



## » THE BONE DOCTOR

**DR MIKE MULDER** is back, and our regular Bone Doctor sheds some light on A/C joint injuries.

# COLLAR BONE SEPARATION

*A/C joint injuries or collar bone separation injuries are a common occurrence following an OTB fall. They are painful, and can leave a very prominent deformity of the affected shoulder. However, unlike clavicle fractures, the treatment of these injuries is controversial and not well defined.*

**I** mentioned in my discussion about clavicle fractures that the collar bone is a strut which links the mobile scapula to the rest of the skeleton. A good analogy is that the scapula (and arm) is suspended from the outer end of the collarbone. The connection between the scapula and clavicle occurs at a joint called the acromioclavicular joint- commonly referred to as the A/C joint. It is located immediately under the skin above the shoulder; it is important to differentiate this from the true shoulder joint which is the “ball and socket” connection between the arm and scapula.

Injuries to the A/C joint usually occur with a fall where the shoulder blade hits the ground first. This damage’s the joint and may even tear some (or all) of the supporting ligaments, resulting in a deformity of the joint.

The spectrum of injuries ranges from a “sprain” of the joint to a full-blown dislocation. I will discuss the extremes below, but be aware that other injuries frequently accompany this, such as

rib fractures, muscle tears and extensive abrasions. Remember to get fully assessed.

A sprain happens with a minor / low speed / low energy fall. There is immediate pain over the upper part of the shoulder, but nothing is out of place. It hurts if you press down over the A/C joint, and you may initially feel a grinding sensation with motion of the arm. Arm movement up to the waist and chest level is relatively comfortable, but as you

lift your arm higher above shoulder height, there will be pain over the joint. This is a frustrating, but less serious injury. These sprains are treated in a sling to rest the shoulder for 2-3 weeks and then you ought to be able to use the arm with relative comfort. Anti-inflammatories will ease your



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miserly during this time.

With a more severe impact one can completely tear the ligaments which attach the clavicle to the scapula. This injury results in the dropping down of the shoulder blade and the collar bone riding high. This is a quite alarming and noticeable deformity (see picture). At the time of the injury, these are very painful, but bracing the arm in a shoulder sling often eases this pain.

The treatment of these injuries is heavily debated;

there is not a “clear-cut” / gold standard “right way” to treat these injuries. Many people will have near perfect shoulder function if it is left to heal in a sling, despite a persistence of the deformity. While others will require surgery to reposition the bone in order to regain the use of their shoulder. Once repositioned, it is held in place with straps, artificial ligaments or other devices. Unfortunately, the surgery is not always effective.

The best antidote to this confusion is to seek treatment from someone who is familiar and experienced in treating this sort of deformity. You don’t need to have this injury treated as an emergency - rather have it properly assessed and get solid advice before you proceed with surgery. The most important outcome is to have a shoulder which is pain-free, functional and as strong as it was before. Find someone who you trust to guide your decision making. **fs**



**ABOVE:** The separation between the clavicle and scapula results when all ligaments are torn.

**ABOVE:** The deformity which results when the ligaments binding the clavicle to the scapula are torn.

**Dr Mike Mulder** is an orthopaedic surgeon specialising in the treatment of shoulder, elbow and hand disorders and injuries. He is based at Constantiaberg Mediclinic, and is a member of The Cape Shoulder and Elbow Unit. He has a wealth of experience in fixing injured cyclists and is an avid mountain biker. He rides as often as his wife and family let him.

