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Adult and Paediatric Orthopaedic Surgeon  
Specialising in the Foot and Ankle

## Ankle Replacement

### **INTRODUCTION**

Like all joints, the ankle can be affected by arthritis.

Ankle replacement surgery is an effective way to treat the pain of ankle arthritis, while maintaining range of motion of the ankle. The ankle replacement is made up of two pieces of titanium alloy that resurface the tibia and talus bones. In between the metal is a polyethylene (plastic) insert.

### **THE PROCESS**

These days, I use patient-specific instrumentation to perform your ankle replacement. This means that the instruments I use to make your bony cuts have been specifically manufactured and tailored to fit your ankle. To do this, a CT scan of the ankle is performed and this is sent to the USA. The implant company uses engineers and a computer software programme to plan your operation and design your instruments. This maximises the accuracy in which the surgery is performed and in which the ankle replacement is inserted.

There are a number of steps involved in ankle replacement surgery:

1. General anaesthetic, Popliteal Nerve Block (behind knee) for post-op pain relief
2. Intravenous antibiotics
3. 15 cm longitudinal incision over front of ankle
4. Removal of bone from tibia and talus using patient-specific instrumentation
5. Insertion of metal tibial and talar components
6. Insertion of polyethylene insert
7. Check x-rays
8. Wound closure with stitches/sutures
9. Plaster back slab for 2 weeks

### **RISKS & COMPLICATIONS**

Every surgical procedure carries some risk. These risks are largely uncommon and many are rare.

They include:

Anaesthetic complications

Wound infection

Ongoing pain

Deep Vein Thrombosis (DVT)/Pulmonary embolism (PE)

Deep infection necessitating removal of implants

Component failure and need for Revision surgery

## **POST OPERATIVE PROTOCOL**

3 – 4 night stay in hospital for observation and physiotherapy  
Weeks 0 – 2: Nonweightbearing using kneewalker or crutches  
End Week 2: wound check, conversion to moonboot, commence weightbearing  
Week 6: Xray and boot weaned  
Swelling for 4 – 6 months on average  
Return to most activities by 3 – 4 months  
Full recovery up to 12 months

## **PROBLEMS AND CONCERNS**

If you have any queries or concerns, contact Dr. Ling's rooms on 9650 4782 between business hours. After hours or on weekends, if your matter is urgent, please present to the Emergency Department at Prince of Wales Hospital if you are an adult, or Sydney Children's Hospital if the patient is your child, and you will be seen by the Orthopaedic Registrar on call, who will contact Dr Ling directly