Plantar Fasciitis

Definition
Plantar fasciitis is irritation and swelling of the thick tissue on the bottom of the foot. The plantar fascia is a very thick band of tissue that connects the heel bone to the toes. This band of tissue is what creates the arch of the foot. When the fascia is overstretched or overused, it can become inflamed. When the fascia is inflamed, it can be painful and make walking more difficult.

Causes
- Foot arch problems (both flat feet and high arches)
- Obesity
- Repetitive long-distance running, especially running downhill or on uneven surfaces
- Sudden weight gain
- Tight Achilles tendon (the tendon connecting the calf muscles to the heel)
- Shoes with poor arch support or soft soles

Plantar fasciitis is commonly thought of as being caused by a heel spur, but research has found that this is not the case. On X-ray, heel spurs are seen in people with and without plantar fasciitis.

Symptoms
The most common complaint is pain in the bottom of the heel, which is usually worse in the morning and may improve throughout the day. By the end of the day the pain may be replaced by a dull ache that improves with rest.

Treatment
Conservative treatment is usually successful, given enough time. Treatment can last from several months to 2 years before symptoms get better. Most patients will be better in 9 months.

Initial treatment usually consists of:
- Anti-inflammatory medications
- Heel stretching exercises

To relieve plantar fasciitis:
- Apply ice to the painful area at least twice a day for 10-15 minutes or more often in the first couple of days.
- Rest as much as possible for at least a week.
- Take acetaminophen for pain or ibuprofen for pain and inflammation.
- Try wearing a heel cup, felt pads in the heel area or an orthotic device.
- Use night splints to stretch the injured fascia and allow it to heal.
- Wear properly fitting shoes.
If these fail, putting the affected foot in a short leg cast (a cast up to but not above the knee) for 3–6 weeks is often successful in reducing pain and inflammation. Alternatively, a cast boot (which looks like a ski boot) may be used. It is still worn full time, but can be removed for bathing.

Some doctors will offer steroid injections, which can provide lasting relief in many people. However, this injection is very painful and not for everyone.

In a few patients, non-surgical treatment fails and surgery to release the tight, inflamed fascia becomes necessary.