

DISTAL CLAVICLE FRACTURE

DESCRIPTION

A complete or incomplete break (fracture) in the outer third of the collarbone (clavicle) near where it attaches to the roof of the shoulder (acromion). Frequently, this fracture extends into the acromioclavicular joint and may be associated with rupture of the acromioclavicular and coracoclavicular ligaments. These ligaments attach the clavicle to the acromion (roof of the shoulder that is part of the scapula - shoulder blade) or coracoid (part of the scapula).

FREQUENT SIGNS AND SYMPTOMS

- Pain, tenderness and swelling on top of the shoulder
- Deformity or bump if the fracture is complete and the bone fragments separate enough to distort normal appearance of the top of the shoulder
- Bruising at the site of injury (usually within 48 hours)
- Loss of strength and/or pain with use of the affected arm
- Occasionally numbness or coldness in the shoulder and arm on the affected side, if the blood supply is impaired.
- Uncommonly, shortness of breath or difficulty breathing

CAUSES

Usually due to a direct blow to the shoulder, to falling on the tip of the shoulder or impact on the tip of the shoulder. Less commonly due to an indirect stress, such as by falling on an outstretched hand or on the tip of the elbow.

EXPECTED OUTCOME

Usually symptoms curable with appropriate treatment. Often these fractures require surgery to properly reposition the fracture fragments to allow healing and reduce complications.

POSSIBLE COMPLICATIONS

- Pressure on or injury to nearby nerves, ligaments, tendons, muscles, blood vessels or other tissues.
- Weakness and fatigue of the arm / shoulder (uncommon)
- Delayed union (healing) or non-union of the fractures. This is frequent in these outer-third clavicle fractures because of the associated injury to the ligaments and pull of the muscles keeping the fragments separated.
- Arthritis, pain and inflammation of the AC joint
- Prolonged healing time if usual activities are resumed too early and susceptibility to recurrent injury (fracture)
- Excessive scar tissue at the fracture site, including excessive bone formation, causing compression on nerves and blood vessels in the neck or arm pit. This may lead to pain, numbness and tingling in the neck, shoulder, arms and hands.
- Infection in open fractures (when the bone breaks through the skin) or at the incision if surgery has been performed.
- Persistent bump or prominence at the fracture site.
- Proneness to repeated collarbone injury

GENERAL TREATMENT CONSIDERATIONS

Initial treatment consists of medication, ice and compressive dressing to relieve pain and reduce swelling. Use of a shoulder immobilizer, figure-of-8 brace or arm sling is usually recommended. Definitive treatment for outer-third fractures of the clavicle when they are displaced and involve the AC joint or injury to the coracoclavicular ligaments requires surgery. Surgery involves repositioning the fracture fragments and holding them with plates and screws usually, though sometimes, wires, sutures and/or pins are used. After fracture healing, pins and wires may need to be removed prior to moving the arm, while plates and screws may remain. Exercises to regain shoulder motion and strength lost due to injury, surgery, and lack of arm use while healing, is necessary prior to returning to sports. This may be done on your own or you may be referred to a physical therapist and/or athletic trainer for further evaluation and treatment. Surgical intervention requires 2 to 6 months to return to sports.

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 your physician immediately if any bleeding, stomach upset or an allergic reaction occurs.
- Pain relievers may be prescribed as necessary by your physician. 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 pain and inflammation, and immediately after any activity which aggravates your symptoms. Use ice packs or ice massage.

NOTIFY OUR OFFICE IF

- Pain, swelling, or bruising worsens despite treatment
- You experience pain, numbness, or coldness in the arm or hand and/or blue, gray or dusky color appears in the hand or fingernails
- Increased pain, swelling or drainage from the surgical area
- Signs of infection including increased pain, swelling, drainage, fever, ill feeling
- New, unexplained symptoms develop. Drugs used in treatment may produce side effects.