



## Operation Information

### External Fixation

#### Introduction

External fixation is a process for fracture fixation by which pins or wires are inserted into bone percutaneously. These pins and wires are attached to the external device which remains outside the body and secures the bone in a proper alignment.

#### Outcomes

The expected outcomes of this operation are to correct bone or soft tissues deformities, and allow the affected site to heal into its normal anatomical position.

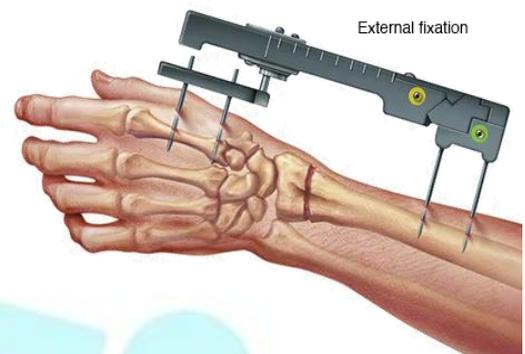
#### Procedures

1. The operation is performed under general anaesthesia.
2. The doctor will drill holes into undamaged portions of the bone and install bolts or wires into the holes.
3. A rod with special ball-and-socket joints joins the bolts to make a rigid support outside the body.
4. The doctor will set the fracture back to its proper anatomical configuration by adjusting the joints.

#### Possible Risks and Complications

1. Wound infection
2. Loosening of pins
3. Injury to the nerve
4. Pressure sores

\*\* The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all procedures are carried out with utmost professionalism and care, this does not rule out the possibility of complications arising. In the event of peripheral organ damage or post-operative haemorrhage or leakage, further operations may be required.



Source:  
[https://www.mayoclinic.org/-/media/kcms/gbs/patient-consumer/images/2013/08/26/10/19/ds00971\\_im04075\\_mcdc7\\_wristfixthu.jpg.jpg](https://www.mayoclinic.org/-/media/kcms/gbs/patient-consumer/images/2013/08/26/10/19/ds00971_im04075_mcdc7_wristfixthu.jpg.jpg)

## **Pre-operative Preparations**

1. Good hygiene can prevent surgical wound infection. Therefore, we advise you to clean up yourself on the day of operation.
2. The procedure and possible complications will be explained by your doctor and a consent form must be signed prior to the operation.
3. Please inform the doctor and nurse all your past medical history, previous surgical operations, current medication and any complication with drug or anaesthesia. Please inform doctor if you are taking medications that affect blood coagulation such as Aspirin, Warfarin, Xarelto or Pradaxa, nonsteroidal anti-inflammatory drug (NSAID) such as Ibuprofen, Naproxen and Chinese medication.
4. You may have x-ray before the operation if needed.
5. Nurse will supply surgical soap to you for washing the operation site as necessary.
6. Shaving of the incision site may be required.
7. Before your operation a doctor will mark the side you are to be operated on. Please do not washing off the marking.
8. No food or drink six hours before the operation.
9. Please change into a surgical gown after removing all belongings including undergarments, dentures, jewellery and contact lenses.
10. Please empty your bladder before the operation.

## **Post-operative Instructions**

### **General**

1. After general anaesthesia, you may:
  - experience discomfort in the throat after tracheal intubation.
  - experience side effects of anaesthesia includes feeling tired, drowsy, nausea or vomiting. Inform the nurse if symptoms persist or worsen.
2. Please inform the nurse of wound pain. Proper pain relief treatment by injection or oral medication may be prescribed by the doctor.
3. The pin site will be closely observed and you blood pressure, pulse or oxygen saturation will also be regularly measured and monitored.
4. The affected site will be elevated for a few days to help reduce swelling and/or pain.

### **Wound Care**

1. The pin will be covered with a sterile dressing which must be kept clean and dry.
2. Elevation can reduce swelling of the affected site.
3. On average an external fixator may be worn for about 3-4 months, but it depends on the doctor's prescription.
4. After you have worn your external fixator for 10 days, the doctor may allow you to shower while wearing your fixator. The fixator and pin sites should be kept dry and clean afterward.

### **Diet**

1. Please continue fasting (No food or drinks) immediately after the operation. Intravenous infusion may be required to supply fluid and electrolytes
2. A normal diet may be resumed as instructed after recovery from anaesthesia.

**Activities**

1. Early mobilization can promote a rapid postoperative recovery. You may follow doctor’s instruction to resume light activities post-operatively.
2. Moving the affected site should be done with extra care. You may bear weight as tolerated with an assistive device.
3. Avoid contact sports and running while in the fixator.
4. Put a soft covering around your device for protection and prevent any damage to bedding.
5. The doctor will suggest as to what your ideal body weight should be.
6. You may be advised physiotherapy about safety handling and moving your affected site.

**Advice on Discharge**

1. Please comply with the medication regimen as prescribed by your doctor.
2. Immediately consult your doctor or return to hospital for professional attention in the event of severe wound pain associated with redness and swelling, secretion of pus, massive bleeding, pins becomes loose or moves, shivering, high fever over 38°C or 100.4°F, or any other unusual symptoms, etc.
3. Any follow-up consultations should be attended as scheduled.

Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

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Compiled by Union Hospital Operating Theatre (OT) Governance Committee

The above information is for reference only, please enquire your physician for details  
Our Hospital reserves the RIGHT to amend any information in this leaflet without prior notification