Morton's Neuroma
An information guide
Morton's Neuroma

What is a Morton's Neuroma?

A Morton's Neuroma is the swelling of a small nerve (plantar digital nerve) as it passes under the ligament connecting the metatarsal (toe) bones.

This nerve can become trapped causing pain. It occurs most commonly between the third and fourth toes, usually in response to irritation, trauma or excessive pressure.
What is the cause?
Morton's neuroma is 8 to 10 times more common in women than men.

The exact cause is unknown; however, it is thought to develop as a result of long standing stress and irritation of a plantar digital nerve. The condition is associated with flat feet, bunions and hammer toes and high foot arches. Poorly fitting or constricting shoes can contribute to Morton's neuroma.

It is more likely in women who wear high-heeled shoes.

What are the symptoms?
Morton's neuroma may present with localised toe pain or symptoms that can start in the ball of the foot and shoot into the affected toes. This is particularly worse when the toes are enclosed in shoes and whilst standing or walking.

There may also be burning, tingling and numbness of the toes. Some people describe the pain as a feeling of 'walking on a pebble or a marble'.

How is the diagnosis made?
Morton's neuroma is usually diagnosed by listening to the symptoms and examination of the foot.

Gently squeezing the toes together and applying pressure between the toes can reproduce the symptoms and a palpable swelling or 'click', known as the Mulder's click, is felt.

Once a Morton's neuroma is suspected an injection of local anaesthetic into the area can cause temporary relief of pain, burning and tingling. This can help to confirm the diagnosis; however, if it is still not clear, an ultrasound or MRI scan may be needed to confirm the diagnosis.
What treatment is available?

**Foot modifications:** Avoidance of high-heeled and narrow shoes. Wider shoes with lower heels and a soft sole enable the bones to spread out and reduce pressure on the nerve.

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

**Steroid and local anaesthetic injections** into the affected area to relieve the inflammation around the nerve. This can be curative if the symptoms have been relatively short lived.

What does surgical treatment involve?

If nonsurgical measures do not work, surgery is sometimes needed. This involves a small incision (cut) on the top of the foot, between the affected toes, to remove the swollen nerve or create more space around the nerve (decompression).

Nerve resection will lead to permanent numbness of the skin between the affected toes. This does not usually cause any problems.

What happens after surgery?

After the surgery there will be a bandage on the foot for 2 weeks while the wound heals. A hard soled surgical shoe is worn during this period. Once the wound has healed comfortable shoes can be worn.
What are the risks of surgery?

Surgery is usually successful, and complications are rare. Possible complications include wound infection, swelling, persistent pain and possible recurrence of symptoms.

The cut ends of the nerve can regrow to form another swelling called a “stump neuroma” which can be painful. This may need another operation or may settle after a small injection between the toes. Revision surgery is usually performed through a second incision on the sole of the foot.

What is the prognosis?

About half of the people do not require any surgery for Morton's neuroma, their symptoms being controlled with footwear modification and steroid/local anaesthetic injections. Of those who choose to have surgery, about three-quarters have good results with relief of their symptoms.

Can a Morton’s Neuroma be prevented?

Ensuring that shoes are well fitted, low-heeled and with a wide toe box may help to prevent Morton's neuroma.

For Further information

Please inform staff of any concerns or questions you may have. We will do our best to answer your queries quickly.
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For general enquiries please contact the Patient Advice and Liaison Service (PALS) on 0161 604 5897

For enquiries regarding clinic appointments, clinical care and treatment please contact 0161 624 0420 and the Switchboard Operator will put you through to the correct department / service

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Date of publication: May 2021
Date of review: May 2021
Date of next review: May 2023
Ref: PI(SU)430

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