

Tibialis Anterior Tendon Repair

INTRODUCTION

The tibialis anterior tendon attaches to the muscle along the front of the lower leg that pulls the ankle upwards. The tibialis anterior tendon can tear partially or rupture fully as the result of trauma or degenerative changes. Repair of the tendon aims to restore the normal walking pattern, to correct foot deformity and reduce pain. Sometimes a transfer of the adjacent extensor hallucis longus (EHL) tendon is required if the tibialis anterior tendon is poor quality or has been chronically ruptured.

THE SURGERY

Tibialis anterior tendon repair surgery involves a number of steps:

- General anaesthetic and IV antibiotics
- Tourniquet around the thigh
- Incision on the top of the foot
- Exposure of the torn tibialis anterior tendon
- Tendon repair or transfer using sutures and/or bone anchors
- Transfer of adjacent EHL tendon into the midfoot using a bone tunnel and interference screw
- Closure of tendon sheath
- Closure of incisions with sutures
- Local anaesthetic block
- Plaster cast or VACOped boot in dorsiflexion

GUIDELINES FOR POST-OP RECOVERY

HOSPITAL ADMISSION

- In hospital post-op for 1 night, IV antibiotics

FIRST 2 WEEKS

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

2 WEEK POST-OP APPOINTMENT

- Review by nurse & removal of cast, dressings and sutures
- Change to VACOped surgical boot locked in 10° dorsiflexion

WEEKS 3-6

- Surgical boot on at ALL times, including in bed, except for rehab exercises & showers (seated with shower chair)
- Elevate foot when resting
- Daily scar massage from 3 weeks post-op
- Continue Aspirin and Vitamin C
- Podiatry/physiotherapy review (arrange first appointment 2-5 days after 2-week post-op check)
- **REHAB - PODIATRY/PHYSIOTHERAPY:**
 - Joint mobilisation, soft tissue manipulation, nerve desensitisation
 - Commence gentle active and passive ankle, midfoot and forefoot ROM exercises. **Avoid forced plantarflexion.**
 - Commence partial weightbearing, and progress up to full weightbearing as tolerated - in surgical boot for all weightbearing
 - General upper body, core, hip and knee exercises

6 WEEK POST-OP APPOINTMENT

- Review by Dr Zilko

WEEKS 7-16

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

FROM 16 WEEKS

- **PODIATRY/PHYSIOTHERAPY:**
 - Work-specific or sport-specific training
 - Safe to commence open-chain impact/running if tendon well healed

Full recovery is usually 6-12 months.

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