



Practice
Plus
Group

Acromioclavicular (collar bone) joint pain



Information for guided patient management

Provided by

Practice Plus Group MSK, Buckinghamshire

Contents:

- What is the acromioclavicular joint 3
- Conditions of Acromioclavicular Joint 3
- AC joint injury 3
- Grades of Injury 3
- Osteoarthritis 4
- What are the signs and symptoms of AC joint pain 4
- Self-management exercises 4

What is the acromioclavicular joint?

The acromioclavicular joint, or AC joint, is a joint at the top of the shoulder. It is the articulation between the clavicle (collar bone) and a projection of the scapular (shoulder blade), called the acromion.

Although there is only a small amount of movement which occurs at this joint, there are three strong ligaments which provide support for it. This joint assists the main shoulder joint to allow the arm to be reached above shoulder height, which is why this region can feel painful on shoulder movements.

Conditions of Acromioclavicular Joint

There are two main conditions that causes pain in the AC joint. The joint itself can become injured or it can become painful through degenerative changes (i.e. osteoarthritis)

AC joint injury

A common injury to the AC joint is dislocation, often called AC joint separation. This is not the same as a shoulder dislocation, which happens at the main shoulder joint (glenohumeral joint).

It occurs most frequently in collision sports, such as rugby, football and martial arts but can also be a problem for those who participate in swimming, horse riding, mountain biking or snow sports.

The common ways in which this joint is injured, is a fall onto the tip of the shoulder or FOOSH (Fall On Outstretched Hand).

Grades of injury

Grade 1 – slight displacement of the joint and a badly stretched or partially torn AC ligament (acromioclavicular ligament).

Grade 2 – partial dislocation of the AC joint with complete disruption tear of the AC joint and a partial disruption of coracoclavicular ligament.

Grade 3 – Complete disruption of AC and CC ligaments (coracoclavicular ligament).

Healing time

Grade 1 – 2 - separations are classified as mild and moderate. These sprains should improve well over a 2-3 month period.

Grade 3 - separations are deemed severe but even this grade of separation rarely required surgery. Despite a physical deformity (step deformity) of the shoulder remaining, shoulder function can usually be regained. Pain generally improves over a 6 month period.

Osteoarthritis

Osteoarthritis of the AC joint is not uncommon and can mostly be seen in adults over 30. It may be caused in relation to a previous trauma to the joint or through wear and tear (degeneration). Osteoarthritis in the joint does not always cause pain, so even if this is identified on x-ray, it does not mean this is the cause of shoulder symptoms.

Osteoarthritis can often co-exist with subacromial impingement (information related to this can be found on the subacromial impingement leaflet), which has the potential to cause pain and reduced function in the shoulder.

What are the signs and symptoms of AC joint pain

- Pain over the top of the shoulder
- Increased pain with overhead movements
- Shoulder pain may be made worse with lifting or carrying
- Worsened shoulder pain when you reach that arm across the chest and over the opposite shoulder
- Pain when lying on that shoulder
- You may notice a slight bump 'step deformity' on the top of the shoulder

Self management exercises

Isometric internal rotation

Stand in a doorway with your elbow close to your body and bent at a right angle. Place your hand against a wall and gently push (20% of your effort). Hold for up to 5 seconds. Relax. Repeat 5-15 times a few times a day.

Isometric external rotation

Stand with your upper arm close to your side, elbow at a right angle and the back of your hand against a wall. Push the back of your hand against the wall (20% of your effort). Hold for up to 5 seconds. Relax Repeat 5-15 times a few times a day

Isometric shoulder extension

Stand with your back against the wall. Keep your upper arm close to the side and elbow at a right angle. Push the elbow back into the wall (20% of your effort). Hold for up to 5 seconds. Relax Repeat 5-15 times a few times a day

Isometric shoulder flexion

Stand facing a wall. Keep your upper arm close to the side with elbow at right angle. Push your fist against the wall (20% of your effort). Hold for up to 5 seconds. Relax. Repeat 5-15 times a few times a day.

