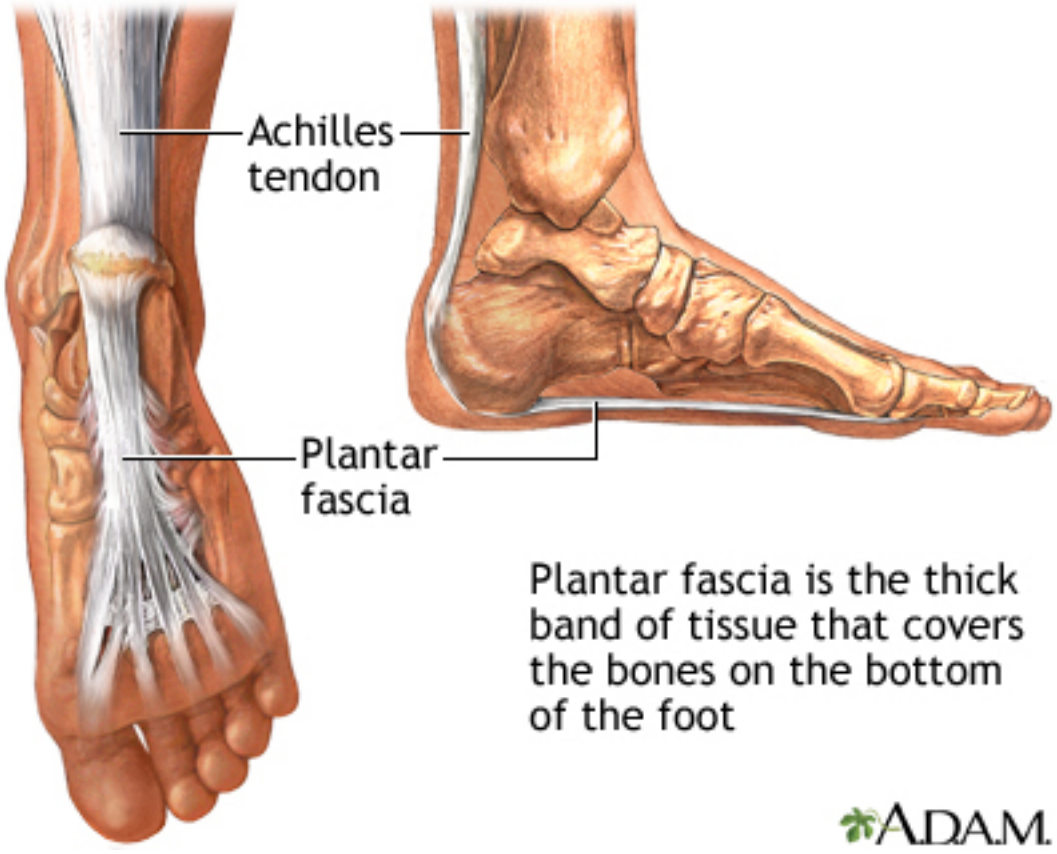
Plantar Fasciitis:

Causes, Symptoms, and Treatments

Evexia Foot Care
Expert Care for Every Step

Overview

Plantar fasciitis is the most common cause of pain on the bottom of the heel. It occurs when the **plantar fascia**—a thick, web-like band of tissue that runs across the bottom of your foot, connecting your heel bone to your toes—becomes irritated, inflamed, or strained.



Causes and Risk Factors

The plantar fascia acts like a shock-absorbing bowstring that supports the arch of your foot. When tension and stress on this bowstring become too great, small micro-tears can develop in the fascia. Repetitive stretching and tearing cause irritation and inflammation.

