Physiotherapy Following an Ankle Fracture

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June 2012
Objectives

- Ankle anatomy
- Fracture Types
- Fracture Management
- Management whilst Immobilized
- Post Immobilization
Bony Anatomy

[Image of a foot with labeled bones and joints]

- Tibia
- Fibula
- Transverse Tarsal Joint
- Talus
- Talocalcaneal Joint
- Calcaneus
- Navicular
- Cuboid

[Image of an ankle in a different perspective]
Weber Fracture Classification

A

B

C
Lauge-Hansen Classification of Ankle Fractures

Pronation - external rotation (PER)  Pronation - abduction (PA)

Supination - external rotation (SER)  Supination - adduction (SA)
An ankle fracture
Operative v. Conservative

- **Operative**
  - Unstable fracture
  - Displaced fracture
  - Fracture dislocation

- **Conservative**
  - Undisplaced fracture
  - Good reduction achieved with manipulation
  - Pt medically unstable
  - Pt refusing theatre
  - Pt has PMH that increase risk of post op infection
Immobilisation Options

* Below Knee POP
* Above Knee POP
* Aircast Boot
* No Immobilisation
Physiotherapy whilst Fracture Healing

* Maintain the knee ROM and strength
* Maintain the knee and hip muscle strength
* Get the patient as mobile as possible; likely to be NWB
* If the ankle is not immobilised increase the ROM as the pain allows.
Elbow Crutch Technique

- Move 2 crutches forward
- Hop in to the middle
- Repeat

- Ensure crutches wide enough apart
- Don’t hop through the crutches until have good balance
Main aims

- Gait re education
- Walking aid progression
- Swelling management
- Scar management
- ROM
- Muscle strengthening
- Balance and proprioception
- Functional- return to sports
- Outcome Measures
Gait re-education and Walking Aid Progression

- Reduced weight bearing
- Tight gastroc leading to foot turning out
- Heel to toe due to reduced DF

- Wean off airboot
- 2 elbow crutches to 1 elbow crutch
- 1 elbow crutch to independent mobility
Swelling Management

- Ice
- Ankle ROM exercises
- Elevation
- Effleurage
- Mobility
Scar Management

- Massage
- Moisturise
- Ankle ROM
Range of Movement

* Active movements
* PPM
* Accessory movements
* MWMs
* Active assisted
* Stretches
  * Gastrocnemius and soleus
* Weight bearing exercise
* Mobility

* Exercise is an important part of the rehabilitation programme.
Muscle Strengthening

- Active ROM
- Resisted
  - Theraband
- Weight bearing
  - Bilateral to unilateral heel raises, squats, SLS +/- squat, wobble board
Balance and Proprioception

- SLS
- Tandem stance
- Heel-toe
- Wobble board
  - Bilateral to unilateral stand
- Uneven surfaces
Functional

* Hopping
* Change of direction
* Zig Zag
* Return to running
* Sport specific
* Advice to stop smoking
Outcome Measures

- VAS
- ROM
- Oxford Muscle Grading
- SLS
- Patient specific goals
- LEFS