

## HALLUX RIGIDUS – Synthetic interposition arthroplasty (CARTIVA)

Pain, swelling and stiffness at the base of the big toe is frequently caused by osteoarthritis of the 1<sup>st</sup> (big toe) metatarso-phalangeal joint. It results in pain, spurs and progressive restriction of movement. The cause is unfortunately unknown in most cases. The treatment is aimed at relieving pain. If non-operative means such as anti-inflammatories, accommodative footwear or orthoses fail to control symptoms surgery may be indicated. Synthetic interposition arthroplasty is a joint movement preserving option for managing big toe osteoarthritis. It is a relatively new procedure however it has promising medium-term results in clinical studies.

### The Surgery:

The procedure is performed under general anaesthetic. An incision is made on top of the big toe and the joint is exposed. The spurs are removed with a small saw. A hole is reamed in the metatarsal head to allow placement of the synthetic 'cartilage-like' implant. The layers of the joint and skin are closed. A dressing is applied.

### Post-Operatively:

You can walk on the foot with a surgical shoe/sandal (provided) as soon as you are awake. Crutches are optional. You will need to keep the foot elevated as often as possible for the first 2 weeks. This is to control swelling and pain. You may need to take medication to control pain. You should keep the bandages dry and clean until your first post-operative clinic visit.

Activity	Timeframe (approximate)
Walk with surgical shoe/sandal	6 wks
Walking in wide shoes	6 wks– 3 mts
Most activities and shoes	3 – 6 mts
Full Recovery	Up to 12 mts

Type of Work	Time off
Sitting	2 weeks
Standing	4 weeks
Driving	4 weeks
Lifting	6 weeks

### Risks of surgery

All surgical procedures carry some risk. The risk of complications with interpositional arthroplasty is low. Most patients benefit from this surgery. A small number of patients can be made worse. You should weigh up the benefits with the risks prior to electing to have surgery.

This is a list of the most common problems which can occur:

- Swelling – is normal and improves with time, but can occasionally persist past 6 months
- Wound healing problems – increased if smoking, diabetes, poor circulation
- Nerve injury – resulting in numbness or pins and needles, occasionally pain
- Bleeding – usually just visible through the dressing
- Infection – minimised with antibiotics, elevation, keeping the dressing clean and dry
- Pain – which may require strong medication (usually Paracetamol is adequate)
- Progression or recurrence of disease – may require further surgery, usually a fusion

These are rarer complications, but they can and do happen:

- Failure to relieve pain or transfer of pain to other part of foot
- Early mechanical failure of the implant – wear or loosening/dislodgement
- Complex regional pain syndrome (CRPS) – nerve pain syndrome, risk reduced with Vitamin C 500mg daily for 40 days
- DVT – clot in the deep veins of the leg (increased if smoking, contraceptive pill, hormone replacement or previous history)
- Anaesthetic complications – more likely if there are pre-existing medical disorders

**Dr. Andrej Nikoloski** MBBS(Hons) FRACS (Orth) FAOrthA  
Orthopaedic Foot and Ankle Surgeon