

SHOULDER FRACTURE (Proximal Humerus or Glenoid)



■ ■ ■ Description

Shoulder fracture is a broken bone (fracture) of the shoulder at the ball (humeral head) or socket (glenoid). This may be a complete or incomplete break. A fracture involving the humerus may be at the neck or one or both of the attachments (tuberosity) of the rotator cuff muscles.

■ ■ ■ Common Signs and Symptoms

- Severe arm pain at the time of injury
- Tenderness, swelling, and later bruising of the arm or chest
- Later, swelling and bruising move to the elbow and hand
- Visible deformity if the fracture is complete and bone fragments separate (displaced) enough to distort normal body contours
- Numbness, coldness, or paralysis below the fracture involving the forearm or hand from pressure on or stretching of blood vessels or nerves (uncommon)
- Pain with attempted motion of the shoulder such as lifting or rotation of the arm

■ ■ ■ Causes

- Indirect stress due to falling on an outstretched hand or bent elbow or violent muscle contraction
- Direct blow to the shoulder (uncommon)

■ ■ ■ Risk Increases With

- Contact sports such as football, soccer, hockey, and rugby
- Sports in which falling is possible (snowboarding, volleyball, basketball)
- History of bone or joint disease, previous immobilization of the arm
- Poor physical conditioning (strength and flexibility)

■ ■ ■ Preventive Measures

- Appropriately warm up and stretch before practice or competition.
- Maintain appropriate conditioning:
 - Cardiovascular fitness
 - Shoulder strength
 - Endurance and flexibility
- Wear proper protective equipment and ensure correct fit.
- Use proper technique when falling.

■ ■ ■ Expected Outcome

With appropriate treatment and normal alignment of the bones, healing can be expected. Surgery may be necessary to realign fractures that are displaced. Average healing time is 6 to 8 weeks in adults and 4 to 6 weeks in children.

■ ■ ■ Possible Complications

- Nonunion (fracture does not heal)
- Malunion (heals in a bad position)
- Chronic pain, stiffness, loss of motion, or swelling of the shoulder
- Excessive bleeding in the arm, causing pressure and injury to nerves and blood vessels (uncommon)
- Heterotopic ossification (calcification of the soft tissues)
- Injury to the nerves of the hand or wrist due to stretching from the fracture, causing numbness, weakness, or paralysis
- Shortening of the arm
- Arthritis of the shoulder
- Arrest of normal bone growth in children
- Interruption of blood supply to the ball of the shoulder

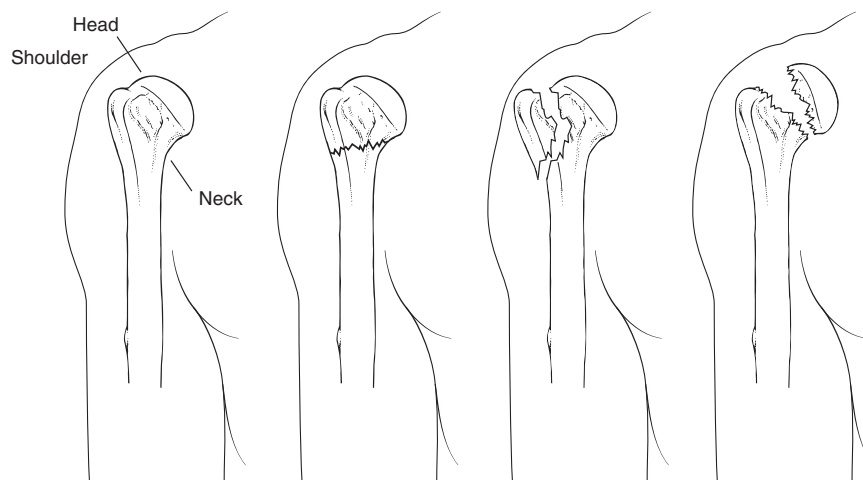


Figure 1

■ ■ ■ General Treatment Considerations

If the bones are in appropriate alignment (position), the initial treatment consists of ice and medications to help relieve pain. Immobilization with a sling or shoulder immobilizer for up to 6 weeks is recommended to protect the bones while they heal. Severe fractures, fractures that are displaced (not in appropriate alignment), and, occasionally, nondisplaced fractures may require surgery to restore and maintain the joint in its normal position. Surgery usually includes repositioning the bones and holding the position with sutures, wires, rods, plates, screws, or pins. After immobilization (with or without surgery), stretching and strengthening of the injured and weakened joints (elbow and shoulder) and surrounding muscles (due to the injury and the immobilization) are necessary. These are usually done with the assistance of a physical therapist or athletic trainer.

■ ■ ■ Medication

- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take within 7 days before surgery), or other minor pain relievers, such as acetaminophen, are often

recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.

- Strong pain relievers may be prescribed as necessary. Use only as directed.

■ ■ ■ Cold Therapy

Cold is used to relieve pain and reduce inflammation. Cold should be applied for 10 to 15 minutes every 2 to 3 hours for inflammation and pain. Use ice packs or ice massage.

■ ■ ■ Notify Our Office If

- Pain, tenderness, or swelling worsens despite treatment
- You experience pain, numbness, or coldness in the hand
- Blue, gray, or dusky color appears in the fingernails
- Any of the following occur after surgery: fever, increased pain, swelling, redness, drainage, or bleeding in the surgical area
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)

Notes:

(Up to 4400 characters only)

Notes and suggestions