Mr Keith Winters

Specialist Orthopaedic Surgeon
www.keithwinters.com.au

METATARSALGIA (FOREFOOT PAIN)

What is metatarsalgia?

This describes the symptom of pain across the ball of the foot when walking. It is not usually present at rest.

What are the common causes?

There are a number of possible causes of metatarsalgia, which include tight Achilles or Gastrocnemius tendons, Rheumatoid arthritis, lesser toe problems, cavus feet, Morton's neuroma, and after previous surgery.

If all of the above causes have been excluded, one problem seen relatively commonly in patients is an imbalance between the lengths of the metatarsal bones in the foot. In this condition, the metatarsal bone to the big toe is relatively short, with relatively over-long metatarsals to the second, third, fourth and fifth toes. This causes the lesser metatarsals to strike the floor before the big toe, causing over-load and hence forefoot pain.

What is the treatment for relatively over-long lesser metatarsals?

Clearly, successful treatment depends on making the correct diagnosis. Assuming the diagnosis of relatively over-long metatarsals has been made, treatment is as follows:

• Non-surgical – this is almost always the first treatment for metatarsalgia. It involves physiotherapy to stretch the Achilles/Gastroc tendon, the use of orthotic insoles and occasional painkilling tablets. If this fails, we may consider surgery.

• Surgical – the correction of over-long lesser metatarsals is complex. It involves a procedure to shorten the metatarsal bones by removing segments of bone. This aims to restore the normal lengths. It is performed using a procedure called a Weil osteotomy, which involves making a cut in the metatarsal bone. The bone is then shortened the correct amount and stabilised with a small screw.

What is the recovery like?

The first two weeks are spent resting the foot. It is important to elevate the leg to reduce the swelling. You will walk in a special forefoot offloading shoe for six weeks. The wound is checked at two weeks. X-rays are taken at six weeks. After this point, if all is well, you can begin to increase mobility and start to wear normal footwear, swelling permitting. Driving is usually possible from six to eight weeks, although impact exercise should be avoided for at least three months.

Are there any potential complications?

There are risks with all surgical procedures. Risks of severe complications are increased in heavy smokers and diabetics with poor sugar control. Surgery is performed under a general anaesthetic with local nerve block. With modern techniques, the risk from the general anaesthetic itself is now very low and the small risks from the nerve block include nerve damage and bleeding. There are also general risks of the surgery, which include infection, pain, swelling, stiffness, blood clots, nerve and blood vessel damage and a risk that the surgery may not fully cure the pain. There is also a risk that the cut in the bone, the osteotomy, may lose position or fail to heal. This is known as a non-union and may necessitate further surgery. One problem seen occasionally with the Weil osteotomy is stiffness of the toes after surgery. This occurs due to tethering of the tendons in scar tissue. If this occurs, it may be necessary to remove the screws and to release the tendons, with a view to improving the range of movement. It can, however, take some months to regain reasonable toe movement.