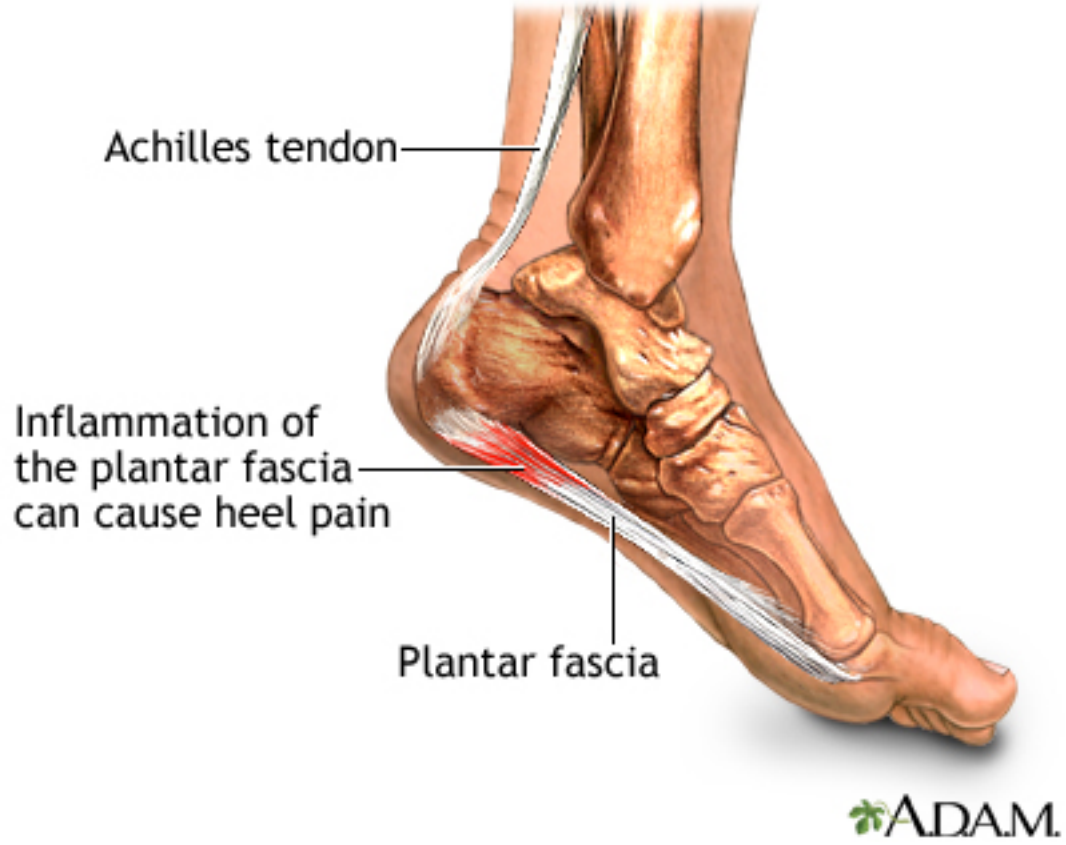
Risk Factor	How It Contributes
Foot Mechanics	Flat feet, unusually high arches, or an abnormal walking pattern (gait) can affect weight distribution and place added stress on the plantar fascia.
Tight Muscles	Tight calf muscles or a stiff Achilles tendon limit ankle flexibility, increasing tension on the heel bone and fascia.
Activity Levels	Activities that place heavy stress on the heel—such as long-distance running, jumping, ballet, or aerobic dance—especially after a sudden
Footwear	Shoes with thin soles, poor arch support, or worn-out cushioning, as well as frequently walking barefoot on hard surfaces.
Occupation	Jobs that require prolonged standing or walking on hard surfaces (e.g., factory workers, teachers, retail staff).
Age	Most common in adults between the ages of **40 and 60**.
Weight	Excess body weight increases the daily mechanical load on the plantar fascia.

Common Symptoms

- **Post-static dyskinesia:** Sharp, stabbing pain at the bottom of the heel with the very first steps in the morning or after sitting for a long period.
- **Activity-related pain:** Pain that typically eases after a few minutes of walking as the tissue warms up, though it often returns after prolonged standing or after—rather than during—exercise.
- **Localized tenderness:** Pain when pressing on the inside bottom edge of the heel or along the arch of the foot.

Treatment Options

Most people recover from plantar fasciitis within several months using conservative, non-surgical treatments.



1. At-Home Care & Conservative Management

- **Rest and Activity Modification:** Temporarily reduce or pause high-impact activities (like running) and switch to low-impact exercises such as swimming or cycling.
- **Ice Therapy:** Apply a cloth-covered ice pack to the painful area for **15–20 minutes**, 3 to 4 times a day. Alternatively, roll your arch over a frozen water bottle for 5–10 minutes to combine cold therapy with gentle massage.
- **Targeted Stretching:** Perform daily stretches for your calves, Achilles tendon, and the plantar fascia itself (such as pulling your toes gently back toward your shin while seated and holding for 30 seconds).
- **Supportive Footwear:** Wear shoes with good arch support, a slightly raised heel, and shock-absorbing soles. Avoid walking barefoot on hard floors, even indoors.
- **Over-the-Counter Pain Relief:** Nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen or naproxen can help reduce pain and inflammation when used as directed.

2. Medical & Professional Therapies

If symptoms do not improve after 4 to 6 weeks of consistent home care, a doctor, podiatrist, or physical therapist may recommend:

- **Physical Therapy:** Guided exercises to strengthen lower leg and intrinsic foot muscles, alongside manual therapy or athletic taping to support the arch.
- **Orthotics:** Over-the-counter or custom-fitted arch supports (insoles) to distribute pressure more evenly across the foot.
- **Night Splints:** Braces worn while sleeping that hold the ankle at a 90-degree angle, keeping the calf and plantar fascia gently stretched overnight to prevent morning pain.
- **Extracorporeal Shock Wave Therapy (ESWT):** High-energy sound waves directed at the heel to stimulate blood flow and tissue healing in chronic cases.
- **Injections:** Targeted corticosteroid injections for temporary relief of severe inflammation, or platelet-rich plasma (PRP) injections to promote tissue repair.

3. Surgical Intervention

Surgery (such as a plantar fascia release or gastrocnemius recession) is rarely needed and is typically only considered if severe pain persists after **6 to 12 months** of consistent non-surgical treatment.

When to Consult a Healthcare Professional

Seek medical evaluation if your heel pain is severe, follows an acute injury, is accompanied by numbness, tingling, or swelling, or if you have underlying conditions such as **diabetes** or poor circulation.