MD PHYSIOTHERAPY SERVICES

YOUR GUIDE TO

MORTON'S NEUROMA

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Introduction

Please take note of the following before starting any of the exercises in this guide:

- The information contained in this guide is intended to assist in managing your recovery.
- This guide is based on the latest medical research in the field and contains the best advice available to the best of our knowledge.
- This guide is complimentary to other medical services and is not intended as a substitute for a health care provider's consultation. Never disregard medical advice or delay in seeking advice because of something you have read in this guide.
- Many people have found quick and lasting relief from their pain by acting upon the information provided, but everyone decides for themselves what to do with this information. Should you doubt a particular exercise in your situation, please consult your health professional.

When consulting your health professional, it is wise to take this guide with you to show them.

What is a Morton's Neuroma?

Morton's Neuroma, also sometimes referred to as plantar neuroma or intermetatarsal neuroma, are the result of irritation, injury or pressure on the nerves of the foot, most commonly between the third and forth toes. Neuroma's are generally benign or non cancerous growths of nerve tissue, which may develop in various parts of the body. Morton's Neuroma's are confined to nerves of the foot and involve a thickening of the nerve tissue around one of the digital nerves leading to the toes. These nerves provide physical sensation to the skin of the toes. Problems may develop in this area of the foot, as this is where part of the medial plantar nerve and lateral plantar nerve combine. Therefore the nerve is typically larger in diameter in this area than those going to the other toes, and therefore more prone to compression or injury.

One of the most common causes of nerve irritation is wearing shoes that have a tapered toe box or high heeled shoes that force the toes into the toe box. People with foot deformities such as flat feet, bunions and hammer toes are at a higher risk of developing a neuroma as are those involved in activities which result in repetitive irritation to the ball of the foot such as running or racquet sports. Morton's Neuroma's can also frequently arise spontaneously from unknown causes. The compression which creates swelling of the nerve, may also eventually lead to permanent nerve damage, and it is therefore essential that it is addressed as soon as possible.

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Symptoms

- Normally, there are no outward signs such as a lump or unusual swelling, because this is not really a tumour.
- The most common symptom is localised pain in the interspace between the third and forth toes, often occurring from the outer side of one toe to the inner side of the adjoining toe. Aching or shooting pain in the forefoot is also common
- There may be tingling, burning or numbness in the ball of the foot that may radiate into the toes.
- A feeling that something is inside the ball of the foot or that there is a rise in the shoe
- The pain generally intensifies with activity or wearing shoes, and night pain is rare.

Symptoms of a Morton's Neuroma begin gradually and may only occur occasionally when wearing specific shoes or performing aggravating activities. Pain may go away temporarily by avoiding these aggravating factors or massaging the foot, but over time the symptoms progressively worsen and may persist for several days or weeks, and the temporary changes in the nerve become permanent. It is essential to consult with your doctor or allied health professional so that a full assessment can be carried out and an x-ray may be taken to rule out other conditions such as a fracture

What Treatment can I Receive?

Treatment approaches for Morton's Neuroma vary depending on the severity of the condition, and most Doctors will recommend conservative approaches first. For mild to moderate cases of neuroma, treatment options include:

- **Padding:** Padding techniques provide support for the metatarsal arch, thereby lessening the pressure on the nerve and decreasing the compression when walking.
- **Icing:** Placing an icepack on the affected area helps reduce swelling. When using ice it is important not to place directly on the skin, but put in a thin cloth or towel to prevent a burn. Ice should be applied for 10-15 minutes at a time, and can be applied a few times a day, depending on the level of pain and inflammation.
- **Orthotic devices:** Individually made orthotic's can provide the support needed to reduce pressure and compression on the nerve.
- **Activity and shoe modifications:** Avoiding activities that put repetitive pressure on the neuroma is essential until the condition improves. Shoes should also be addressed, with narrow toed or high heeled shoes being avoided.
- **Medications:** Nonsteroidal anti-inflammatory drugs (NSAID's), such as ibuprofen, can be obtained from your local pharmacy and can serve to reduce the inflammation. These medications should only be taken if you have no contraindications to their usage and if in doubt, it is essential that you consult with your GP before taking them.

