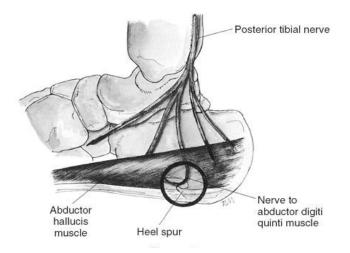
# STEVEN CHUDIK MD

# SHOULDER, KNEE & SPORTS MEDICINE

# **Lateral Plantar Nerve Entrapment**

Lateral plantar nerve entrapment is a nerve disorder in the foot that causes pain in the heel. There usually is no loss of feeling in the foot. It involves compression of the lateral plantar nerve (the nerve to a small muscle in the foot and to the lining of the heel bone) by ligament-like tissues (fascia) and muscle or bone.



## **Frequent Signs and Symptoms**

- Pain, tenderness, or burning on the inner part of the heel that may migrate up the ankle and to other parts of the bottom of the foot
- Pain that is worse with standing, running, or jumping, although it may also occur at night

## **Etiology (Causes)**

- Pressure on the lateral plantar nerve at the heel of the foot, causing pinching of the nerve between ligament-like tissue and the bone or muscle
- Inflammation of the plantar fascia, causing nerve inflammation





630-324-0402 contactus@chudikmd.com stevenchudikmd.com

# STEVEN CHUDIK MD

# SHOULDER, KNEE & SPORTS MEDICINE

#### **Risk Factors**

- Sports that require standing on the toes often or for a prolonged period, such as sprinting, ballet, and figure skating
- Shoes with minimal padding and loss of shock absorption
- Looseness of the joints of the foot, flat feet, or stiffness of the big toe (hallux rigidus)
- New arch supports (orthotics) that have high arches
- Medical disorders, including diabetes mellitus and thyroid disorders

## Prevention

- Maintain appropriate conditioning:
  - Foot and ankle flexibility
  - Muscle strength and endurance
  - Cardiovascular fitness
- Wear proper equipment, such as shoes and orthotics, and ensure correct fit.
- Wear arch supports and heel cushions.

#### Outcomes

This condition is usually curable with appropriate treatment; sometimes it heals spontaneously. Uncommonly, surgery is required.

## **Potential Complications**

Persistent pain in the foot or ankle and inability to compete due to pain.

## **Treatment Considerations**

Initial treatment consists of rest from the offending activity and medications and ice to help reduce inflammation and pain. Arch supports and heel cushions are beneficial. Cross-training is usually helpful. Stretching, and strengthening exercises of the muscles of the foot and ankle, particularly the Achilles tendon, may be useful. If 12 months of this treatment is not successful, surgery may be necessary to free the pinched nerve. This provides almost complete relief, with full return to sporting activities in most patients. Training, while wearing orthotics, usually begins 6 weeks after the surgery.





630-324-0402 contactus@chudikmd.com stevenchudikmd.com

# STEVEN CHUDIK MD

# SHOULDER, KNEE & SPORTS MEDICINE

#### **Possible Medications**

- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take within 7 days before surgery), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.
- Pain relievers may be prescribed as necessary by your physician, usually only after surgery. Use only as directed and only as much as you need.

#### Modalities (Heat and Cold)

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

#### Notify My Office If Symptoms Worsen





630-324-0402 contactus@chudikmd.com stevenchudikmd.com