

# ACROMIOCLAVICULAR JOINT INJURIES

## WHAT IS THE AC JOINT?

The AC (acromioclavicular) joint is a joint in the shoulder where the collarbone (clavicle) meets the shoulder blade (scapula). The specific part of the scapula adjacent to the clavicle is called the acromion, hence the name AC joint.

This is in contrast to the glenohumeral joint, the main "ball and socket" shoulder joint.

## WHAT KIND OF PROBLEMS OCCUR AT THE AC JOINT?

The most common problems that occur at the AC joint are arthritis, fractures and dislocations. Arthritis is a condition characterised by loss of cartilage in the joint. Like arthritis at other joints in the body, it is characterised by pain and swelling, especially with activity. Over time, the joint can wear out, leading to swelling and formation of spurs around the joint. These spurs are a symptom of the arthritis and not a primary cause of the pain. Motions which aggravate arthritis at the AC joint include reaching across the body toward the other arm. AC joint arthritis is common in weight lifters, especially with the bench press, and to a lesser extent, military press. AC joint arthritis may also be present when there are rotator cuff problems.

## HOW DO YOU TREAT ARTHRITIS OF THE AC JOINT?

There is currently no way to replace the cartilage that is damaged by arthritis. As a result, the primary way to control the symptoms of arthritis is to modify your activities so as not to aggravate the condition. Application of ice to the joint helps decrease pain and inflammation. Medication including aspirin, Panadol and non-steroidal anti-inflammatory drugs are also used commonly.

## WHAT CAN BE DONE IF THOSE TREATMENTS DO NOT WORK?

If rest, ice, medication and modifying your activity does not work, then the next step is a cortisone shot. One shot into the joint sometimes takes care of the pain and swelling permanently, although the effect is unpredictable and may only be transient.

Surgery may be indicated if non-surgical measures fail. Since the pain is due to the ends of the bones making contact with each other, the treatment is to remove a portion of the end of the clavicle. This outpatient surgery can be performed through a small incision about one inch long or arthroscopically, using several small incisions. Regardless of the technique utilised, the recovery and results are about the same. Most patients have full motion by about 6 weeks and can return to sports by 12 weeks.

## WHAT IS AN AC JOINT DISLOCATION?

When the AC joint is dislocated, it means that the ligaments connecting the acromion and clavicle have been damaged and the two structures no longer line up correctly. AC dislocations can be anywhere from mild to severe and are "graded", depending upon which ligaments are torn and how badly they are torn:

- Grade I injury – the least damage is done and the AC joint still lines up.
- Grade II injury – damage to the ligaments which reinforce the AC joint. In a Grade II injury, these ligaments are only stretched by not entirely torn. When stressed, the AC joint becomes painful and unstable.
- Grade III injury – AC and secondary ligaments are completely torn and the collarbone is no longer tethered to the shoulder blade, resulting in a visible deformity.



queensland  
combined  
orthopaedic  
specialists

#### WHAT IS THE TREATMENT FOR AC SEPARATION?

These can be very painful injuries, so the initial treatment is to decrease pain. This is best accomplished by immobilising the arm in a sling and placing an ice pack to the shoulder for 20-30 minutes every 2 hours as need.

Medication and non-steroidal anti-inflammatory drugs can also help the pain. As the pain starts to subside, it is important to be moving the fingers, wrist and elbow and eventually the shoulder in order to prevent a stiff or "frozen" shoulder. Instruction on when and how much to move the shoulder should be provided by your doctor or physiotherapist. The length of time needed to regain full motion and function depends on the severity or grade of the injury. Recovery from a Grade I AC separation usually takes 10-14 days whereas a Grade III injury may take 6-12 weeks.

#### WHEN IS SURGERY INDICATED?

Grade I and II separations very rarely require surgery. Even Grade III injuries usually allow return to full activity with full restrictions without surgery. In some cases, a painful lump may persist, necessitating partial clavicle excision in selected individuals, such as high calibre throwing athletes. Surgery can be very successful in these cases, but as always, the benefits must be weighed against the potential risks.