

Introduction

The calcaneus is the lowest piece of bone in the foot and ankle. It withstands the highest pressure of the body, at the same time it forms a major part of the subtalar joint, which is essential for one's ability to walk on uneven ground. Calcaneal fracture is one of the commonest fractures of the foot.

The Operation

Operation is to reduce the fracture, and fix it with screws or plate internally. The goal of the surgery is to preserve the joint, reduce complications of a displaced fracture, at the same time allows rapid return of joint motion. The method commonly uses a lateral approach, an open reduction and internal fixation. If there is significant bony defect, you may require bone grafting.

Preoperative Preparation

1. Admit 1 day before or on same day of this "elective" operation.
2. Anesthetic assessment. **Inform your doctors** about drug allergy, regular medications or other medical conditions.
3. Keep fast for 6 to 8 hours before operation.
4. Empty bladder and change to operation clothes before transfer to operating room.
5. Pre-medication, antibiotic prophylaxis intravenous line may be required.

Postoperative Instruction

- A. General**
1. Mild throat discomfort or pain because of intubation.
 2. Mild discomfort or pain over the operation site. Inform nurse or doctor if pain severe or more analgesics are required.
 3. Nausea or vomiting are common; inform nurses if symptoms severe.
- B. Wound care**
1. Stitches or skin clips (if present) will be taken off around 10-14 days.
 2. The drainage tube will be removed by doctor when drainage decreases, but patient may go home with the drainage tube.
- C. Diet** Resume diet, usually 4 hours after anesthesia, and when taking sips of water well.

Common Risks and Complications (not all possible complications are listed)**A. Anesthesia related complications**

1. Cardiovascular: myocardial infarction or ischemia, stroke, deep vein thrombosis, pulmonary embolism, etc.
2. Respiratory: atelectasis, pneumonia, asthmatic attack, exacerbation of chronic obstructive airway disease.
3. Allergic reaction and shock.
4. Toxicity of local anesthetic may result in serious complication although rare.

B. Procedure related complications

1. Risks are related to the fracture itself: non-union, mal-union, joint stiffness, and post-traumatic osteoarthritis etc.
2. Other risks are wound complications, nerve injuries, complex pain syndrome and problems with implants including loosening or exposure. All may require further action.

Things to take note after discharge

1. Contact your doctor or a nearby Accident & Emergency Department if you find increasing discharge, pain and or redness around the wound.
2. Take analgesics prescribed by your doctor if required.
3. In general patient is free of Plaster of Paris. They usually need crutches for non-weight-bearing walking for six weeks. Physiotherapy for ankle and subtalar joint exercise is most important. For heavy manual workers, occupational therapy is an important part of rehabilitation.
4. Wound healing can be complicated, persistent pain is not uncommon, Prolonged treatment needs patience.
5. For implant removal, it should be considered in individual situations; but if patient requests, it should be done after the fracture has fully healed.

Remarks

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your doctor. Evangel Hospital reserves the right to amend this leaflet without prior notice. We welcome suggestions or enquiries on the information provided in this leaflet. Please contact our Healthcare professionals so that we could follow up and make improvement.

Reference

Hospital Authority: "Calcaneal Fracture Fixation Surgery" (2021)

Smart Patient: http://www.ekg.org.hk/pilic/public/O&T_PILIC/O&T_CalcanealFractFixation_0003_eng.pdf (12-07-2023)