PLANTAR FASCIITIS

Plantar Heel Pain

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WHAT IS PLANTAR FASCIITIS?

Plantar fasciitis is pain where the **plantar fascia** attaches to the heel bone. The plantar fascia is a thick band of tissue along the bottom of the foot. It runs from the heel to the toes and supports the arch.

It is among the most common causes of heel pain. It often starts after a jump in activity such as more walking, running or time on your feet. It is most common between about 40 and 60 years of age and in women more than men.



WHY IT HAPPENS

- A tight calf
- A jump in activity
- Long hours on your feet
- Higher body weight

A tight calf is one of the strongest risk factors. The calf muscles connect to the heel through the Achilles tendon. When they are tight they put extra strain on the plantar fascia with every step. This is why **stretching the calf is a core part of treatment**.

Common Symptoms

- **Pain with the first steps in the morning** or after sitting for a while
- Pain on the bottom of the heel toward the inner side
- The pain often eases after a few minutes of walking. It can build again later in the day or after long periods on your feet.
- The plantar fascia may tighten overnight when the foot is commonly resting in a position that is pointed down. The first steps in the morning often place a stretch on the plantar fascia, which is why it often hurts at that time.

How It Is Diagnosed

- A history of your symptoms and a physical examination
- We check for tenderness where the plantar fascia attaches to the heel and for a tight calf
- An X-ray may be performed to rule out other causes of heel pain
- An ultrasound or MRI is usually only needed if the heel is not improving as expected

When Heel Pain Is Something Else

Other problems can cause heel pain and may look similar at first:

- A **stress fracture of the heel bone**. The pain is typically in a different location than the bottom of the heel.
- **Irritation of a nerve near the heel** such as tarsal tunnel syndrome. This can cause burning, tingling or numbness.
- **Achilles tendonitis**. The pain is at the back of the heel rather than the bottom.
- **Inflammatory arthritis**. Pain in both heels at the same time may need further evaluation.

YOUR TREATMENT OPTIONS

Most people get better with simple home treatment, but it often takes months. About 8 in 10 improve within a year.

First-Line Treatment

Stretching the calf is the most important treatment. A home exercise program includes calf stretching and foot and ankle motion and strengthening. Do your calf stretches every day.

Other things that help:

- **Heel cups** from the store can ease pain. Custom inserts are usually not needed.
- **Topical or oral anti-inflammatory medicine** can ease pain.
- **Ice massage** at least once a day such as rolling the arch on a frozen water bottle.
- A **night splint** that holds the foot up while you sleep may help with morning pain.
- **Shockwave therapy** uses sound waves directed at the heel to stimulate healing.
- A **walking boot** for a short time is reserved for severe cases.

Keep stretching consistently even when the heel starts to feel better. The calf takes time to become more flexible.

If the Pain Is Not Improving

If the heel has not improved after 3-6 months of first-line treatment, other options may be considered.

A **platelet-rich plasma (PRP) injection** uses a concentrate of your own blood. It is often given after a round of shockwave therapy. A **walking boot is worn for about 2 weeks** afterward, then physical therapy resumes. It can be expensive and is often not covered by insurance.

Tenex is a minimally invasive procedure for pain that does not improve. It uses ultrasound guidance to remove damaged tissue through a very small incision.

We typically avoid steroid injections for plantar fasciitis because of the risk of the plantar fascia tearing (rupture). They can also cause **thinning of the fat pad** that cushions the heel.

WHAT TO EXPECT

First 3-6 months	After 3-6 months	Within 12 months
Stretching, heel cups, anti-inflammatories, ice and shockwave	If not improving, PRP or Tenex may be considered	About 8 in 10 people improve

Tips That Help

- Wear **supportive shoes or sandals at home** while symptoms are aggravated to avoid walking barefoot
- Cut back for a while on the activity that brings on the pain such as running or long hours standing
- Low-impact exercise such as cycling or swimming keeps you fit while the heel settles

Selected Background Sources

The guidance in this handout reflects current peer-reviewed orthopedic literature and professional society recommendations. Selected sources include:

- American Academy of Orthopaedic Surgeons. Plantar Fasciitis and Bone Spurs. OrthoInfo.
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- Acevedo JI, Beskin JL. Complications of plantar fascia rupture associated with corticosteroid injection. Foot Ankle Int. 1998.

This handout is for education and does not replace the discussion with your surgeon. Numbers come from specific studies, may not apply to you and do not guarantee any result. Ask Dr. Tummala about anything that applies to your specific foot.

Notes



Sai Tummala, MD

Sports Medicine and Shoulder Surgery

Dr. Sailesh Tummala is an orthopaedic surgeon at Stanford Health Care and a clinical assistant professor at Stanford University School of Medicine with fellowship training in sports medicine and shoulder surgery. A former collegiate basketball player, he cares for athletes and active patients of all ages and emphasizes nonoperative care while also offering minimally invasive and complex reconstructive surgery. He has authored more than 100 peer-reviewed papers and has received grant funding for his research. He assists with teams at all levels across the Bay Area, including the Stanford men's basketball and football teams.

Website
saitummalamd.com

Stanford profile
profiles.stanford.edu