

FREIBERG'S DISEASE

www.dfac.co.uk

What is Freiberg's Disease?

This is a condition caused by a lack of blood supply to the head of the metatarsal bone at the base of the toe. The most common site is the second metatarsal, although the other metatarsals can be affected. The lack of blood supply causes the head to crumble and collapse, thereby making the joint at the base of the toe, the metatarsophalangeal joint, painful – see picture, right.



What is the cause?

Freiberg's disease can occur after a traumatic injury. Often, however, it occurs spontaneously, with no obvious cause.

What is the treatment?

If diagnosed early, it may be possible to rest the foot, to allow the blood supply to recover. Often, however, the joint is too badly damaged and surgery is necessary.

In very mild cases, it may be possible to simply tidy up the joint, known as debridement. This procedure removes any loose fragments of bone and may reduce the pain. It will not, however, cure the pain once more severe arthritis is present.

If the arthritis is not too advanced, and only the upper part of the head of the metatarsal is damaged, it may be possible to perform an osteotomy. This procedure re-sets the shape of the bone, aiming to restore movement to the joint and reduce the pain (see picture, right). The osteotomy is held with small pins or staples.



If arthritis is established in the joint and is very painful, then there are two final surgical options:

- Joint excision – this involves removing the base of the proximal phalanx, the bone at the base of the toe. This leaves a shortened, floppy toe, but has a good chance of significantly reducing the pain
- Joint replacement – this involves replacing the arthritic joint with a ceramic joint. We use the Moje replacement, similar to that used in hallux rigidus (see relevant section). This is a relatively experimental technique that needs careful consideration before being used.

Are there any potential complications of surgery?

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.

If a joint replacement is performed, there is a risk that the implant may fail. Should this be the case, further more complex surgery may be needed to resolve the problem.