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## Acromioclavicular Joint Separation

This joint dislocation is a fairly common injury, especially in certain contact sports like rugby.

The AC joint is the connection between the scapula (shoulder blade) and the clavicle (collarbone).

Majority can be treated without any surgery

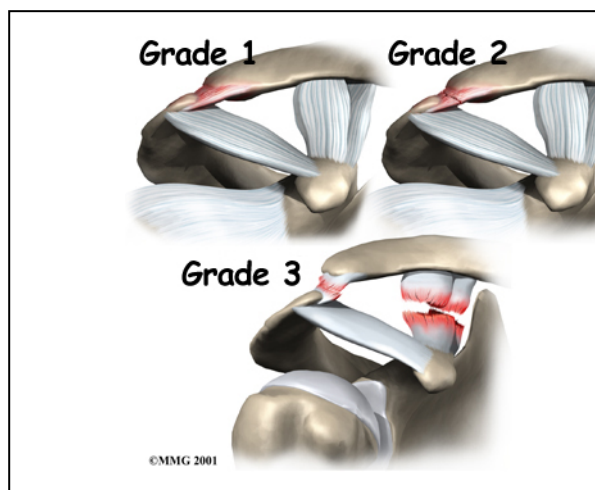
Prognosis is good

### What is the AC joint, and how does it work?

The shoulder is made up of three bones: the scapula (shoulder blade), the humerus (upper arm bone), and the clavicle (collarbone).

The part of the scapula that makes up the top of the shoulder is called the **acromion**. The AC joint is where the acromion and the clavicle meet. Ligaments hold these two bones together.

ACI joint separations are graded from mild to severe, depending on which ligaments are sprained or torn.



Grade I: The mildest type of injury is a sprain of the Acromio-clavicular ligaments.

Grade II: Involves a tear of the Acromio-Clavicular ligaments and a sprain of the coracoclavicular ligaments.

Grade III: A complete tear of the Acromio-clavicular ligaments and the coracoclavicular ligaments

### How does AC joint separation happen?

The most common cause of an AC joint separation is falling on the shoulder.

As the shoulder strikes the ground, the force from the fall pushes the scapula down.

### What symptoms does this condition cause?

Symptoms range from mild tenderness to the intense pain

Grade two and three separations can cause a considerable amount of swelling. Bruising may make the

skin bluish several days after the injury.

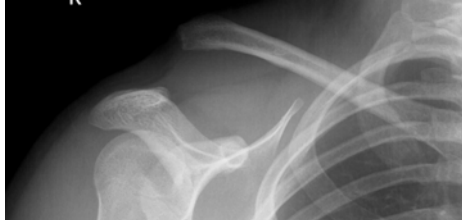
In grade three separations, you may feel a popping sensation due to shifting of the loose joint. Grade three separations usually cause a noticeable bump on the shoulder.

### What tests will my doctor run?

History of injury and a detailed medical history.

Diagnosis is made by the physical examination.

X-rays can show an AC joint disruption



### What treatment options are available?

#### Nonsurgical Treatment

A short period of rest using a shoulder sling.

Your rehabilitation program may be directed by a physical or occupational therapist.

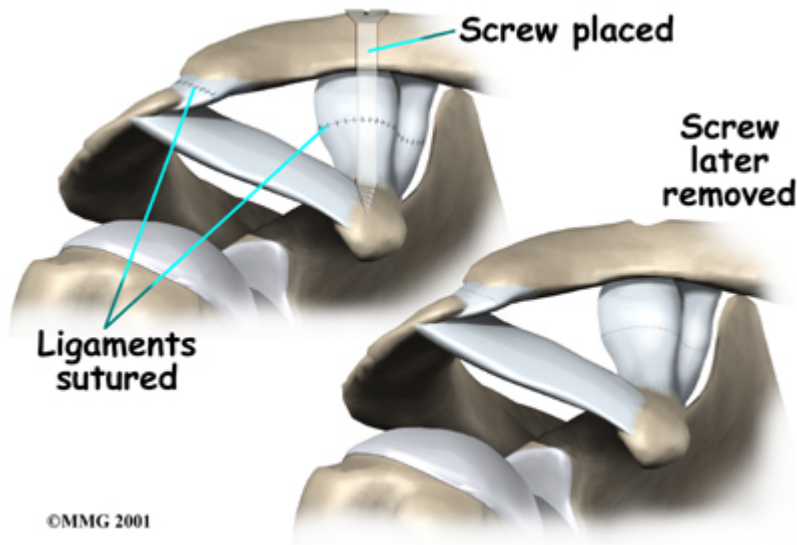
The treatment of grade three A-CI separations is somewhat controversial. Many studies show no difference whether a person is treated with surgery or conservative treatment.

Even with surgery, a bump may still be present where the separation occurred. And a significant portion of people who undergo surgery will need another operation later.

Whether surgery or not, some require an operation at some time in the future. The injured joint degenerates faster than normal.

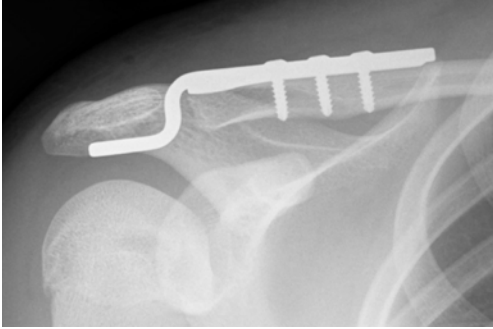
#### Surgery

Some surgeons prefer to repair severe grade three AC separations, especially in high-level throwing athletes.



**1. Screw Fixation:** The surgery is usually done through a four-inch incision over the AC joint. The surgeon starts by putting the joint into its correct position. A screw or some other type of fixation may be used to hold the clavicle in place while the ligaments heal. To fix the joint using a screw, the surgeon inserts the screw through the top of the clavicle and into the coracoid process. When a screw is used, it is usually removed six to eight weeks after the surgery. If it is not removed, the screw will probably break.

**2. Plate fixation:** Hook plate is fixed. It should be removed under anaesthesia after 6 months.



### **What should I expect after treatment?**

#### **Nonsurgical Rehabilitation**

1. Range-of-motion exercises should be started as pain eases, followed by a program of strengthening.
2. At first, exercises are done with the arm kept below shoulder level.
3. The program advances to include strength exercises for the rotator cuff and shoulder blade muscles.
4. In most cases, the pain goes away almost completely within three weeks.
5. Full recovery can take up to six weeks for grade two separations and up to 12 weeks for grade three separations