

Morton's Neuroma Excision



The Department of Orthopaedics offers specialist medical and surgical treatments on musculoskeletal disorders, joint replacements, foot and ankle disorders, among other trauma injuries. Our consultants and surgeons work closely with sports medicine physicians, physiotherapists, podiatrists and other healthcare professionals to help patients return to their normal activities after surgery.

What is a morton's neuroma?

A neuroma is an enlargement on a nerve, in this case the nerve to the toe which runs between the bones in the ball of the foot. The enlargement may be due to the nerve being trapped by the bones and ligaments of the foot, and symptoms may be exacerbated by putting too much weight on the front portion of the foot. It is most common in women between 30 and 50 years old, but it can also affect men and other age groups.

What are the symptoms?

A small neuroma is similar to stepping on a lump in the shoe. Larger neuromas can be painful, with patients describing a sharp or throbbing pain with a feeling of 'electric shocks' or shooting pain into the toes. Symptoms are often worse in shoes than on bare feet at first, but may progress to symptoms that are felt all the time.



How is it diagnosed?

Morton's neuroma is diagnosed by a combination of consultation and examination by an orthopaedic surgeon. In some cases imaging studies (ultrasound or MRI scans) may be required to confirm the diagnosis.

What are the treatment options?

Treatment may be surgical or non-surgical.

Non-surgical

Non-surgical treatments include wearing wider and more supportive shoes. Custom-made insoles (orthotics) may also relieve symptoms of a neuroma by relieving pressure from the painful area.

An image-guided injection (administered using ultrasound control to confirm the exact placement of the needle) can provide complete relief of symptoms in approximately 1/3 of patients¹ and should not affect a patient's suitability for surgery later should it fail or symptoms return. It is therefore often advisable to try an injection first.

Physiotherapy can help by stretching the calf muscle and relieving pressure on the front of the foot.

Surgical

An incision is usually made on the top of the foot (in some cases the incision may be made at the bottom of the foot) directly over the neuroma. The section of the nerve containing the neuroma is removed and the wound is stitched and dressed. The foot is then covered in cotton wool and a crepe bandage to minimise swelling after surgery.

There will be some permanent numbness felt between the two toes next to the neuroma. The skin between those two toes may also be a bit drier than the skin between the other toes. Compared to the pain of the neuroma, numbness and dryness typically does not cause any inconvenience, with some patients hardly noticing it.



After surgery

Will it hurt?

Some pain is expected in the next few days after any surgery. We will do our best to keep you as comfortable as possible. Local anaesthetic will be administered during the operation so that when you awake, your foot will be numb but not painful. When the local anaesthetic wears off after a couple of hours (similar to when you have an injection at the dentist), you will be given painkillers. You will also be prescribed painkillers at discharge. The more you elevate your foot in the first two weeks after surgery, the more comfortable you will feel.

Dressings and stitches

Initially you will have a large bandage on your foot. It is important to keep your dressings dry. If they accidentally get wet, come back to have them changed at our hospital. You will be reviewed at our outpatient clinic between 10 to 14 days after surgery and have your dressings removed. If non-absorbable stitches were used, they will be removed. If absorbable stitches were used, your wound will simply be checked by a doctor. Our staff will inform you of the type of stitches used before your discharge.

Mobility

Elevate your foot above the level of your heart when you sit, especially in the first few days after surgery. You may walk but are advised to keep it elevated as much as possible for your wound to heal (10 to 14 days).

Driving and work

You **must not** drive for 24 hours after an anaesthetic. You should also not drive until your stitches are removed and your foot feels comfortable. If the operation was on your right foot, please do not drive until you are comfortably able to perform an emergency stop. This may take between two to six weeks.



A medical certificate will be given to you for a period of two weeks after your surgery. In most cases, you may return to work after your stitches are removed and your wound has healed. If your job involves manual labour or if it requires you to stand for long periods, you may be given more time to recover.

Strenuous activity and sports should be avoided for about four weeks.

Potential risks and complications

Complications after removing a morton's neuroma is rare. However, they may arise in the form of:

- **Bleeding:** Some bleeding is expected. Should your dressings be soaked excessively with blood, please contact our hospital or go to a GP for a dressing change.
- **Infection of the wound:** This is very rare. If you notice your wound becoming red or swollen, or if there is a cloudy discharge, please contact our hospital or see a GP.
- **Recurrence:** A neuroma may very occasionally return at the original site, and other times at different sites in the foot or in the other foot.
- **Thromboembolic complications (blood clots in the large veins of the leg or lung) such as Deep vein thrombosis (DVT) or Pulmonary Embolism (PE):** While this is possible after any surgery on the lower limbs, its incidence is extremely low (around 0.3%) in foot and ankle surgeries. Blood-thinning medication can be prescribed to prevent blood clots. The risks associated with blood-thinning drugs are greater than the risk of developing blood clots. For this reason, blood-thinning medication are routinely not prescribed^{2,3,4} unless deemed necessary by your doctor. Please inform your surgeon if you have had DVT or PE before.
- **Blood clots:** This can be avoided by keeping your leg elevated when you sit. If you notice that your calf is painful, red and warm, please see a GP or go to the nearest Emergency Department.



