MORTON'S NEUROMA

A neuroma is a thickening of nerve tissue that may develop in various parts of the body. The most common neuroma in the foot is a Morton's neuroma, which occurs between the third and fourth toes. It is sometimes referred to as an intermetatarsal neuroma. Intermetatarsal describes its location in the ball of the foot between the metatarsal bones. The thickening of the nerve that defines a neuroma is the result of compression and irritation of the nerve. This compression creates enlargement of the nerve, eventually leading to permanent nerve damage. Neuromas may also occur in other locations in the foot.



Causes

Anything that causes compression or irritation of the nerve can lead to the development of a Metatarsals neuroma. One of the most common offenders is wearing shoes that have a tapered toe box or highheeled shoes that cause the toes to be forced into the toe box. People with certain foot deformitiesbunions. hammertoes. flatfeet or more flexible feet—are at higher risk for

developing a neuroma. Other potential causes are activities that involve repetitive irritation to the ball of the foot, such as running or court sports.

Symptoms

- Tingling, burning, or numbness
- Pain
- A feeling that something is inside the ball of the foot
- A feeling that there is something in the shoe or a sock is bunched up

The progression of a Morton's neuroma often follows this pattern:

- The symptoms begin gradually. At first, they occur only occasionally when wearing narrow-toed shoes or performing certain aggravating activities.
- The symptoms may go away temporarily by removing the shoe, massaging the foot, or avoiding aggravating shoes or activities.
- Over time, the symptoms progressively worsen and may persist for several days or weeks.

• The symptoms become more intense as the neuroma enlarges and the changes in the nerve become permanent.

Nonsurgical Treatment

In developing a treatment plan, your foot and ankle surgeon will first determine how long you have had the neuroma and will evaluate its stage of development. Treatment approaches vary according to the severity of the problem. For mild to moderate neuromas, treatment options may include:

- Padding. Padding techniques provide support for the metatarsal arch, thereby lessening the pressure on the nerve and decreasing the compression when walking
- Icing. Placing an icepack on the affected area helps reduce swelling.
- Orthotic devices. Custom orthotic devices provide the support needed to reduce pressure and compression on the nerve.
- Activity modifications. Activities that put repetitive pressure on the neuroma should be avoided until the condition improves.
- Shoe modifications. Wear shoes with a wide toe box and avoid narrow-toed shoes or shoes with high heels.
- Medications. Oral nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, may be recommended to reduce pain and inflammation.
- Injection therapy. Treatment may include injections of cortisone, local anesthetics or other agents.

When Is Surgery Needed?

Surgery may be considered in patients who have not responded adequately to nonsurgical treatments. Your foot and ankle surgeon will determine the approach that is best for your condition. Regardless of whether you have undergone surgical or nonsurgical treatment, your surgeon will recommend long-term measures to help keep your symptoms from returning.

