

# **Distal Clavicle Resection**

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## **Surgical description**

A Distal Clavicle Resection is performed to relieve chronic pain in a stable acromioclavicular (AC) joint that is not responsive to non-surgical treatment. The procedure may be performed through open arthrotomy (Mumford) or through arthroscopy.

With the Open Distal Clavicle Resection (or Mumford Procedure), an incision is placed over the superior aspect of the distal clavicle near the AC joint. The delto-trapezial fascia is split over the clavicle and the muscles are released from the bone. A saw, osteotome, or burr is used to resect the distal portion of the clavicle so that a gap of two centimeters is created between the distal clavicle and medial acromion. The fascia is closed over the resection space with sutures.

The deltoid and trapezius muscles must be protected post-operatively until solidly healed. These muscles heal well within a few weeks, but until that time, strenuous activities with those muscles should be avoided. Light active use of the arm is allowed.

With the Arthroscopic Distal Clavicle Resection, the AC joint is typically located during arthroscopy of the subacromial space. The capsule is removed from the inferior portion of the joint. A power burr is used to remove the distal portion of the clavicle so that a gap of one – two centimeters is created between the clavicle and acromion.

Since the muscle fascia is not violated during the scope resection, no precautions are needed. Active use of the arm is unrestricted and limited only by pain.

## **Philosophy of rehabilitation**

The rehabilitation program following a distal clavicle resection is divided into three phases. Phase I is the first week post-operative and consists mainly of rest, ice, and restricted activity. Phase II consists of three weeks of shoulder range of motion exercises and a cautious return to activities. Phase III consists of shoulder range of motion exercises as needed, resistive strengthening, and return to full sport and work activities.

The main emphasis following this surgery is to educate and caution the patient

from aggravating his or her shoulder by becoming too active too quickly.

## **Phase I:** **(0-7 days)**

### **Clinical Goals**

- ◆ Initial healing with minimal irritation of surgical shoulder.
- ◆ Pain-free sleep

### **Testing**

- ◆ None

### **Exercises**

- ◆ This initial phase does not incorporate any exercises. The patient should rest the involved shoulder, using a sling as needed, and should ice the shoulder regularly to prevent pain and swelling.

### **Clinical Follow-up**

- ◆ The patient will see the physician and the therapist after approximately one week. At this time sutures will be removed and a rehabilitation exercise program will be initiated.

## **Phase II:** **(1 – 4 weeks)**

### **Clinical Goals**

- ◆ Full passive and active range of motion
- ◆ Pain-free ADLs and light job duties

### **Testing**

- ◆ Bilateral ROM

### **Exercises**

- ◆ Ice to prevent pain and swelling.
- ◆ Passive, active assisted, and/or active ROM exercises are initiated depending on the patient's tolerance. Exercises may be performed in all planes of motion.
- ◆ Wand or doorway exercises can be used to work on flexion, abduction, external rotation in neutral as well as at 90° of abduction as tolerated. Internal rotation can be worked on close to the body with the towel stretch behind the back.

### **Clinical Follow-up**

- ◆ The patient will follow up as needed per the discretion of the therapist for home exercise program update(s).

- ◆ The patient will return to see, both the physician, and the therapist at one month post operative.

### **Phase III:** **(4 weeks on)**

#### **Clinical Goals**

- ◆ Full active and passive range of motion
- ◆ Normal strength
- ◆ Full pain-free ADLs including work, sports, and lifting activities

#### **Testing**

- ◆ Bilateral ROM
- ◆ Manual muscle testing of shoulder strength for flexion, abduction, and extension using a handheld dynamometer

#### **Exercises**

- ◆ ROM exercises are continued/advanced as indicated.
- ◆ Strengthening exercises are implemented using theratube or light dumbbells.
- ◆ The patient will begin with internal and external rotation in a neutral position and flexion and abduction at or below 90° of elevation.
- ◆ Light dumbbells and/or theratube exercises may be progressed above 90° of elevation if indicated by the patient's desired activity level. Exercises should be progressed as tolerated.

#### **Return to Sport or Weightlifting:**

- ◆ A sport specific functional progression may be implemented at approximately 2 months post operatively. Athletes performing repetitive overhead motions may expect to be progressed back return to sport at a slower rate, approximately 2-4 months post operative. These include throwers, swimmers, divers, tennis, and volleyball players.
- ◆ Weight room activities will be phased in at this time depending on patient's tolerance. Lifts, such as bench press, that put an extreme load on the AC joint will be some of the last exercises to be added and may take up to 4 months before resuming their previous level of performance.

## Phase IV – weeks

### **Clinical Goals**



### **Testing**



### **Exercises**



### **Agility**



### **Clinical Follow-up**



## Phase V- weeks and on

### **Clinical Goals**



### **Testing**



### **Exercises**

### **Return to Sport**



### **Clinical Follow-up**

#### **DISCLAIMER**

These general rehabilitation guidelines are created by physical and occupational therapist for the rehabilitation of various shoulder and elbow pathologies. These are to simply be used as guidelines. This information is provided for informational and educational purposes, only. Specific treatment of a patient should be based on individual needs and the medical care deemed necessary by the treating physician and therapists. The University of Kentucky and The American Society of Shoulder and Elbow Therapists take no responsibility or assume no liability for improper use of these protocols. We recommend that you consult your treating physician or therapist for specific courses of treatment.