

## ***PLANTAR FASCITIS*** **(HEEL SPUR SYNDROME)**

### **DESCRIPTION**

Stiffness and inflammation of the main fascia (fibrous connective {ligament -like} tissue) on the bottom of the foot. It is occasionally associated with a bone spur on the heel. Occasionally there may be a partial or complete tear of the fascia of the bottom of the foot. Bone spurs themselves usually do not cause symptoms

### **FREQUENT SIGNS AND SYMPTOMS**

- Pain and tenderness in the sole of the foot, mostly under the heel bone, with standing or walking.
- Particularly noticeable pain with the first steps when getting out of bed in the morning, or after sitting

### **CAUSES**

- Stress or injury to the heel tissues, which causes inflammation and calcification of the fascia of the foot.
- May be due to irritation of a small nerve that runs under the foot where the main fascia attaches to the heel bone.
- Associated with tight calf muscles and/or flat feet.
- Shoes that are poorly fitted, have inadequate arch supports, and/or with soles that are too stiff or rigid arch supports (orthotics)
- Activities that require sudden turns or stops

### **RISK INCREASES WITH**

- Sports including running or jogging and sudden stops or changes in direction.
- Prolonged standing
- Poor physical conditioning (strength/flexibility)
- Inadequate warm-up before practice or play
- Obesity
- Flat feet

### **PREVENTIVE MEASURES**

- Appropriate warm-up and stretching before practice or competition.
- Appropriate conditioning including calf, ankle, and foot flexibility, strength and endurance. Also, cardiovascular fitness and maintain ideal body weight
- Avoid activities that put a constant strain on the foot
- Appropriate shoes with a rubber or felt heel cushion, and good arches or cushioned arch supports

### **EXPECTED OUTCOME**

Usually curable with appropriate conservative treatment. If not, heel spurs are frequently curable with surgery.

## **POSSIBLE COMPLICATIONS**

- Frequent recurrence of symptoms resulting in a chronic, repetitive problem. Appropriately addressing the problem the first time decreases the frequency of recurrence.
- Lower back or knee disorders caused by constant limping
- Pain and/or weakness of the foot during push off following surgery.
- Chronic inflammation, scarring and partial or complete fascia tear, occurring more frequently from repeated injections.

## **GENERAL TREATMENT CONSIDERATIONS**

Initial treatment consists of medications and ice to relieve pain, stretching exercises of the heel cord/achilles tendon and modifying activities. A heel cup or felt insert in the shoe to relieve pressure on the heel usually is recommended. Occasionally, wearing splints at night may be offered. Chronic cases may require referral to a physical therapist or athletic trainer for further evaluation and treatment. Arch supports (orthotics) are helpful for people with flat feet to prevent and/or treat this problem. Occasionally surgery is needed to release the fascia and nerve. Surgery is often effective at relieving the symptoms.

## **MEDICATION**

- Non-steroidal anti-inflammatory medications (such as aspirin and ibuprofen), or other minor pain relievers (such as acetaminophen) are often recommended. Do not take non-steroidal anti-inflammatory medications if surgery is planned in 7 days or less. Take these as directed by your physician. Contact him/her immediately if any bleeding, stomach upset or an allergic reaction occurs.
- Cortisone injections reduce inflammation, and anesthetics temporarily relieve pain. However, this is done only sparingly as there is a limit to the number of times cortisone may be given due to the fact it weakens muscle, fascia and tendon tissue.

## **HEAT AND COLD:**

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 - 15 minutes every 2-3 hours for inflammation and pain, and immediately after any activity which aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used prior to performing stretching and strengthening activities prescribed by your physician, physical therapist or athletic trainer. Use heat pack or a warm soak.

## **NOTIFY OUR OFFICE IF:**

- Symptoms get worse or do not improve in 2 weeks despite treatment.