PAINFUL HEEL SYNDROME

The painful heel is a common complaint in both the non-athlete as well as the athlete. The painful heel syndrome (PHS) is also known as plantar fasciitis or a heel spur. While the PHS does not produce severe or disabling pain, it is aggravating enough to limit or curb any walking, standing or running activities.

Many myths exist concerning the cause, and therefore the treatment, of PHS. It is still widely held by many physicians, and certainly the lay public, that this is secondary to a heel spur. Plantar heel spurs exist in patients with PHS at approximately a 50% rate and in the normal population without a history of heel pain at a 25% rate. Pain can be present with or without a spur and statistics alone refute spurs as the inciting cause of pain. A plantar heel spur probably represents evidence of a previous injury or a normal response of the calcaneus (heel bone) to traction from the plantar fascia (the tough tissue that supports the arch).

We believe your pain is secondary to overuse or stress to the region of the attachment of the plantar fascia to the heel bone. This leads to chronic inflammation and irritation of tissues in the area. Commonly, PHS is associated with a tight Achilles tendon and plantar fascia. This tightness sets up a re-injury phenomenon which prolongs the duration of the patient’s symptoms.

We use a staged treatment program that has been very effective in both the athletic and non-athletic patient:

STAGE I:  1) Wearing of jogging, walking or athletic type shoes with good support and a shock absorbing heel as much as possible.

2) Wearing a heel cup, heel pad, or custom soft orthotic to help relieve pain.

3) An aggressive stretching program of the heel cord which relieves stress on the plantar fascia and rehabilitates the tight and irritated tissue over time. This stretching should be done 2 to 3 times every day, five minutes each time, as you have been shown and diagrammed. (Fig. 1)
In the beginning, you may have to gradually build up to the five minute sessions, three times a day, due to initial soreness in the calf muscles and heel. Do not bounce up and down, let gravity gradually stretch the tight tissues. A majority of patients may experience a 10-15% increase in their pain 2-3 weeks after beginning the stretching program. (Fig. 2)

DON'T GIVE UP! This is a minor increase in pain and rehabilitating the tight tissues is critical to your overall long term recovery.

4) Stretch your achilles tendon and foot while in bed before taking your first step in the morning. Point your foot and toes toward your nose and hold for two to three minutes. (Fig. 3)

5) A morning hot bath or foot soak often helps prepare your foot for the day's activities. An ice massage to the heel may relieve symptoms at the end of the day or after an aggravating activity.

6) Temporarily limit aggravating activities. This is toughest for the jogging or walking exercise crowd, but switching to swimming or biking will maintain your conditioning and avoid undue stress to the foot.

7) An anti-inflammatory medicine is helpful. Please take as directed (don't skip days) and only if tolerated and prescribed.

STAGE II: Cortisone injection
STAGE III: Walking cast and/or night splint
STAGE IV: Surgery (rarely needed)

Patients who comply with the Stage I treatment program should gradually resolve their painful heel. In general, 85% of our patients will obtain near complete relief of pain by 12 weeks with the majority of symptoms alleviated in 6-8 weeks. Once relief is obtained, you should consider a modified program of stretching as part of your normal daily routine to prevent a return of the PHS. If, however, you have faithfully followed Stage I for 8 to 12 weeks and are still experiencing significant pain without improvement, give us a call or return to the office for further evaluation.
Fig. 1  Heel cord stretch on stair. Wear tennis-type shoes.

Fig. 2  Heel pain vs. time during stretching treatment.

Fig. 3  Morning stretch while in bed.