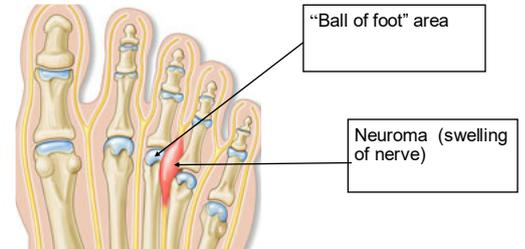


Morton's Neuroma

What is Neuroma?

A Neuroma (sometimes called a Morton's Neuroma) is a painful swelling or irritation of the nerve that runs between the metatarsal bones (known as a digital nerve). Irritation of this nerve causes pain in the "ball of the foot" that often radiates to the toes.



What are the symptoms?

Pain, numbness and a tingling sensation are the main symptoms. This usually presents when the foot is enclosed in a shoe and while standing or walking. Pain is usually experienced in a specific area of the forefoot and radiates into the toes.

The condition commonly affects the third and fourth toes and sometimes the second and third toes but may occur between any of the toes. As the condition progresses, shooting pains (like electric shocks) may be felt, even without any weight bearing. Occasionally a clicking sensation is associated with the pain.

What causes this condition ?

Irritation to the nerve can be caused by various factors, including:

- Poor or altered foot mechanics
- Tight calf and leg muscles
- Inappropriate footwear - such as tight or high heeled shoes

What are the treatment options?

There are a number of non operative treatments for this condition, including:

- Wearing appropriate footwear - avoid tight fitting and high heeled shoes. Wear a shoe with a wider toe box and a thicker soles.
- Orthoses (insoles) - may help to reduce symptoms by reducing stresses on the nerve.
- Activity modification - reducing those activities that increase symptoms of pain
- Stretching the calf muscles - may reduce pressure through the affected area
- Injection therapy - a steroid injection can sometimes reduce pain by reducing the inflammation.

Surgery:

In those cases, which fail to respond to the non operative treatments, surgery may be indicated. This involves the removal of the effected nerve.

Intermetatarsal Bursitis

An Intermetatarsal bursitis can produce similar symptoms to those found with Morton's Neuroma. The causes are also very similar, as are the diagnostic and treatment options. A bursa is a fluid filled sac that can form between the long bones in the mid-foot (metatarsals), ball of the foot



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(metatarsal phalangeal joints) or toe web spaces.

Often they occur in response to rubbing and friction within the tissues. The bursitis can become inflamed and distended with fluid which then presses on surrounding structures producing forefoot pain, tingling into the toes in a very similar way to Morton's neuroma.

Treatment options are as for Morton's neuroma and include:

- Insoles with a metatarsal raise
- Wider, deeper shoes
- Functional orthoses(a device that is contoured to the entire foot and used to reduce abnormal movement or foot position). Diagnostic imaging includes an ultrasound scan and an injection. This may settle the problem and can be diagnostic
- Surgery is not normally indicated for a bursitis, as addressing the mechanics of the foot should help to settle down this condition.