



M.P. SHAH HOSPITAL
A Legacy of Care

OPEN REDUCTION INTERNAL FIXATION ORIF

Open Reduction Internal Fixation (ORIF) is a method of surgically repairing a fractured bone that can avoid the need for a plaster for long periods of time.

What is ORIF?

Open Reduction Internal Fixation (ORIF) is a method of surgically repairing a fractured bone. This generally involves either the use of plates and screws or an intramedullary rod to stabilise the bone.

Generally, ORIF is an urgent surgery. Your doctor might recommend ORIF if your bone:

- Has broken in multiple places
- Has moved out of position
- Sticks out through the skin

How is ORIF carried out?

There are two separate components to an ORIF procedure. The first is the "open reduction" part, which refers to using open surgery to set the bones. Open surgery may be required when a fracture is complex or there are many pieces of bone. The surgeon makes an incision in the area of the break to access the involved bone or bones and manipulates them back into place. X-rays are used to confirm that the fracture has been fully addressed.

The internal fixation involves the use of pins, plates and screws to hold the bones in place. This is done because the bones cannot heal with casting or splinting alone. The internal fixators hold the bones together as they begin to heal. Sometimes they are simply left in place, and in other instances, they may be removed when healing is complete. Healing is monitored with the help of imaging e.g. X-rays to ensure that the bone is healing correctly.

Benefits of ORIF

Successful surgery usually enables patients to return to normal daily activities. It can avoid the need for protracted periods of time in plaster. For certain complex fractures it provides the best possible outcome and is necessary above and beyond plaster treatment.

Possible complications

1. General complications associated with any operation

- Pain
- Bleeding
- Infection in the surgical wound
- Unsightly scarring
- Blood clots
- Difficulty passing urine
- Chest infection
- Allergic reaction to anaesthesia
- Heart attack or stroke



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2. Complications specific to this operation

- Nerves, blood vessels, ligaments, muscles, and bones may be damaged
- Stiffness, numbness and weakness in treated joints
- Pain
- Movement problems
- Blood clots
- Stroke
- Tendon or ligament damage
- Incomplete or abnormal bone healing
- Metal hardware moving out of place
- Reduced or lost mobility
- Muscle spasms or damage
- Audible popping and snapping
- Compartment syndrome - occurs when there's increased pressure in the arm or leg.

If the hardware gets infected, it might need to be removed. You may also need to repeat the surgery if the fracture doesn't heal properly.

What to expect following the procedure

- After ORIF doctors and nurses will monitor your blood pressure, breathing and pulse. They'll also check the nerves near the broken bone.
- Depending on your surgery and nature of fracture, you may go home that **day or you might stay in the hospital for one to several days.**

Self-Care at home

- **Take pain medication** - Follow your doctor's instructions.
- **Make sure your incision stays clean** - Keep it covered and wash your hands often. Ask your doctor how to properly change the bandage.
- **Lift the limb** - After ORIF, your doctor might tell you to elevate the limb to decrease swelling. Follow instructions given to you.
- **Don't apply pressure** - Your limb may need to stay immobile for a while. If you were given a sling, wheelchair or crutches, use them as directed.
- **Continue physical therapy** - as advised.

Attend all your check-ups after surgery so that your doctor can monitor your healing process.