If pain is persistent or severe, or there has been no improvement with conservative approaches, the following treatments may be needed:

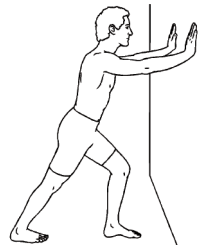
- **Corticosteroid Injections:** A corticosteroid injection in the area of the neuroma will reduce inflammation and may therefore reduce the pain. However overuse of corticosteroid injections can lead to a number of side effects and therefore only a limited number of injections will be given by your doctor.
- **Surgery:** Surgical removal of the growth may be necessary if other conservative treatments fail to provide symptomatic relief. Although surgery is usually highly successful, doctors often use it as a last resort as it involves the removal of both the neuroma and the nerve, which can lead to permanent numbness in the affected toes.

Exercises

Limitation of activity, in particular weight bearing repetitive loading activities of the foot, is advised in the early stages of the onset of symptoms to prevent further pain and inflammation. Once the symptoms are manageable, it is very important that return to activity is very gradual, with correct footwear modifications, to ensure that the nerve is not irritated again. As soon as pain allows, a stretching and strengthening programme can also begin and can help to prevent future problems from occurring. It is important that you are aware that this is a general exercise programme for Morton's neuroma, which can be adjusted depending on advice that you have been given by your health professional on assessment.

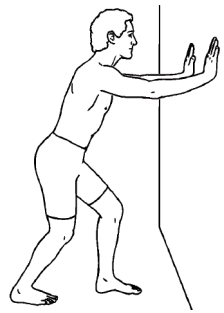
STRETCHES

- Perform each exercise **2-3 times**, holding the stretch for **30 seconds**.
- There should not be any pain when performing a stretch and you should just feel a comfortable pull.
- Hold a steady stretch, **do not bounce**.



CALF STRETCH

Keeping back leg straight, with heel on floor and turned slightly outward, lean into wall until a stretch is felt in calf.



SOLEUS STRETCH

Keep the back leg slightly bent, with the heel on the floor and pointing in a straight line to the wall. Lean into the wall until a stretch is felt in the lower calf.

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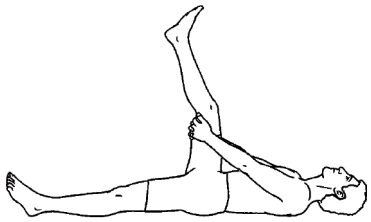
Exercises (continued)

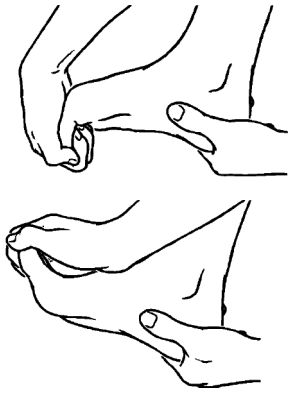
PLANTAR FASCIITIS STRETCH

Stand with the ball of one foot on a stair. Slowly reach for the bottom of the step with your heel until a stretch is felt through the arch of your foot.



TIBIALIS ANTERIOR STRETCH

Lying on back with one leg straight, raise the bent knee towards you and hold behind your knee. Now slowly straighten your knee, and at the same time point your toes and rotate them inwards. You should feel a stretch down the front and side of your lower leg.

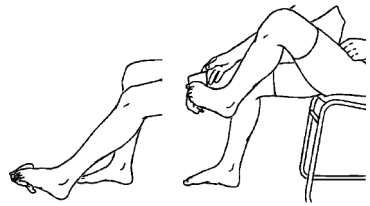


TOE FLEXION/EXTENSION STRETCH

Sitting on a chair and holding the heel of the affected foot with one hand to stabilise it in a neutral position. Now take your toes in the other hand and push them all down towards the floor. Now push your toes up towards the ceiling.