The information in this brochure is not exhaustive, if you would like to know more, please approach any of our friendly staff.

For further information:
www.footEducation.com

References

- 1. Markovic M, Crichton K, Read JW, Lam P, Slater HK.** Effectiveness of ultrasound-guided corticosteroid injection in the treatment of Morton's neuroma. *Foot Ankle Int* 2008;29-5:483-7.
- 2. Mizel MS, Temple HT, Michelson JD, Alvarez RG, Clanton TO, Frey CC, Gegenheimer AP, Hurwitz SR, Lutter LD, Mankey MG, Mann RA, Miller RA, Richardson EG, Schon LC, Thompson FM, Yodlowski ML.** Thromboembolism after foot and ankle surgery. A multicenter study. *Clin Orthop Relat Res* 1998-348:180-5.
- 3. Solis G, Saxby T.** Incidence of DVT following surgery of the foot and ankle. *Foot Ankle Int* 2002;23-5:411-4.
- 4. Griffiths JT, Matthews L, Pearce CJ, Calder JD.** Incidence of venous thromboembolism in elective foot and ankle surgery with or without aspirin prophylaxis. *JBJS (B)* 2012 Feb; 94(2):210-4.

For more information

Ng Teng Fong General Hospital and Jurong Community Hospital

1 Jurong East St 21, Singapore 609606

www.ntfgh.com.sg | www.jch.com.sg

Clinic opening hours

Monday – Friday: 8.30am – 5.30pm

Saturday: 8.30am – 12.30pm (Selected clinics only*)

Dental Clinic: Monday – Thursday: 8.00am – 5.30pm, Friday: 8.00am – 5.00pm

*Please refer to our websites for more details.

General enquiries & appointments

General enquiries line: 6908 2222 (24-hr)

Fax: 6716 5500 | Email: contactus@nuhs.edu.sg

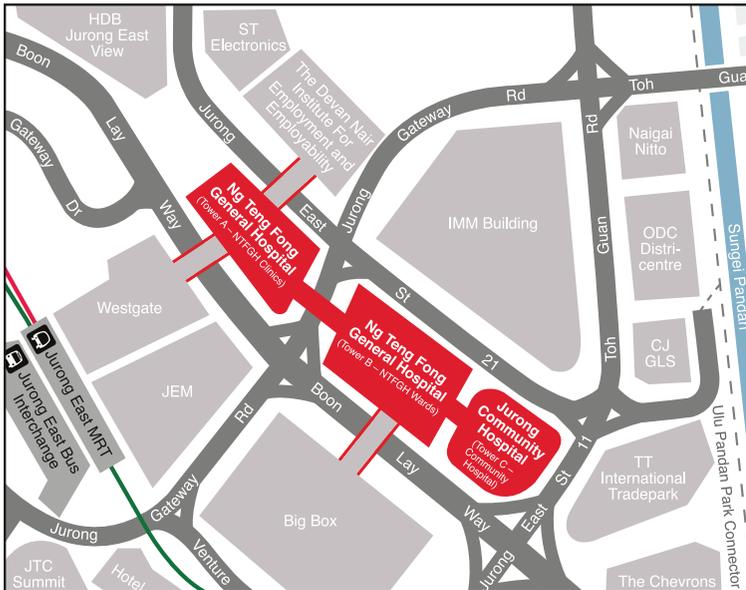
Appointment line: 6908 2222 (Monday – Friday: 8.00am – 5.30pm, Saturday: 8.00am – 12.30pm)

Fax: 6716 2200 | Email: appointment@nuhs.edu.sg

Dental appointment line: 6716 2233 (Monday – Friday: 8.00am – 5.30pm)

Fax: 6716 2200 | Email: JHCampus_Dental@nuhs.edu.sg

Getting there



By train

Alight at Jurong East MRT Station

By bus

Jurong East Bus Interchange

41, 49, 51, 52, 66, 66B, 78, 78A, 79, 79A, 97, 97E, 98, 98M, 105, 143, 143M, 160, 160A, 160M, 183, 183B, 197, 333, 334, 335, 506

Along Boon Lay Way

49, 99, 333, Private bus service 625, 990

Disclaimer:

The information in this brochure is meant for educational purposes and should not be used as a substitute for medical diagnosis or treatment. Please seek your doctor's advice before starting any treatment or if you have any questions related to your health, physical fitness or medical condition. Information is accurate at the time of printing.