

## **Questions and Answers About Injuries to the Acromioclavicular Joint (AC Joint)**

### **What is the AC Joint in the shoulder?**

The top of the wing bone or scapula is the acromion. The joint formed where the acromion connects to the collarbone or clavicle is the AC joint. Usually there is a protuberance or bump in this area, which can be quite large in some people normally. This joint, like most joints in the body, has a cartilage disk or meniscus inside and the ends of the bones are covered with cartilage. The joint is held together by a capsule, and the clavicle is held in the proper position by two heavy ligaments called coracoclavicular ligaments.

### **How is the AC Joint usually injured?**

The AC joint is injured most often when one falls directly on the point of the shoulder. The trauma will separate the acromion away from the clavicle, causing a sprain or a true AC joint dislocation. In a mild injury, the ligaments which support the AC joint are simply stretched (Grade I), but with more severe injury, the ligaments can partially tear (Grade II) or

completely tear (Grade III). In the most severe injury, the end of the clavicle protrudes beneath the skin and is visible as a prominent bump

### **How is an AC Joint separation diagnosed?**

Most often the clinical exam will demonstrate tenderness or bruising around the top of the shoulder near the AC joint, and the suspected diagnosis can be confirmed using an x-ray, which compares the injured side with the patient's other joint.

### **What is the proper treatment for a sprained AC Joint?**

When a joint is first sprained, conservative treatment is certainly the best. Applying ice directly to the point of the shoulder is helpful to inhibit swelling and relieve pain. The arm can be supported with a sling, which also relieves some of the weight from the shoulder. Gentle motion of the arm can be allowed to prevent stiffness, and exercise putty is very helpful to improve function of the elbow, wrist, and hand, but any attempts at vigorous shoulder mobilization early on will probably lead to more swelling and pain

### **How long does it take for a shoulder separation to heal?**

Depending on how severe the injury is, it may heal adequately in two to three weeks. In severe cases, the shoulder may not heal without surgery

### **When and why is surgery necessary for AC Joint separations?**

Usually surgery is reserved for those cases where there is residual pain or unacceptable deformity in the joint after several months of conservative treatment. The pain can occur with direct pressure on the joint, such as with straps from underwear or work clothing. Sometimes there will be catching, clicking, or pain with overhead activities, such as lifting, throwing, or reaching. Finally, in some people with very thin skin and very little muscular and soft tissue padding above their shoulders, the prominent clavicle after the separation may be considered unattractive, since the shoulder can appear to be unbalanced

### **Are there other causes of AC Joint pain and disability?**

Arthritis can occur as an isolated event in the AC joint, causing stiffness, aching, and sometimes swelling. Another condition called DCO, or distal clavicle osteolysis, gives a similar picture, usually in young people who lift heavy weights. This is called "Weightlifter's Shoulder."

### **What type of surgery can repair AC Joint problems?**

The simplest type of surgery for AC joint injury involves resection or removal of the end of the clavicle using arthroscopic (mini-surgical) techniques (called a Mumford procedure). If the joint becomes painful because of DCO (weightlifter's shoulder) or arthritis, or the separation is

only minor, this technique can be very satisfactory. When the joint is severely displaced, then a more complex procedure is needed to restore the position of the clavicle. Usually this operation, called a Weaver-Dunn procedure, is done using a two-inch incision over the joint. The end of the clavicle is removed, and ligament is transferred from the underside of the acromion into the cut end of the clavicle to replace the ligaments torn during the dislocation. Soon an arthroscopic procedure should be available to restore the position of the joint, but at this point, only open surgery techniques are available.

#### **What is the postoperative treatment and rehabilitation?**

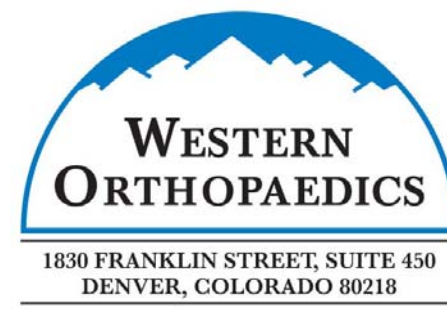
Postoperatively, treatment depends on the type of surgery performed. Usually, when the Mumford procedure is performed using arthroscopic techniques, the arm can be treated with a sling. Bathing is allowed in three days' time, and elbow, wrist, and hand exercises are begun immediately. Lifting is limited for three weeks, but following that, progressive exercise and motion activities proceed as the symptoms allow.

When a Weaver-Dunn procedure (rebuilding of the torn ligaments) is needed, approximately two or three weeks is added to the immobilization time before motion exercises are begun. This time allows the ligament to heal.

Otherwise, the exercise program is the same as that for the Mumford procedure above.

#### **How can I get more information about AC Joint injuries?**

Please feel free to call Western Orthopaedics, PC at (303) 321-1333 or toll free at 1-888-900-1333 and ask for a referral to a shoulder specialist. One of the physicians will be happy to answer your questions and evaluate your shoulder in the clinic. You may visit us at [www.western-ortho.com](http://www.western-ortho.com).



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