



OA of the 1st MTPJ

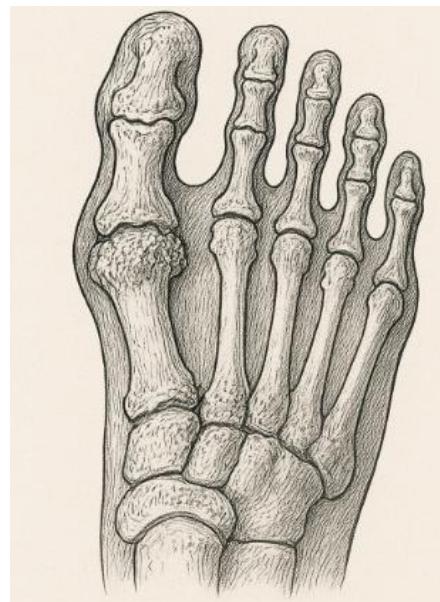
What is Osteoarthritis?

Osteoarthritis (OA) is a common condition that affects joints, causing pain and stiffness. It occurs when the protective cartilage that cushions the ends of your bones wears down over time. Osteoarthritis can affect any joint, but one common area is the 1st metatarsal phalangeal (MTP) joint, which is located at the base of your big toe.

Pathology of 1st Metatarsal Phalangeal Joint Osteoarthritis

The 1st MTP joint plays a crucial role in walking and maintaining balance. When osteoarthritis affects this joint, it can lead to the following issues:

- **Cartilage Wear and Tear:** The cartilage covering the ends of the bones in the 1st MTP joint gradually breaks down, leading to pain and swelling.
- **Bone Spurs:** As the cartilage deteriorates, the body may produce extra bone in the form of spurs, which can further restrict movement and cause discomfort.
- **Joint Stiffness:** The loss of cartilage and the presence of bone spurs can make the joint stiff and difficult to move, particularly after periods of inactivity.



Symptoms of 1st Metatarsal Phalangeal Joint Osteoarthritis

If you have osteoarthritis in the 1st MTP joint, you may experience:

- **Pain:** Pain in the big toe that worsens with activity or pressure.
- **Swelling:** Swelling around the joint, making it appear larger than usual.
- **Stiffness:** Difficulty in moving the big toe, especially in the morning or after resting.
- **Bone Spurs:** Hard lumps around the joint, which are bone spurs.
- **Reduced Range of Motion:** Limited ability to bend the toe up and down.

Treatment Options for 1st Metatarsal Phalangeal Joint Osteoarthritis

There are several treatment options available to help manage the symptoms of 1st MTP joint osteoarthritis:

Non-Surgical Treatments

- Analgesia: From your Doctor or pharmacist.
- Footwear Modifications: Wearing shoes with a wide toe box, cushioned soles, and stiff bottoms can help reduce pressure on the joint. Orthotic inserts or custom-made shoes may also be recommended.
- Physical Therapy: Exercises and stretches can improve joint flexibility and strengthen the muscles around the joint, helping to alleviate pain and improve function.
- Activity Modification: Avoiding activities that put excessive strain on the joint, such as running or jumping, can help prevent further damage.

Surgical Treatments

If non-surgical treatments do not provide sufficient relief, your doctor may recommend surgery. Surgical options include:

- Cheilectomy: Removal of bone spurs and part of the joint to improve movement and reduce pain.
- Arthrodesis (Fusion): Fusing the bones of the joint together to eliminate pain, though this will result in reduced movement.

What will my surgery entail - Arthrodesis?

- Surgery is conducted as a day case procedure, meaning that you will go home on the same day.
- The anaesthetist will talk to you about the different anaesthetic options available to you ensuring that it is individualised to your specific wants and needs.
- The surgery involves an incision being placed on the top of your foot centred at the 1st metatarsal phalangeal joint.
- The diseased cartilage is removed, toe positioned straight and held with a plate and screw construct to encourage the toe to fuse.
- The incision is closed and the foot is wrapped in a bulky bandage which will remain on for 2 weeks. You will be able to walk straight away after the surgery but with most of your weight through your heel in a custom shoe.

What can I expect post-operatively?

- You will be in your post-op shoe for 6 weeks total which will allow heel weight-bearing only.
- After 2 weeks you will require a wound at which point the bulky dressing can be removed. At this point the wound will most likely be healed but you may require a few more days with a small dressing on to ensure that the wound is fully healed. Once healed you will be able to get the wound wet.
- At 6 weeks following surgery you will require a weight bearing X-ray of your foot to confirm that the bones are

healing well. They are not expected to be fully healed at this point.

- If all is well at the 6 weeks check you can start to wear normal supportive footwear.
- It is normal for the foot and especially the big toe to remain swollen for 3-6months following surgery.
- It is normal for you to experience some pain in the toe from time to time for the first 3 months. You are expected to return to your normal level of function at 3 months.