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### "Proximal Humerus Fracture"

A proximal humerus fracture is a common injury to the shoulder.

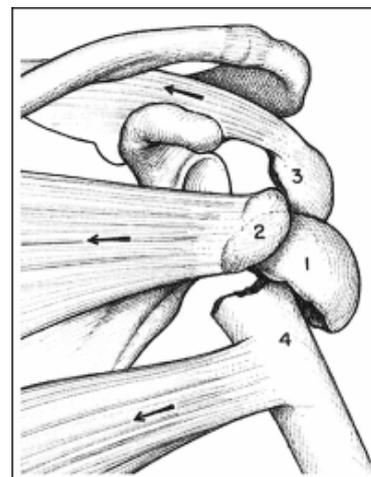
More common in elderly individuals due to osteoporosis.

90% heals with non-operative treatment

Some requires Hemiarthroplasty or internal fixation

#### Where is the broken bone in a proximal humerus fracture?

A proximal humerus fracture occurs when the ball, of the ball-and-socket shoulder joint, is broken. The fracture is actually at the top of the arm bone.



#### What is the treatment of a proximal humerus fracture?

1. Most often, proximal humerus fractures are not badly displaced, and can be treated with simple management in sling.
2. In more severe or badly displaced fractures, surgery may be necessary.

**In old people:** In surgery, either the fracture pieces are put back together and held in position, or the broken bones are removed and a shoulder replacement is performed.

**In young and some selected old people:** If the fragments of bone can be fixed, either spines, screws, wires, large sutures, or a plate will be used to hold the bones in place.

Majority in young population: may need CT scan assessment:



#### What are the common complications?

1. General complication of anaesthesia
2. 1% chance of infection after surgery: requiring antibiotics and sometimes cleaning of the wound
3. Nerve damage: may have problem in elevating shoulder. Majority may improve with time

4. Instability: joint replacement: Sense o joint coming out of the socket. Sometimes requiring re-operation
5. Failure to heal. May require re-operation and bone grafting.

**Outcome surgery:**

85-90% good to excellent

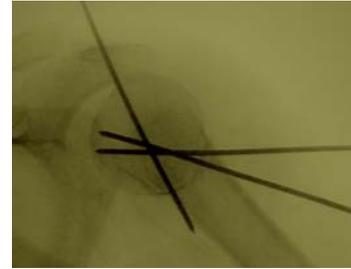
**Different ways of treating fracture proximal humerus?**

**1. Commonest: Sling** for 3 weeks

- Gentle Pendulum exercises
- Active mobilisation after 3 wks
- Avoid sports for 3 months

**2. Manipulation and wire application:**

- Requires General anesthesia
- Wires are passed through the skin
- Problems: infection at the site of pins
- Pin migration



**3. Open reduction and fixation?**

Open the fracture from the front and fix with a plate



**4. Joint replacement:**

- Small subgroup requires joint replacement
- Joint is performed with a cut in front of the joint
- Requires post op physio [Refer total should joint]
- 1% chance of infection
- Small chance of shoulder instability
- Small chance of nerve damage

