Patient Information: Morton's Neuroma

Liverpool University Hospitals NHS Foundation Trust

What is a 'Morton's Neuroma'?

A Morton's neuroma is an enlargement of the nerved caused by scar tissue within the nerve. Because the nerve is now bigger it rubs against a ligament and other tissues around it. A fluid swelling (bursitis) can also happen around it.

What symptoms are common?

Typically, a burning pain is felt onthe sole of the foot but it can shoot up the foot. Usually it is between the third and fourth toes, although it can occur less commonly between the second and third toes. Occasionally, this pain can be associated with 'pins and needles' or numbness. Pain is aggravated by walking in narrow or pointy shoes or high heels or by walking on hard ground.

What is the initial treatment?

The treatment is initially aimed at reducing pressure at the front of the foot, inflammation, and nerve irritation. Altering the style of footwear (or sometimes insoles) has been shown to improve symptoms significantly. Patients with calf tightness may improve with calf stretching exercises.

What happens if this does not work?

Most commonly, the next step would be an injection of both local anaesthetic and steroid. This can be performed in clinic or with an ultrasound scan.

This has been reported to give a long-lasting relief of symptoms in 30 to 80% of patients.

What are the surgical options?

If symptoms do not improve or recur, surgery can be performed. This surgery may involve removal of the affected nerve (neurectomy) and division of the overlying ligament. Other procedures are rarely necessary. Surgery has been reported to give full relief of symptoms in between 50 and 90% of patients.

What can I expect postoperatively?

This surgery is performed as a day-case procedure, meaning you return home that night. Local anaesthetic will be put around the nerves to your foot meaning that the foot should be numb at the end of the operation. As this wears off there will be some pain later. You will be provided with a special flat shoe that you are required to wear for the first 2 weeks (6 weeks if a metatarsal osteotomy is performed). Whilst wearing the shoe you will be able to walk, however we urge you to rest as much as possible to allow everything to heal.

The sutures will be removed at 2 weeks. If everything is ok at this stage, you will be allowed to return to a normal shoe.

Leaflet Lead Name: Phil Ellison	Issue Date: August 2020	Ref: 1850
Approval Date: August 2020	Review Date: July 2023	Version No: 3

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Our usual follow up clinic appointments are at 2 weeks, 6 weeks and 3 months.

The foot can remain swollen and stiff for several months following the operation, and this should be expected.

What activities can I do?

General exercise progression is from non-weight bearing and non-impact (cycling and swimming – once wounds have healed) to low impact (stepper, elliptical/cross trainer, walking) to higher impact activity (jogging, exercise classes and sports). The general rule is to 'listen to your body'. The main reason NOT to progress is increasing pain (during and after activity) and swelling that impedes normal movement and muscle control/strength.

Work

You may return to sedentary work after 2 weeks. For those patients who do more manual work or whose work involves standing for long shifts, up to 6 weeks off work or longer may be required.

Driving and Flying

You can drive as long as the foot is comfortable and you are out of the postoperative shoe. It is imperative that you are safe making an emergency stop, and therefore practicing before embarking on a drive is wise. Return to driving may be possible earlier if the car is automatic and the left foot has been operated on.

More information available at www.dvla.gov.uk
According to the Department of Health flying should be avoided for 8 weeks after surgery. For further information see below: www.nhs.uk/chg/Pages/2615.aspx?CategoryID69

Sport

Sport can be resumed after full recovery from surgery has occurred and walking and running is comfortable. It is sensible to start with light non impact activity and build up to competitive sport. It is important to listen to your body and increase activity as comfort allows. Most patients can go back to running, swimming, cycling by 3 months.

What are the risks of surgery?

Infection – The rate of superficial infection within our department is 1%, the majority of which will respond to antibiotics. The risk of deep infection is 1 in 2000.

Recurrence – the nerve end can regrow, causing a stump neuroma. This is reported 1 -15% post surgery.

Thrombosis – The risk of getting a clot in your leg following nerve excision surgery is small. Some patients may be at an increased risk however, and thus your surgeon will tailor the need for clot prevention therapy to yourself based on any noted risks.

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We advise that you drink plenty of water and move around as much as is sensible to reduce the chances of a clot.

Please be vigilant for symptoms of thrombosis, including:

- Swelling – you will have some swelling due to the nature of the surgery but if you have any concerns please call for advice.
- Pain – new pains since the operation.
- Calf tenderness.
- Heat and redness compared to the other leg.
- Shortness of breath or chest pain when breathing in.

If any concerns regarding this, please seek medical attention urgently.

Nerve symptoms – Sensory loss in the distribution of excised nerve is unavoidable.

Painful scars – Some studies report up to a 5% incidence of painful scars following neuroma excision.

Complex regional pain syndrome - Some patients are susceptible to ongoing pain and swelling following surgery or injury to their feet (or other limbs). This is caused by an over activity of the nerves in the limb. Some studies have shown in the upper limb, the rate of onset can be reduced by taking normal over the counter Vitamin C starting the day of the operation, and we therefore recommend this from the day of surgery.

Vascular injury – one of the arteris to the toe can be injured as part of the operation. This can lead to a slight temperature difference but doesn't normally cause any long-lasting problems

Further Information

The figures for complications given in this leaflet have been taken from the most up to date publications on this subject (as of October 2014).
For further reading:

- The British Orthopaedic Foot Surgery Society web site is available at: http://www.bofas.org.uk/PatientInformation.aspx (accessed May 2014).
- The foot and ankle hyperbook: www.foothyperbook.com (accessed May 2014).
- Mann, R. Coughlin, M. and Saltzman, C. Surgery of the Foot and Ankle 8th edition, Elsevier, Philadelphia. 2008
- Myerson, M. Foot and Ankle Disorders. Saunders, Philadelphia. 2000
- NHS Constitution. Information on your rights and responsibilities. Available at www.nhs.uk/aboutnhs/constitution

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- Barouk, L.S. Forefoot Reconstruction. Springer-Verlag, France. 2005
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What if I need to contact someone?

Fracture Clinic – Monday – Friday (9-5.30)
Tel: 0151 529 2554
Please leave a message on the answer machine stating your name and contact number and a member of staff will return your call.

Ward 16 – (always open for advice)
Tel: 0151 529 3914 / 3527

If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact:

Tel No: 0151 529 2906

Email: interpretationandtranslation @aintree.nhs.uk

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