

# InfoSheet – Acromioclavicular (A-C) Arthritis

David M. Klein, MD – Kennedy-White Orthopaedic Center

## WHAT IS ACROMIOCLAVICULAR ARTHRITIS?

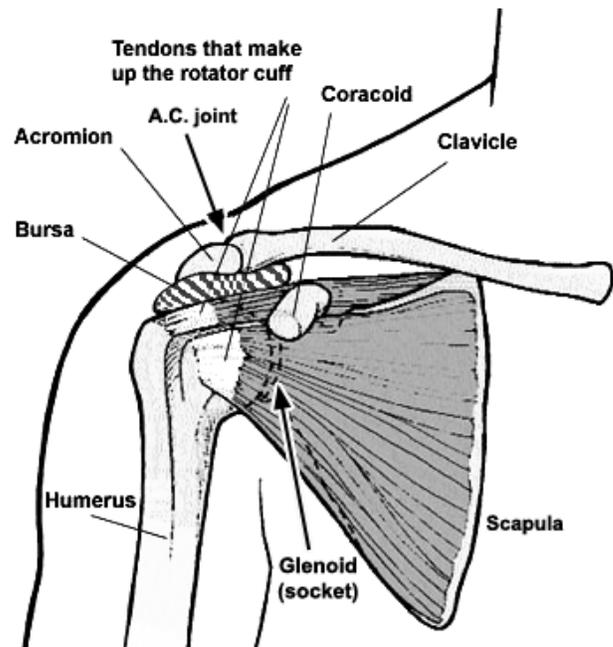
Some joints in the body are more likely to develop problems due to normal wear and tear, or **degeneration** of the cartilage and joint lining. The type of arthritis that occurs due to degeneration over time is called osteoarthritis. The acromioclavicular (AC) joint, at the far end of the collarbone, is a common joint for developing osteoarthritis during middle age.

## SYMPTOMS

The symptoms of acromioclavicular (AC) joint arthrosis usually begin with pain and tenderness in the front of the shoulder around the joint. The pain may be worse when the arm is brought across the chest, since this motion compresses the joint. The pain that occurs with this condition is a vague pain that may spread out to include the shoulder, the front of the chest, and the neck. If the joint has been injured in the past, there may be a bigger bump over the joint on the affected side than the other side. The joint may also click, or snap, as you move the shoulder. AC arthritis is often present with other shoulder conditions, such as rotator cuff disease.

## ANATOMY

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 roof of the shoulder is called the acromion. The joint where the acromion and the clavicle join is known as the acromioclavicular (AC) joint.



In some ways, this joint is like any other joint. It has two bones that need to attach together, but needs to be flexible as well. The ends of the bones are covered with cartilage -- a slick, rubbery surface that allows movement and protects the bones. The acromioclavicular (AC) joint is different from joints like the knee or ankle, because it doesn't need to move nearly as much as these joints. The acromioclavicular (AC) joint just needs a little movement so that the shoulder can move freely, but it is still supported by the clavicle - the joint just shifts a bit as the movement occurs.

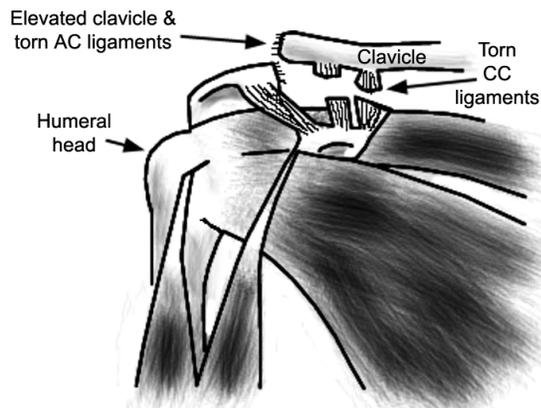
## CAUSES

Acromioclavicular (AC) joint arthrosis is probably common due to the amount of stress the joint gets over the years as we use our shoulder constantly. This joint gets a lot of constant pressure as the arm is used overhead. Weightlifters have an increased incidence of the condition - at a younger age. This may

suggest that constant overhead lifting activities increase the stress on the joint.

The arthritis may be the result of an old injury to the joint, such as an acromioclavicular separation.

### ***Shoulder Separation / AC Joint Sprain***



This injury is common and can result from a fall on the shoulder. The shoulder gets better after the injury and years may go by before the degeneration causes the acromioclavicular (AC) joint to become painful.

### **DIAGNOSIS**

The diagnosis is usually made by physical exam. Tenderness over the acromioclavicular (AC) joint is usually present. Pain with compression of the joint is an essential finding. If you pull your bad arm underneath your chin as tight as you can with your good arm, this usually causes pain at the acromioclavicular (AC) joint, if the joint is where the problem is. X-rays of the AC joint may show narrowing of the joint and bone spurs around the joint. An injection of a local anesthetic, such as lidocaine, into the joint will temporarily reduce the pain and confirm the diagnosis.

### **TREATMENT**

Initial treatment usually consists of rest and anti-inflammatory medications, such

as aspirin or ibuprofen. If the pain persists, an injection of cortisone into the joint may ease the pain. Cortisone is a strong anti-inflammatory medication that can decrease the inflammation in the joint and reduce the pain. This will probably be temporary.

If all conservative measures fail to relieve your pain, surgery may be recommended. The procedure that is most commonly recommended for acromioclavicular (AC) joint arthrosis is a **resection arthroplasty**. Remember that the acromioclavicular joint doesn't move much, but it needs to be flexible. A resection arthroplasty involves removing the last part of the clavicle, or collarbone. This leaves a space between the acromion and the cut end of the clavicle where the joint used to be. The joint is replaced by scar tissue, which allows movement to occur, but stops the rubbing of the arthritic bone ends. Therefore, the result is that the flexible connection between the acromion and the clavicle is maintained. This procedure is usually done by making a small incision in the skin over the acromioclavicular (AC) joint. The surgery can be done using the arthroscope in some cases.

The rehabilitation following surgery for a simple resection arthroplasty is usually straightforward. You should expect the soreness to last for 3-6 months, but you will probably be able to use the arm fairly well by 3 weeks.