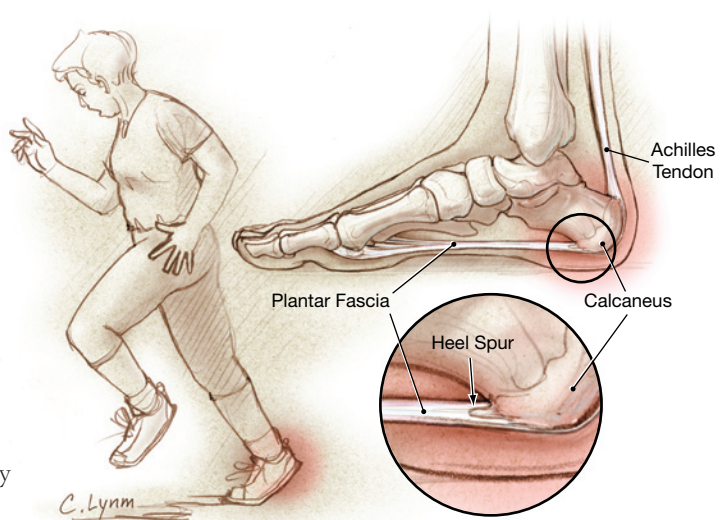


Plantar Fasciitis

Heel pain is a common complaint that has many causes. Heel pain may result from inflammation of the tissue on the bottom of the foot. This is called **plantar fasciitis**.

The **plantar** (foot) **fascia** (connective tissue) stretches under the skin across the arch of the foot from the heel to the base of the toes. When this tissue is torn, overused, or improperly stretched, it can become inflamed (**fasciitis**). Soreness, tenderness, and pain result. Persons who are overweight, female, or older than 40 years or who spend long hours on their feet are especially at risk of developing plantar fasciitis. Athletes, especially joggers and runners, may develop plantar fasciitis.

Sometimes plantar fasciitis can be associated with **heel spurs**. These spurs are outgrowths of bone on the **calcaneus** (heel bone). They are sometimes painful and may occasionally require surgical treatment. The September 17, 2003, issue of *JAMA* includes an article about heel pain and plantar fasciitis.



SYMPTOMS OF PLANTAR FASCIITIS

- Heel pain, especially in the early morning or after a period of rest
- Increasing pain with standing
- Pain in the heel after exercising

TREATMENTS FOR PLANTAR FASCIITIS

- Rest
- Arch supports (sometimes called **orthotics**) to be worn in shoes
- Stretching the calf muscles and **Achilles tendon**
- Ice packs
- Nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen or naproxen
- Reducing excess body weight
- Corticosteroid injections may be used in select cases
- Surgery may be helpful if other treatments are not successful

OTHER CAUSES OF HEEL PAIN

It is important to understand that all heel pain is not from plantar fasciitis. Other medical problems can cause foot and heel pain. Diabetes and blood vessel disease, both serious medical problems, can cause heel pain. Arthritis, traumatic injury and bruising, gout, **stress fractures** (caused by repeated stress on bone), and other diseases can also cause heel pain. Rarely, tumors (either benign or cancerous) or infections can cause heel pain. If you develop persisting heel pain, see your doctor for an evaluation.

Sources: American Academy of Orthopaedic Surgeons, American College of Foot and Ankle Surgeons, American Podiatric Medical Association

Janet M. Torpy, MD, Writer

Cassio Lynn, MA, Illustrator

Richard M. Glass, MD, Editor

The JAMA Patient Page is a public service of *JAMA*. The information and recommendations appearing on this page are appropriate in most instances, but they are not a substitute for medical diagnosis. For specific information concerning your personal medical condition, *JAMA* suggests that you consult your physician. This page may be photocopied noncommercially by physicians and other health care professionals to share with patients. Any other print or online reproduction is subject to AMA approval. To purchase bulk reprints, call 718/946-7424.

FOR MORE INFORMATION

- American Academy of Physical Medicine and Rehabilitation
312/464-9700
www.apmr.org
- American Academy of Orthopaedic Surgeons
800/346-AAOS
www.aaos.org
- American College of Foot and Ankle Surgeons
800/421-2237
www.acfas.org
- American Podiatric Medical Association
800/ASK-APMA
www.apma.org

INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page link on *JAMA*'s Web site at www.jama.com. Many are available in English and Spanish.

