



## Procedure Information Sheet

### Introduction

The ankle joint is the largest, heavily loaded articulation in the foot & ankle. It has to maintain stability, as well as provides mobility. Most ankles are fractured as a result of indirect injury, from either an internal or external forces of twist, turning or rotation, resulting in fracture and/or ligamentous injuries. When serious, it can lead to dislocation or even open fractures.

The ankle joint is formed from three pieces of bones. If the fracture cannot be reduced accurately, it would lead to post-traumatic osteoarthritis.

### Indication

- Ankle will swell after it fractured. The lower limb should be elevated, avoiding haematoma or fracture blister formation. If there is a wound, or open fracture, priority wound management is needed. Debridement surgery becomes necessary.
- If the fracture is mild and the ankle articulation is preserved, conservative management with a Plaster-of-Paris is adequate. Patient can walk with crutches, without weight bearing on injured foot.

### The Operation / Procedure

1. When the fracture is displaced, or even dislocated, operative reduction and internally fixed should be considered. The operation will be performed under general or local anaesthesia. In general, internal fixation is accompanied with the use of prophylactic use of antibiotic to minimize infection. Fixation methods include use of K-wire, tension band wire, screws and plate. After fixation, cast immobilization may not be necessary.
2. In complicated situations such as severe open fractures, comminuted fractures, or when there is soft tissue defect, extra procedures such as bone grafting, external fixation frame or microvascular reconstruction may be necessary, usually in stages.

### Before the Operation / Procedure

1. Doctor will explain to patient about operation, risks and complications. Patient has to sign a consent form.
2. Body check up as doctor's order will be done before operation, eg. blood tests, urine routine, ECG and X-ray.
3. Correct and stabilize underlying medical problem, eg. heart disease, hypertension, diabetes mellitus etc.
4. Pre-operative assessment by anaesthetist if necessary.
5. To reduce swelling of injured limb before operation by old compress or using pillows.
6. Fasting according to doctor's advices.

### After the Operation / Procedure

1. Hospital care
  - 1.1. Close observation of vital signs, wound and drainage.
  - 1.2. Resume diet according to doctor's advice.
  - 1.3. Intravenous therapy, analgesic and antibiotic according to doctor's prescription.
  - 1.4. Fractured limb will be wrapped in elastic bandage and elevated to control bleeding and swelling.
  - 1.5. Keep wound clean and dry, if there is a drain, it will be removed according to doctor's order.
  - 1.6. Ankle have to be kept in 90° in neutral position to avoid joint stiffness.
  - 1.7. Perform ankle exercises and use walking aids according to doctor's order and physiotherapist advices.
  - 1.8. Balanced diet.
  - 1.9. Removal of stitches about after 2 weeks according to doctor's advices.
2. Home care after discharge
  - 2.1. Keep wound clean and dry. Follow-up as advices.
  - 2.2. Most patients with an ankle fracture need to avoid loading that foot for about six weeks, using two crutches for non-weight-bearing walking.
  - 2.3. Use walking aids according to physiotherapist advice.
  - 2.4. If there is signs and symptoms of wound infection, such as redness, swelling, hotness, pain or presence of purulent discharge, consult doctor immediately.

#### Patient's Label

Patient Name: \_\_\_\_\_  
Hospital No: \_\_\_\_\_  
Episode No: \_\_\_\_\_



### Risk and Complication

1. Complications related to anaesthesia is rare (<0.01%). But may lead to permanent harm or death.
2. Risks related to the operation itself:
  - 2.1. Non-union.
  - 2.2. Mal-union.
  - 2.3. Suboptimal reduction.
  - 2.4. Joint stiffness.
  - 2.5. Post-traumatic osteoarthritis.
  - 2.6. Wound complications.
  - 2.7. Nerve injuries, blood vessels injuries and loosening.
  - 2.8. Exposure of implants.

### Disclaimer

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

### Reference

Smart Patient Website of Hospital Authority, Procedure Information Sheet: Ankle Fracture Fixation Surgery (04/2021)

Patient's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

<p><b>Patient's Label</b></p> <p>Patient Name: _____</p> <p>Hospital No: _____</p> <p>Episode No: _____</p>
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