

# ***CLAVICLE SHAFT FRACTURE***

## **DESCRIPTION**

A complete or incomplete break (fracture) in the middle third of the collarbone (clavicle) in the shaft. This is the most common location of clavicle fracture.

## **FREQUENT SIGNS AND SYMPTOMS**

- Pain, tenderness and a swelling at the fracture
- 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 attempting to use 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 impact or falling on the tip of the shoulder or a direct blow to the shoulder. Less commonly due to an indirect stress, such as by falling on an outstretched hand or on the tip of the elbow.

## **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 healing of the fracture. This may happen due to the naturally poor blood supply to the clavicle.
- Non-union of the fracture (uncommon).
- Prolonged healing time if usual activities are resumed too early and susceptibility to recurrent injury (fracture)
- Excessive bone and scar tissue at the fracture site causing compression of 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 performed.
- Shortening of the injured bones
- Persistent bump or prominence at the fracture site.
- Proneness to repeated collarbone injury

## **GENERAL TREATMENT CONSIDERATIONS**

Initial treatment consists of ice, compressive dressing and medication to relieve pain and reduce swelling. An arm sling, shoulder immobilizer, or figure-of-8 brace is usually recommended. Refrain from sporting activities until the fracture is healed, usually 6 or more weeks. Pain will subside after 2 - 4 weeks and you will be able to begin to use the arm more comfortably. By 6 - 8 weeks after the injury, the pain should be significantly reduced.

Surgery is recommended when the bone ends are far apart, there is significant shortening or overlap of the bones, or very angulated. Surgery can help reduce the deformity (bump or prominence) though there will be a scar of the skin. Surgery is also recommended when the broken bone pokes through the skin, or if there involvement of nearby nerves or blood vessels. Surgery consists of repositioning the fracture fragments and holding them with plates and screws, though wires, sutures and/or pins may be used. After fracture healing, wires or pins may need to be removed prior to moving the arm.

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. Return to sports requires healing of the bone and usually takes 2 to 6 months.

### **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.

### **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 an ice massage.

### **NOTIFY OUR OFFICE IF**

- Pain, swelling, or bruising worsens despite treatment
- You experience pain, numbness, or coldness in the arm or hand or if blue, gray or dusky color appears in the hand or fingernails
- You develop a fever of > 100.5 F
- You develop shortness of breath
- New, unexplained symptoms develop. Drugs used in treatment may produce side effects.