

Acromioclavicular Joint Arthritis of the Shoulder

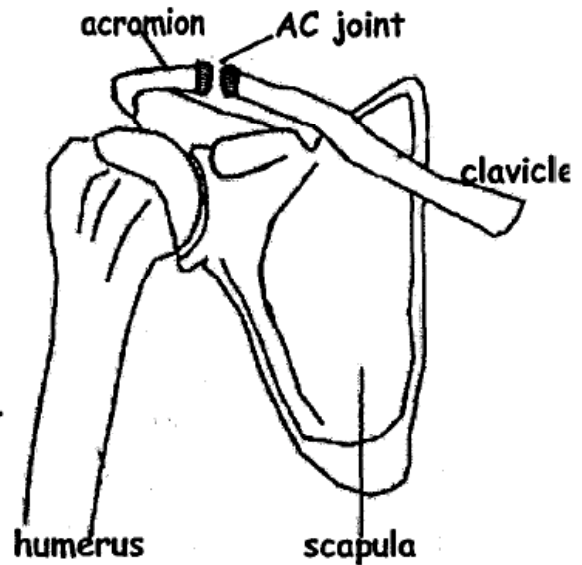
Quincy Medical Center

Massachusetts General Hospital

Eric Berkson, MD

Orthopaedic Surgery of Quincy
909 Hancock Street
Quincy MA
(617) 773-7457

The AC joint is located at the tip of the shoulder where the shoulder blade and collarbone (clavicle) come together at a point on the upper part of the shoulder blade called the acromion. These two bones are held together by ligaments. One group of ligaments envelope the joint to form a capsule that covers the joint; these ligaments are termed the acromioclavicular ligaments. Another set of ligaments stabilize the shoulder by holding the clavicle in place by attaching it to a bony projection on the surface of the shoulder blade called the coracoid process. These ligaments are called the coracoclavicular ligaments. There is a disk of cartilage in the joint between the two bones that helps guide the joint movement. As you move your shoulder, the AC joint allows movement to occur between the clavicle and scapula.



What is Acromioclavicular Joint Arthritis of the Shoulder?

AC joint arthrosis, or osteoarthritis of the acromioclavicular joint is most common in people who are middle aged. It develops when the cartilage in the AC joint begins to wear out. With this condition, there is usually pain that limits the motion of the arm.

Causes of AC Arthritis of the Shoulder

The principal cause of AC joint arthrosis is wear and tear due to use. As a person uses his/her arm and shoulder, stress is placed on the joint. This stress produces wear and tear on the cartilage, the cartilage becomes worn over time, and eventually arthritis of the joint may occur. Persons who must use their arms for extended periods of time are susceptible to AC joint arthrosis. Constant overhead lifting, such as is engaged in by weightlifters or construction workers who work overhead, can increase the incidence of the disease. Other susceptible individuals are athletes participating in contact sports or engaging in any activity that may result in a fall on the end of the shoulder.

Symptoms of AC Arthritis of the Shoulder

One of the first signs that a person may have arthrosis of the AC joint is pain and tenderness at the top of the shoulder around the joint. Sleeping on the side may cause pain. There may be a decrease in shoulder motion. Compression of the joint, such as bringing the arm across the chest may result in increased pain. There may be some swelling at the site of the joint. If the AC joint had been injured some time in the past, there may be a snap or click as the shoulder is moved, and the area of the AC joint may become more prominent.

Diagnosis

Usually the diagnosis of AC joint arthrosis is made during the doctor's physical examination. In the course of the examination, the doctor will look for tenderness over the AC joint and the presence of pain with compression of the joint. The doctor may determine that an injection of a local anesthetic, such as lidocaine, is indicated. The injection will reduce the pain temporarily and confirm the diagnosis. X-rays may be used to reveal a narrowing of the joint and the presence of bone spurs around the joint.

Non-surgical Treatment

The goal of treatment for AC joint arthrosis is to eliminate pain and restore movement to the shoulder. Treatment, initially, may be conservative, consisting of rest and nonsteroidal anti-inflammatory medications such as aspirin, ibuprofen, and Naprosyn. Ice may be applied for twenty minutes at a time, daily or several times daily, to decrease the pain and inflammation at the joint. Cortisone, an anti-inflammatory steroidal medication, may be injected into the joint if the pain persists after the administration of non-steroidal medications. In order to avoid further aggravation of the condition, there should be a lessening of activities that tend to put undue stress on the shoulder.

Surgical Treatment

Should rest, ice, medication, and modifying activities not work to reduce the pain and swelling, surgery may be the next step in treatment. The most common procedure for surgically treating AC joint arthrosis is AC joint arthroplasty. In this procedure, the doctor removes about 1 cm of the end of the collarbone and the worn joint surface at the end of the collarbone. The major ligaments still remain intact. Scar tissue develops to replace the joint to allow movement to occur without further abrasion of the ends of the arthritic bone. This procedure maintains the flexible connection between the acromion on the shoulder blade and the collarbone. The surgery can be done either through a small one-inch long incision or using an arthroscopic technique involving several smaller incisions.

With either surgical technique, recovery and results are similar. Usually you can go home wearing an arm sling the same day as surgery. Stitches are removed typically after one week. You may begin motion of the shoulder immediately. Complete motion usually returns in about four to six weeks, strength tends to return after a few weeks more, and full recovery can be expected in about three months.

Results and Risks of Surgery

Most patients achieve a high level of pain relief from the surgery; nearly 95 percent return to their normal routine of activity and sports with few complications. As with any surgical procedure, there are potential risks. The incidence of infection is less than 0.5%.