



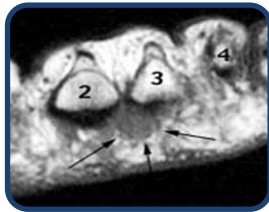
MORTON TYPE NEUROMA



Morton's neuroma is the term given to enlargement of the nerve which lies between the metatarsal heads just where it divides to supply sensation to the inside of the adjacent toes.

This is shown in red in the diagram. The adjacent bones are shown in blue. The cause of this common painful condition is unknown but repeated minor trauma is most likely.

The nerve becomes thickened / enlarged and this can give rise to pain, numbness, shooting sensations, burning under the forefoot. In some people the pain radiates into the toes or less commonly backwards toward the heel area.



- Neuromas are a painful thickening to the nerves under the ball of the foot. They are **not** any type of cancer. They are caused by abnormal repetitive injury to the nerve which is often linked to poor foot health e.g. bunions,

WHAT DO NEUROMAS LOOK LIKE IN REAL LIFE?



The area of damaged nerve is mainly situated at the toe web space. Here one can see how the nerve has become thickened due to scarring and accumulation of fat around it.

The normal nerve thickness (roughly the diameter of wool fibre) is seen further down the foot.

COMMON SYMPTOMS



METATARSALGIA (FOREFOOT PAIN)

- The foot splays causing shoes to hurt
- The big toe joint may become painful due to arthritis



SPLAYING OF THE TOES

- As the big toe turns inwards it can deform the second toe leading to more deformity



MORTON TYPE NEUROMA

Symptoms to the ball fo the foot (base of middle toes)

May feel like there is a stone in your shoe

Sometimes numbness to the toes

Often there is burning or shooting pains

WHAT HAPPENS IF I DO NOTHING?



THE PROBLEM WILL GET WORSE

- The pain typically gets worse with time
- You may notice that your toes start to become buckled and splayed apart as the neuroma damages the supporting tendons

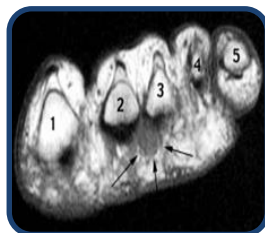
IS TREATMENT SUCCESSFUL?



SEEING A SPECIALIST GIVES BETER RESULTS

- A simple change to your regular shoes may help in about 20% of patients
- An injection helps in the short to medium term in 60% of patients
- Removal of the neuroma works in 90% of patients

WILL I NEED AN X-RAY OR SCAN ?



ULTRASOUND OR MRI SCANS ARE OFTEN NEEDED

- You may be sent for an ultrasound scan or MRI scan of your foot to determine the size and location of the neuroma.
- Ultrasound scans and MRI scans **do not** use any radiation and are safe.



MORTON TYPE NEUROMA

TREATMENT PLAN



A STEP-WISE TREATMENT IS BEST

- Try modifying your footwear / activities
- An injection can alleviate your pain
- Surgery to remove the neuroma is successful in about 90% of cases.

TREATMENT OPTIONS FOR MORTON'S NEUROMA

FOOTWEAR ORTHOTICS

- Supportive well padded shoes may help reduce some of your symptoms
- Orthotics or arch supports are not really very helpful for neuroma pain

INJECTIONS

- Cortisone injections can help reduce the pain in about 60% of people. Repeat injections are often necessary
- Cortisone injection can cause some side effects: "skin discolouration, loss of fatty tissue, rupture of tendons,"

SURGERY

- Surgery is often necessary at some point due to increasing pain. The damaged nerve can be removed and this is successful in 80-90% of people.
- Risks of surgery include infection, scar, loss of sensation, increased nerve pain, toe deformity.