

# Ankle Joint Fusion

## INTRODUCTION

Like all joints the ankle can be affected by various types of arthritis. This leads to increasing pain, swelling and stiffness, resulting in an ankle that does not function well. Ankle fusion (arthrodesis) is a very effective way to relieve the pain of ankle arthritis. Ankle fusion involves joining the two main bones of the ankle (the tibia and the talus together). After an ankle fusion most patients are able to walk without a limp and have minimal pain.

## THE SURGERY

Ankle fusion surgery involves a number of steps:

- General anaesthetic, nerve block and IV antibiotics
- Tourniquet around the thigh
- Long incision over the front of the ankle joint
- Removal of any remaining cartilage
- Bone graft harvest (calcaneum or proximal tibia)
- Insertion of bone graft into the ankle joint to stimulate fusion
- Internal fixation with screws +/- a plate
- Check x-rays
- Closure of incision with sutures
- Application of plaster cast

## GUIDELINES FOR POST-OP RECOVERY

### HOSPITAL ADMISSION

- In hospital for 1 night, IV antibiotics

### FIRST 2 WEEKS

- Elevate foot and rest
- Strictly **NON-WEIGHTBEARING** in plaster cast
- Mobilise with knee scooter/crutches/frame
- Cast/boot and dressings to stay dry and intact
- Strong painkillers as required
- Aspirin 100mg, Vitamin D 5000 units and Vitamin C 1g per day
- Antibiotics for 5 days
- Wiggle toes to encourage circulation

### 2 WEEK POST-OP APPOINTMENT

- Nurse review: removal of cast, dressings & sutures
- Change to VACOCast surgical boot

### WEEKS 3-6

- Strictly **NON-WEIGHTBEARING** in boot
- Surgical boot on at **ALL** times, including in bed and showers, except to change boot liner
- Keep ankle and boot dry at all times
- Mobilise with knee scooter/crutches/frame
- Elevate foot when resting
- Continue Aspirin, Vitamin D and Vitamin C
- Wiggle toes to encourage circulation
- Podiatry/physiotherapy review (arrange first appointment 2-5 days after 2-week post-op check)
- **REHAB - PODIATRY/PHYSIOTHERAPY:**
  - Soft tissue manipulation, nerve desensitisation
  - Gentle midfoot & forefoot joint mobilisation
  - **NO** stresses through ankle joint
  - General upper body, core, hip and knee exercises

### 6 WEEK POST-OP APPOINTMENT

- X-ray and review by Dr Zilko

### WEEKS 7-12

- Surgical boot on at all times during the day except for rehab exercises
- Can sleep out of boot at night
- Can shower out of boot whilst on shower chair
- Elevate foot when resting
- Continue Aspirin, Vitamin D and Vitamin C
- **PODIATRY/PHYSIOTHERAPY:**
  - Commence partial weightbearing in surgical boot with crutches/frame, and progress up to full weightbearing as tolerated in the boot
  - Commence gentle passive and active ROM of subtalar, midfoot and forefoot joints
  - Soft tissue massage and scar mobilisation

### 12 WEEK POST-OP APPOINTMENT

- X-ray and review by Dr Zilko

### FROM 12 WEEKS

- **PODIATRY/PHYSIOTHERAPY:**
  - Transition out of boot into normal supportive shoes
  - Gait re-training, continue strength and conditioning

### 6 MONTH POST-OP APPOINTMENT

- CT scan to confirm fusion and review by Dr Zilko

Full recovery is usually 6-12 months.

*Every patient's recovery is individual and depends on the severity of the disease and complexity of the surgery.*