

Acromioclavicular Joint (AC Joint) Pain.

What is the acromioclavicular joint?



Figure 1: Bony Anatomy.



Figure1: AC Joint.

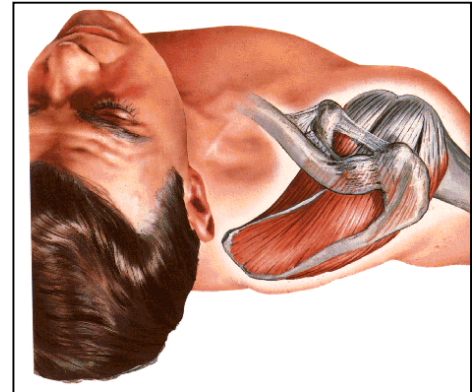


Figure 1: Superior View of AC Joint.

The shoulder joint is formed at the junction of three bones, the collar bone (clavicle), the shoulder blade (scapula) and the arm bone (humerus). The scapula and clavicle form the socket of the joint, and the humerus has a round head that fits within this socket. The end of the scapula is called the acromion and the joint between this part of the scapula and clavicle is called the acromioclavicular joint (AC joint) (See Figure(s) 1).



How does an AC joint injury occur?

An AC joint injury is often termed a shoulder separation and is always the result of a sudden, traumatic event that can be attributed to a specific incident or accident. The two most common descriptions of a shoulder separation are either a direct blow to the shoulder, or a fall on to an outstretched hand. When playing football the AC joint can be injured in both the ways, through a collision or by falling onto the shoulder, elbow or an outstretched arm.

What are the signs and symptoms?

Pain is the most common symptom of an AC joint or separated shoulder injury. The pain is usually severe at the time of injury and often associated with swelling and bruising. There are different 'grades' of AC joint injury, with grade 1 being a minimal joint disruption through to a grade 3, a severe injury. If the AC joint injury is severe (Grade 3), a bump caused by the separated joint may be seen or felt at the tip of the shoulder bones (See Figure(s) 2).



Figure 2: AC Joint Injury (Separation) (Grade 3).

When the player moves the shoulder joint, especially with the arms above the shoulders, they will experience pain. The pain will be on the tip of the shoulder. The player will find playing football painful and very difficult.

What can the player do?

The player should stop playing football and rest. Applying ice to the injury in the early stages will prevent swelling and reduce the pain. As the AC joint injury gets less painful, the player can work on mobility exercises for the shoulder, to prevent stiffness (See Figure 3).

The player should see a sports injury professional for an accurate diagnosis and management plan.



Figure 3: Shoulder Stretch.

What can a sports injury professional do?

Initially, a sports injury professional (a sports doctor or physiotherapist) can confirm the diagnosis. If the sports injury professional suspects a severe AC joint injury/rupture they will refer the player to an orthopaedic surgeon who will make a decision regarding any possible surgery. Most AC joint injuries heal without the need to see a surgeon.



Figure 4: Taping.

Rehabilitation will involve seeing a physiotherapist who will advise on an appropriate management plan. Rehabilitation can involve strengthening and stretching – as well as treatment aimed at reducing the swelling and pain (See Figure 3). A physiotherapist may also apply some taping –to provide some support for the collar bone and allow healing (See Figure 4) or stretch the shoulder (See Figure 5).



Figure 5: Mobilisation of the Shoulder.