

## NEUROMA

### Description

If you feel that you are “**walking on a marble**” and have a persistent pain in the ball of your foot, you may have a condition called Morton’s neuroma. A Morton’s neuroma is a benign tumor of a nerve. Morton’s neuroma is not actually a tumor, but a thickening of the tissue that surrounds the digital nerve leading to the toes. It occurs as the nerve passes under the ligament connecting the toe bones (metatarsals) in the forefoot. The nerve becomes sandwiched between the bones in the foot. A Morton’s neuroma most frequently develops between the third and fourth toes but is also quite common between the second and third toes. Morton’s neuroma develops in response to irritation, trauma or excess pressure. Tight shoes, shoes with little cushion, and high heels can all contribute to the development of Morton’s neuroma. Tight, narrow, and high heel shoes aggravate the condition by compressing the toe bones and pinching the nerve. Morton’s neuroma is **10 times more common in women than men** due to the difference in types of shoes worn.

### Signs/Symptoms

Typically, there is no outward sign of problems, such as a lump or redness. But a burning pain in the ball of the foot that radiates into the toes is common. Because a Morton’s neuroma is a nerve tumor, the neurological impulse sent back to the brain varies widely. People may complain of burning, tingling or numbness. Some patients describe the sensation as walking on a “bunched up sock”. Night pain is rare.

During the examination, your podiatrist will utilize an ultrasound as well as feel for a palpable mass or a “click” between the bones in the foot. A test, called the “lateral squeeze test”, is performed by squeezing the forefoot from side to side while applying direct pressure to the affected area between the toes. A positive test yields exacerbation of symptoms and may also elicit what is termed a “Mulder’s Click”. Range of motion at the toes will rule out arthritis and an x-ray may be taken to rule out a stress fracture of the metatarsal bones.

### Treatment

Initial treatment includes changing one’s footwear to more comfortable shoes. We recommend patients wear well-fitting shoes that have a wide toebox, plenty of cushion, and no high heels. This will allow the bones in the forefoot to spread out and may reduce the pressure on the Morton’s neuroma, giving it time to heal. Orthotics (custom molded shoe inserts), or pads may also help take pressure off the nerve. A series of seven injections, given weekly, of a 4 percent solution of dehydrated ethyl alcohol is injected into the site of the Morton’s neuroma. Conservative treatment beyond this may involve physical therapy and oral anti-inflammatory medications.

While conservative treatment of a Morton’s neuroma is effective 80 percent of the time, surgery may be indicated. A Morton’s neuroma that has been symptomatic for greater than four to six months may develop into a large fibrotic tumor and require surgical removal. Surgery is a minor same-day out-patient procedure. A one-inch incision is made on the top of the foot and the Morton’s neuroma is removed. Post-operative recovery is swift and complications are few. Patients are often back in shoes within two weeks.