine is appropriate.

If initial care is not enough, treatment may include supervised physiotherapy, taping, or a night splint that keeps the foot gently stretched during sleep. Shockwave therapy, which sends sound waves into the painful area, is sometimes considered for persistent symptoms.

A corticosteroid injection may provide temporary pain relief, but it does not correct the underlying strain. Injections can have complications, including thinning of the heel's protective fat pad or tearing of the plantar fascia. The potential benefits and risks need careful discussion.

Surgery to release part of the plantar fascia is rarely needed. It is generally considered only when substantial pain continues despite a prolonged course of non-surgical treatment.

Complications

Plantar fasciitis itself is not dangerous, but ongoing pain can affect walking, sleep, work, and exercise. You may begin to change the way you walk to avoid pressure on the heel. Over time, this can contribute to discomfort elsewhere in the foot, ankle, knee, hip, or back.

A sudden tear of the plantar fascia is uncommon. It may cause an abrupt snapping sensation, bruising, and difficulty putting weight on the foot. The risk can be increased by repeated corticosteroid injections.

Prolonged inactivity can also reduce strength and fitness. This is why treatment usually focuses on adjusting activity rather than avoiding movement completely.

Prevention

Plantar fasciitis cannot always be prevented. Foot shape, work demands, tissue tolerance, and other factors are not always within your control.

You may be able to lower the chance of symptoms starting or returning by increasing new activities gradually. Sudden changes in running distance, walking time, hills, or work duties can place more strain on the fascia than it is ready to handle.

Wear footwear that fits well and is suitable for the activity. Replace shoes when their cushioning or structure is clearly worn. Regular calf and plantar fascia stretching may be useful if you have limited ankle movement or have had plantar fasciitis before.

If symptoms begin, responding early by adjusting painful activity may prevent a mild problem from becoming more limiting. There is no reliable evidence that a single shoe type, insert, or exercise can prevent every case.

Living with it and what to expect

Plantar fasciitis often improves, but it can be slow to settle. Recovery commonly takes weeks to months because the plantar fascia continues to carry weight during everyday life. Some cases last longer.

Symptoms may fluctuate. You may have several better days followed by a flare after extra walking, prolonged standing, or a change in exercise. A short flare does not necessarily mean that new damage has occurred.

As pain improves, activity can usually be increased gradually. A sudden return to the previous level of running, sport, or standing may bring symptoms back. Comfortable daily walking is often restored before more demanding activities become manageable.

Continuing calf and foot stretches, using suitable footwear, and paying attention to changes in activity may reduce recurrence. However, symptoms can return even after a full recovery.

Persistent plantar fasciitis can be frustrating, but it does not usually keep worsening indefinitely or damage the whole foot. If progress has stopped, reassessment can check the diagnosis and identify other treatment options.

When to get medical help

Arrange a routine appointment if the pain is affecting normal activities, keeps returning, or has not begun to improve after several weeks of self-care. Earlier assessment is sensible if you have diabetes, reduced feeling in your feet, poor circulation, or a condition affecting your immune system.

You should also seek medical advice if you have numbness, tingling, pain at rest or during the

night, pain in both heels with joint stiffness elsewhere, or symptoms that do not match the usual first-step pattern.

Seek urgent medical care if:

These are not typical signs of uncomplicated plantar fasciitis and may indicate an injury, infection, or circulation problem.

- You cannot put weight on the foot after an injury
- The foot or ankle is badly swollen, bruised, or misshapen
- The heel becomes red, hot, and swollen, especially with fever
- You felt a sudden snap and developed bruising or severe pain
- The foot becomes pale, blue, cold, or suddenly numb

Common questions

Will plantar fasciitis go away on its own?

It often improves with time, but reducing aggravating activity, stretching, and wearing supportive footwear may help recovery. Symptoms that continue or limit your usual activities should be assessed.

Is plantar fasciitis the same as a heel spur?

No. Plantar fasciitis affects the soft tissue beneath the foot. A heel spur is a bony growth visible on an X-ray. Spurs are common in people without heel pain and usually do not need to be removed.

Should I keep walking with plantar fasciitis?

Gentle walking is often reasonable if it does not cause a marked increase in pain. Shorten the distance or take breaks if symptoms build. Avoid pushing through severe pain or limping for long periods.

What shoes are best for plantar fasciitis?

There is no single best shoe. Look for a comfortable fit, adequate cushioning, and a stable sole. A shoe should not squeeze the toes or allow the heel to slide. The right choice also depends on your activity and foot shape.

Can massage cure plantar fasciitis?

Massage may temporarily ease tightness or pain, but it is unlikely to be a complete treatment by itself. It is usually combined with activity changes, stretching, and supportive footwear.

Is plantar fasciitis a type of arthritis?

No. It affects the plantar fascia rather than the joint surface. However, some inflammatory forms of arthritis can also cause heel pain, especially when both heels or several joints are involved.

Sources

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