

# Triple Joint Fusion

## INTRODUCTION

The triple joint complex includes the subtalar, talonavicular and calcaneocuboid joints. Together these joints are responsible for most of the side-to-side movement of the hindfoot. Triple fusion (arthrodesis) is a reliable and effective method of treating severe hindfoot deformities or arthritis. After a triple fusion most patients have considerably less pain and improved foot function.

## THE SURGERY

Triple joint fusion surgery involves a number of steps:

- General anaesthetic, nerve block and IV antibiotics
- Tourniquet around the thigh
- Incisions over the outside and inside of the foot
- Removal of any remaining cartilage in the subtalar, talonavicular and calcaneocuboid joints
- Bone graft harvest (proximal or distal tibia)
- Insertion of bone graft into the joints to stimulate fusion
- Internal fixation with screws, staples and/or plates
- Check x-rays
- Closure of incisions with sutures
- Surgical camboot (VACOCast) or plaster cast

## GUIDELINES FOR POST-OP RECOVERY

### HOSPITAL ADMISSION

- In hospital for 1-2 nights
- IV antibiotics and Clexane injections

### FIRST 2 WEEKS

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

### 2 WEEK POST-OP APPOINTMENT

- Nurse review: removal of cast, dressings and sutures
- Change to VACOCast surgical boot if in cast

### WEEKS 3-6

- Strictly **NON-WEIGHTBEARING** in boot
- Surgical boot on at **ALL** times, including in bed, except for physio/exercises & showers (seated with shower chair)
- Mobilise with knee scooter/crutches/frame
- Elevate foot when resting
- Aspirin 100mg and Vitamin D 5000 units per day
- Physiotherapy review (arrange first appointment for 2-5 days after the 2-week post-op check)
- **PHYSIOTHERAPY:**
  - General upper body, core, hip and knee exercises
  - Gentle active ankle plantarflexion/dorsiflexion and toe flexion/extension
  - **NO** inversion/eversion
  - Soft tissue massage and scar mobilisation

### 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 physio/exercises & showers (with shower chair)
- Can sleep out of boot at night
- Elevate foot when resting
- Aspirin 100mg and Vitamin D 5000 units per day
- **PHYSIOTHERAPY:**
  - Commence partial weightbearing in surgical boot with crutches/frame, and progress up to full weightbearing as tolerated
  - Passive and active ROM of ankle and forefoot joints

### 12 WEEK POST-OP APPOINTMENT

- X-ray and review by Dr Zilko

### FROM 12 WEEKS

- **PHYSIOTHERAPY:**
  - Transition out of boot into normal supportive shoes
  - Gait re-training
  - Continue lower limb strength and conditioning

Full recovery is usually 6-12 months.

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