

MORTON'S NEUROMA

(Interdigital Plantar Neuroma)



■ ■ ■ Description

Morton's neuroma is a nerve disorder in the foot that causes pain and loss of feeling between two toes. It involves compression of the thickened nerve between bones (interdigital nerve) of the mid-foot, near the toes. It most often involves the space between the third and fourth toes.

■ ■ ■ Common Signs and Symptoms

- Tingling, numbness, burning, or electric shocks in the forefoot, most often involving the third and fourth toes, although it may involve any other pair of toes
- Pain and tenderness in the forefoot, usually in the sides of the third and fourth toes' bases, especially with walking
- Pain made worse by wearing tight shoes and lessened by removing shoes
- Severe pain in the front of the foot when standing on the front of the foot (on tiptoes), such as with running, jumping, pivoting, or dancing

■ ■ ■ Causes

- Swelling of the interdigital nerve that becomes pinched by the bones of the foot

■ ■ ■ Risk Increases With

- Recurrent foot or ankle injuries
- Ill-fitting or worn shoes with minimal padding and shock absorption
- Loose ligaments of the foot, causing thickening of the nerve
- Poor physical conditioning (strength and flexibility)

■ ■ ■ Preventive Measures

- Appropriately warm up and stretch before practice or competition.
- Maintain appropriate conditioning:
 - Foot and ankle flexibility
 - Muscle strength and endurance
 - Cardiovascular fitness
- Ensure proper shoe fit with good padding.
- Wear arch supports (orthotics) when necessary.

■ ■ ■ Expected Outcome

This condition is usually curable with appropriate treatment, and sometimes it heals spontaneously. Occasionally, surgery is necessary.

■ ■ ■ Possible Complications

- Permanent numbness and pain in the foot
- Inability to compete due to pain

■ ■ ■ General Treatment Considerations

Initial treatment consists of rest from the offending activity and the use of medications and ice to help reduce inflammation and pain. Wearing soft-heeled shoes with a wide toe area may help. Cross-training with less impact of the forefoot may help reduce the symptoms. A metatarsal bar or arch support (orthotic) with a metatarsal bar may help reduce pressure on

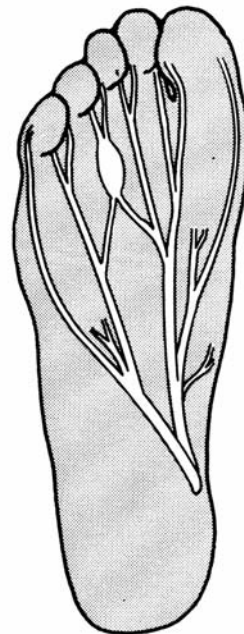
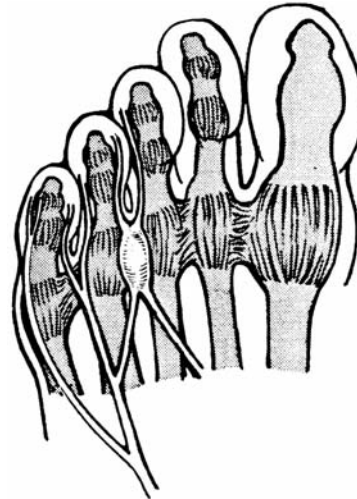


Figure 1

From Nicholas JA, Hershman EB: *The Lower Extremity and Spine in Sports Medicine*. St. Louis, Mosby Year Book, 1995, p. 458.

the nerve and eliminate the symptoms. Stretching and strengthening exercises of the muscles of the foot may be useful. Cortisone injections may be helpful in reducing the inflammation of the nerve. If this treatment is not successful, surgery may be necessary to free the pinched nerve. Surgery usually is performed on an outpatient basis (you go home the same day) to remove the source of compression or the inflamed nerve itself. This provides almost complete relief in most patients, although persistent numbness between the toes can be expected if the inflamed nerve is removed.

■ ■ ■ Medication

- 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.
- Cortisone injections reduce inflammation, and anesthetics temporarily relieve pain. However, there is a limit to the number of times cortisone may be given, because it weakens muscle 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 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 Our Office If

- Symptoms get worse or do not improve in 2 weeks despite treatment
- After surgery you develop increasing pain, swelling, redness, increased warmth, bleeding, drainage, or fever
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)

Notes:

(Up to 4400 characters only)

Notes and suggestions