STRENGTHENING EXERCISES

- Follow the instructions within each exercise regarding sets and repetitions
- Always work in a pain free range of movement

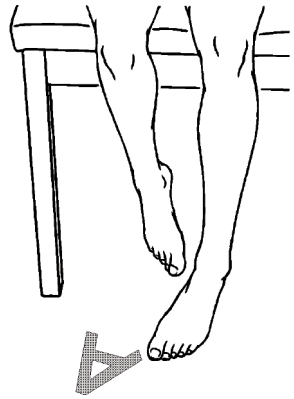


MARBLE PICKUP

Place 20 marbles on the floor. Pick up one at a time with your toes and put each marble in a bowl. This is recommended for people who have pain in the ball of the foot, hammer toes, or toe cramps

TOE RAISES AND CURLS

Sitting on a chair with your affected leg out in front of you. Bring your toes up towards the ceiling, hold for 5 seconds and now take them towards the floor i.e. curl them downwards and hold for 5 seconds. Repeat 5-10 times on each side



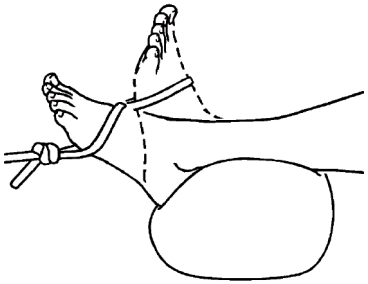
ANKLE ALPHABET

Using your ankle and foot, trace the letters of the alphabet. Perform the A to Z.

Exercises (continued)

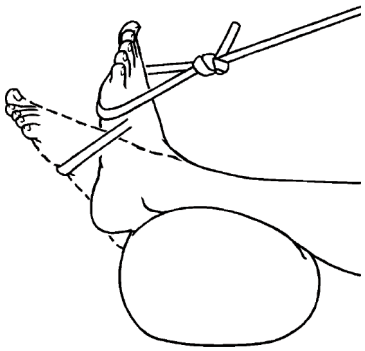
TOWEL CRUNCHES

Sit on a chair with your feet on the end of a towel on the floor. Keep your heels on the floor, and use your toes to crunch the towel up. Keep doing this until you reach the other end of the towel and then start again. Repeat this for 5 towel lengths. (Progress by adding weight on the towel and then using one foot at a time)



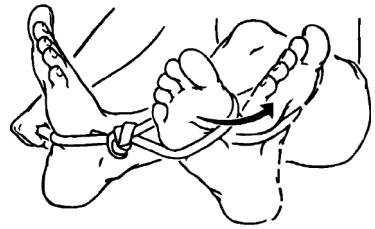
RESISTED DORSIFLEXION

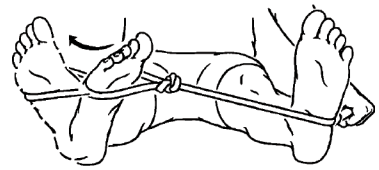
With the tubing anchored to a fixed object, pull the foot towards your shin. Return slowly to your starting position. Repeat 2 sets of 10-15 repetitions



RESISTED PLANTARFLEXION

Whilst holding one end of the tubing and the other tied around your ankle, press the foot downwards. Return slowly to your starting position. Repeat 2 sets of 10-15 repetitions.





RESISTED INVERSION

Cross your leg with the ankle you are exercising underneath. Anchor the tubing around the upper foot; slowly turn the lower foot inward.

RESISTED EVERSION

With the tubing around one ankle, slowly turn the foot outwards.

Contact us

This guide is designed to assist you in the self-management of your injury/ condition.

We are here to assist your recovery in the shortest but safest possible time. If you have any uncertainties or queries regarding the information, please do not hesitate to contact us on:

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