Interdigital Neuritis

OVERVIEW
You have been diagnosed with interdigital neuritis, which is also often called a Morton's Neuroma. This is inflammation and swelling between the bones in your forefoot with irritation of the digital nerve. The digital nerve often becomes swollen. This swelling was previously felt to a nerve tumor, but now it is not well accepted that the problem is due to mechanical irritation in the space between the metatarsal heads. Treatment is directed to rest and protect the area to let the inflammation settle down, then avoiding additional mechanical irritation to prevent recurrence. Sometimes the inflammation does not improve and an injection or surgery is required to reduce the pain and limitations.

BACKGROUND
A 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. Morton's neuroma most frequently develops between the third and fourth toes, usually in response to irritation, trauma or excessive pressure. The incidence of Morton's neuroma is 8 to 10 times greater in women than in men.

CLINICAL PRESENTATION
Patients typical present with complaints of pain and burning in the forefoot, that may extending into the toes. The pain generally intensifies with activity or wearing shoes. Night pain is rare. Sometimes patients report that it feels like they have a stone or a marble in their shoe. Normally, there are no outward signs, such as a lump, because this is not really a tumor. There may also be numbness in the toes, or an unpleasant tingling feeling in the toes. High-heeled shoes and tight, narrow shoes also aggravate this condition by compressing the toe bones and pinching the nerve.

DIAGNOSIS
During the examination, your physician will feel for a palpable mass or a "click" between the bones. He or she will put pressure on the spaces between the toe bones to try to replicate the pain and look for calluses or evidence of stress fractures in the bones that might be the cause of
the pain. Range of motion tests will rule out arthritis or joint inflammations. X-rays may be required to rule out a stress fracture or arthritis of the joints that join the toes to the foot.

**TREATMENT**
Initial therapies are non-surgical and relatively simple. They can involve one or more of the following treatments:

*Changes in Footwear: Avoid high heels or tight shoes, and wear wider shoes with lower heels and a soft sole. This enables the bones to spread out and may reduce pressure on the nerve, giving it time to heal.*

*Orthoses: Custom shoe inserts and pads also help relieve irritation by lifting and separating the bones, reducing the pressure on the nerve.*

*Injection: One or more injections of a corticosteroid medication can reduce the swelling and inflammation of the nerve, bringing some relief.*

**EXPECTED OUTCOMES**
Several studies have shown that a combination of roomier, more comfortable shoes, non-steroidal anti-inflammatory medication, custom foot orthoses and cortisone injections provide relief in over 80% of people with interdigital neuritis. If conservative treatment does not relieve your symptoms, your orthopaedic surgeon may discuss surgical treatment options with you. Surgery can resect a small portion of the nerve or release the tissue around the nerve, and generally involves a short recovery period.

**MORE INFORMATION**
Further information can be obtained on the internet. Your local public library can help you explore these sources if you are interested. Two good internet sites for expert and peer reviewed information are the American Academy of Orthopedic Surgeons at [www.aaos.org](http://www.aaos.org) and [www.emedicine.com](http://www.emedicine.com).

**FEEDBACK**
If you have questions or comments, please contact the office or submit them to the web site at [www.pedortho.com](http://www.pedortho.com).