

5th Metatarsal Fracture Fixation

INTRODUCTION

The 5th metatarsal is the long bone of the little toe. Fractures at the very base of the 5th metatarsal (Zone I) tend to heal well without surgery, but fractures that extend into the 4th-5th metatarsal junction (Zone II, or Jones fractures) and fractures just beyond this region (Zone III) have a poor blood supply and a high risk of not healing. Surgery is recommended for these fractures, which involves the insertion of a compression screw and bone graft using a minimally invasive technique.

THE SURGERY

Minimally invasive 5th metatarsal fracture surgery involves a number of steps:

- General anaesthetic and IV antibiotics
- Tourniquet around the thigh
- Small incision ~6mm on outside of foot
- X-ray guidance for insertion of a guide wire
- Drilling and reaming of the fracture site
- Insertion of bone graft to stimulate healing
- Insertion of a solid compression screw
- Closure of incision with sutures
- Local anaesthetic block
- Surgical camboot (VACOCast)

GUIDELINES FOR POST-OP RECOVERY

HOSPITAL ADMISSION

- Most patients go home on the day of surgery

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
- Wiggle toes to encourage circulation

2 WEEK POST-OP APPOINTMENT

- Review by nurse & removal of dressings and sutures

WEEKS 3-6

- **TOUCH WEIGHTBEARING** in boot
- Surgical boot on at ALL times, including in bed and showers, except for physio/exercises
- Elevate foot when not walking
- Aspirin 100mg and Vitamin D 5000 units per day
- Daily scar massage from 3 weeks post-op
- Physiotherapy review (arrange first appointment for 2-5 days after the 2-week post-op check)
- **PHYSIOTHERAPY:**
 - Commence active and passive range of movement exercises - ankle and toe flexion/extension
 - **NO** rotational movements or stress to midfoot
 - General upper body, core, hip and knee strength & conditioning

6 WEEK POST-OP APPOINTMENT

- X-ray and review by Dr Zilko

FROM 6 WEEKS

- **PHYSIOTHERAPY:**
 - Commence **FULL** weightbearing and transition out of boot into normal supportive shoes
 - Continue ROM
 - Gait re-training
 - Ankle stability and proprioception exercises
 - Stationary bicycle/elliptical trainer

3 MONTH POST-OP APPOINTMENT

- X-ray and review by Dr Zilko

FROM 3 MONTHS

- Return to normal activities if fracture healed
- **PHYSIOTHERAPY:**
 - Straight-line jogging from 3 months and progress
 - Work-specific or sport-specific training

Full recovery is usually 3-6 months.

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