

RADIAL HEAD FRACTURE

DESCRIPTION

Broken bone(s) (fracture) in the elbow involving the disc shaped radial head. This may be a complete or incomplete break.

FREQUENT SIGNS AND SYMPTOMS

- Severe elbow and arm pain at the time of injury
- Tenderness, swelling and later bruising of the elbow
- Visible deformity if the fracture is complete and bone fragments separate (displaced) enough to distort normal body contours (rarely)
- Numbness, coldness or paralysis in the elbow, forearm and/or hand from pressure on the blood vessels or nerves (rare)

CAUSES

- Usually, an indirect stress due to falling on an outstretched hand.
- Direct blow or force to the elbow
- Twisting injury to the elbow

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 6-8 weeks in adults and 4-6 weeks in children. There is a high risk of loss of elbow motion with this injury.

POSSIBLE COMPLICATIONS

- Non-union (fracture does not heal), or mal-union (heals in a bad position)
- Chronic pain, stiffness, loss of motion, and/or swelling of the elbow
- Heterotopic ossification (calcification of the soft tissues about the elbow)
- Excessive bleeding in the elbow or at the fracture site causing pressure and injury to nerves and blood vessels (rare).
- Unstable or arthritic joint following repeated injury, mal-alignment of the joint surface or delayed treatment
- Arrest of normal bone growth in children
- Atrophy, weakness, stiffness, numbness and poor control of the hand due to injury to blood vessels, nerves, cartilage, muscle, ligaments and fascia.

GENERAL TREATMENT CONSIDERATIONS

If the bones are in appropriate alignment (position), the initial treatment consists of ice and elevation of the injured elbow at or above heart level to reduce swelling. Medications are prescribed to help relieve pain. Immobilization by splinting, casting or bracing for 1 or 2 weeks may be recommended to protect the radial head while it heals and pain subsides. A sling may afford comfort. Large fractures that are displaced (not in appropriate alignment) may require surgery to restore and maintain the joint to its normal position. Surgery usually includes repositioning the bone and holding the position with plates, screws and/or pins or removing the broken radial head. After injury, especially with prolonged

immobilization (with or without surgery), the elbow may be stiff. Stretching and strengthening of the injured and weakened joint and surrounding muscles (due to the injury and the immobilization) is usually necessary. This may be with the assistance of a physical therapist or athletic trainer. Early range of elbow motion is important in preventing or reducing the loss of motion that usually accompanies this injury.

MEDICATION

- Non-steroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take if surgery planned in 7 days or less), or other minor pain relievers, such as acetaminophen are often recommended. Take these as directed by your physician. Contact him/her immediately if any bleeding, stomach upset or an allergic reaction occurs.
- Strong pain relievers may be prescribed as necessary. Use only as directed and only as much as you need.

COLD THERAPY:

Cold is used to relieve pain and reduce inflammation. Cold should be applied for 10 - 15 minutes every 2-3 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.