PARTS OF EXTERNAL FIXATOR

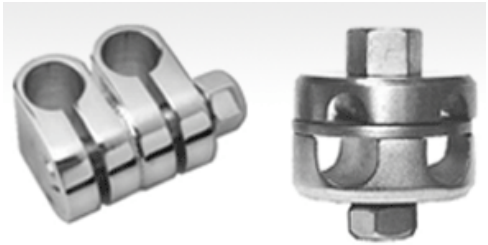
- Schanz Screw



- Connecting Rods



- Clamps



COMPLICATIONS

Major **complications** that threaten the success of fracture healing include:

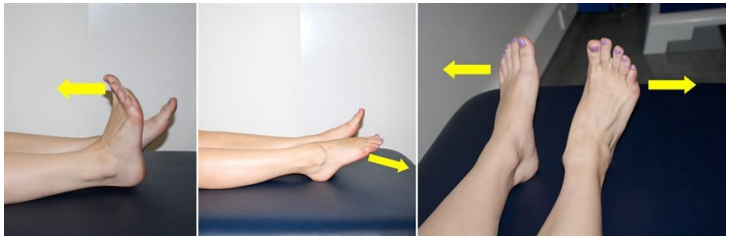
- Failure of the fixator to maintain reduction
- Failure of the bone-pin interface
- Fracture healing problems
- Infections

POST OPERATIVE CARE

- Pain and swelling management in the early postoperative period, elevation and standard postoperative pain control is adequate
- Pin care dry gauze dressings are wrapped around each fixator pin (below the bars) to reduce swelling and to absorb blood or wound secretion. Once the stab incisions are dry, pin sites are best left open.
- Motion exercises early active and passive range of motion exercise of the adjacent joints can prevent contractures and reduce disuse atrophy.



Dry gauze dressing

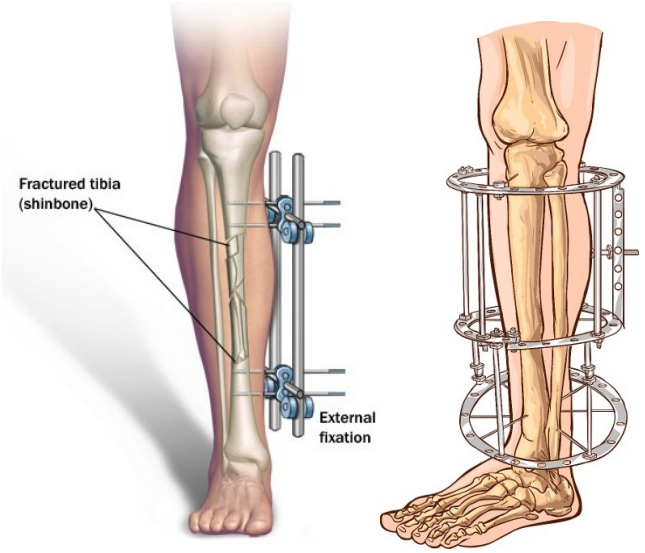


Motion Exercise

UNIVERSITY OF MALAYA MEDICAL CENTRE

Patient Information Leaflet

EXTERNAL FIXATOR



WHAT IS EXTERNAL FIXATOR?

An external fixator is a device placed outside the skin to support and stabilize fractured bones as a temporary treatment for fractures.

It is also often used when there are multiple injuries which are unsuitable for insertion of any implants.

Other times, an external fixator can be used as a device to stabilize the bone until healing is complete.

WHAT IS THE INDICATION FOR AN EXTERNAL FIXATOR?

- Stabilization of open fractures
- Correction of extremity malalignments and limb length discrepancies
- Initial stabilization of fracture in poly trauma patients (damage control orthopedics)
- Closed fracture with associated severe soft tissue injuries
- Certain pediatric fractures
- Open fractures that have significant soft tissue disruption (e.g., type II or III open fractures)
- Comminuted fracture, especially near joint

HOW TO CARE FOR THE PIN SITE?

Step 1 Prepare the cleaning supplies

- Disposable cup
- Cotton swab
- Dressing gauze
- Paper towel
- Waste bag
- Cleaning solution
  e.g. normal saline





Step 2

- Remove old dressing
- Wash hand with water and soap. Dry it.
- Don't touch anything

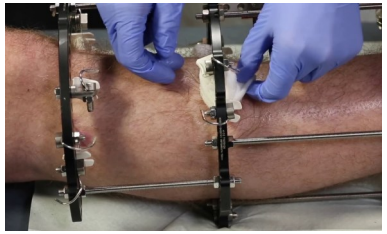


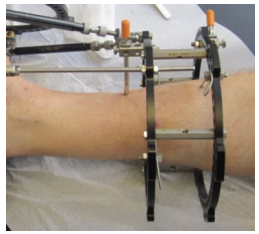
Step 3

- Saturate few cotton swabs with the cleansing solution
- Gently massage the skin around the pins with finger-tips to bring any drainage out
- Change cotton swabs as often as necessary
- Dry the pin site with new cotton swab
- Wrap sterile gauze loosely around the pin site
- When the pin sites are dry, it should be left uncovered and exposed to air









TYPES OF EXTERNAL FIXATOR

Illizarov Apparatus

Taylor Spatial Frame

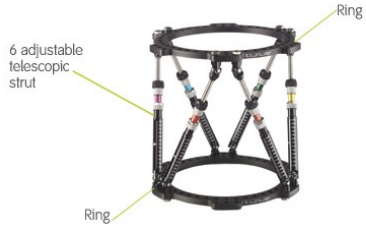
Hoffmann External Fixator System

Rail External Fixator

Stuller– Heiss External Fixator



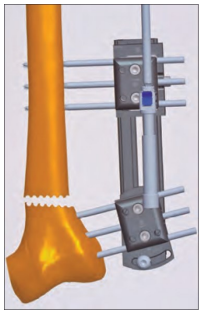
Illizarov Apparatus



Taylor Spatial Frame



Hoffmans External Fixator System



Rail External Fixator