

AC Joint Osteoarthritis

Anterior view of the left shoulder showing the acromioclavicular (AC) joint where the collarbone meets the acromion of the shoulder blade, plus the surrounding ligaments and the deeper glenohumeral joint.

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What you're feeling

You likely feel pain at the very top of your shoulder, where your collarbone meets your shoulder blade. This is your acromioclavicular joint. The ache may stay mild for years. In fact, 90% of people with early signs on X-rays feel no pain at all over a 7-year period. However, if symptoms do start, they often follow a predictable pattern.

The pain usually worsens when you move your arm across your body. You might feel it when reaching up to a high shelf or behind your back to fasten a bra. Tucking in a shirt can also trigger a sharp pinch. Lifting objects, especially overhead, puts direct pressure on this joint. Many patients find that resting the arm at their side brings relief. Gentle movement often feels better than staying completely still.

Nighttime pain is a common complaint. You may wake up if you roll onto your affected shoulder. The weight of your body presses down on the inflamed joint, making it hard to find a comfortable position. Some people notice the pain is worse when they first wake up in the morning. It may feel stiff until you have moved around for a while.

It is important to know that imaging findings do not always match your symptoms. A distinction between symptomatic and asymptomatic radiographic AC osteoarthritis is unnecessary. All patients were equally satisfied with the outcome of preoperative acromioclavicular injection, regardless of what the X-rays showed. This means your level of discomfort is the true guide for treatment, not just the appearance of the joint on a scan.

If you have had previous shoulder surgery, such as a rotator cuff repair, untreated arthritis in this joint is associated with a low percentage of failure. It rarely causes major problems on its own. However, if you experience persistent pain that interferes with daily tasks like dressing or sleeping, your surgeon may discuss options like injections or minor surgery to remove the worn bone ends. These procedures provide predictable pain relief for symptomatic cases.

What's actually happening

Your acromioclavicular (AC) joint sits at the very top of your shoulder, where your collarbone meets your shoulder blade. Think of this joint as a small hinge that allows your arm to move smoothly overhead. Inside, smooth cartilage acts like a shock absorber, cushioning the bones so they do not grind against each other.

In AC osteoarthritis, this protective cartilage wears down over time. It is essentially wear-and-tear arthritis. As the cushion thins, the bones rub together more directly. This friction causes inflammation and pain, especially when you reach across your body or lift your arm overhead. The joint capsule, which is the sleeve surrounding the joint, may also become stiff or irritated, adding to the discomfort.

Sometimes, the ligaments that hold your collarbone in place stretch or tear. This can cause the collarbone to sit higher than normal, creating a visible bump. When this happens, the normal movement of your shoulder blade changes. These kinematic changes can be a potential source of pain and dysfunction in the shoulder. Even if the joint looks fine on an X-ray, the altered movement can still cause symptoms.

It is important to know that not all changes on an X-ray mean you will have pain. Asymptomatic AC osteoarthritis remained asymptomatic in 90% of patients over a 7-year period. This means many people have visible wear on scans but feel no pain at all. Untreated AC joint osteoarthritis, whether symptomatic or not, encountered during arthroscopic rotator cuff repair is associated with a low percentage of failure.

However, if the arthritis becomes severe, it can lead to other issues. Severe acromioclavicular joint osteoarthritis is associated with acromial stress fractures after reverse shoulder arthroplasty. Your surgeon will look at both your symptoms and your imaging to decide if the joint is truly the source of your pain.

The goal of treatment is to reduce this friction and restore smooth movement. Both open and arthroscopic resection arthroplasty techniques provide predictable pain relief for symptomatic AC osteoarthritis. These procedures involve removing a small part of the collarbone to create more space, allowing the bones to glide without rubbing. This simple change can significantly improve your shoulder function and reduce pain.

What we can do about it

You can start with self-management and physiotherapy. This conservative approach is a valid initial treatment for many shoulder injuries and joint conditions. Your surgeon may suggest modifying activities if you have osteolysis, which is the wearing away of bone. Physiotherapy aims to strengthen the muscles around your shoulder to support the joint. Conservative and surgical treatments are both effective for managing acromioclavicular joint osteoarthritis. Give this non-operative treatment a fair chance, as it is helpful for most patients with painful conditions in this area.

If pain persists, your surgeon may discuss medical management. This often includes pain medication and anti-inflammatory drugs to reduce swelling and discomfort. You might also consider acromioclavicular injections. These injections offer a 1-year success rate of 47% in patients with acromioclavicular osteoarthritis. The injection helps reduce inflammation and pain directly at the joint site. Research is still comparing different

types of steroid injections to see which works best for isolated joint pain. While some patients find lasting relief, others may need to explore other options if the injection effect wears off.

Surgery is considered when conservative care has reached its limit and pain continues to affect your daily life. Both open and arthroscopic resection arthroplasty techniques provide predictable pain relief for symptomatic acromioclavicular osteoarthritis. This procedure involves removing a small part of the collarbone to create more space and reduce friction. Limited distal clavicle excision reduces pain and improves shoulder function at midterm follow-up in patients resistant to conservative treatment. Your surgeon will determine if you are a good candidate based on your specific symptoms and imaging results. For some, this simple removal of bone tissue is enough to restore comfort and movement without the need for more complex reconstruction.

What to expect

If you are diagnosed with wear-and-tear arthritis in the acromioclavicular (AC) joint but have no pain, it is likely to stay that way. In 90% of patients, asymptomatic AC osteoarthritis remained asymptomatic over a 7-year period. You do not need to worry about this finding if it is not bothering you. It is common to see signs of arthritis on scans even without symptoms.

If you have pain, the outlook depends on how you manage it. Injections into the joint offer a 1-year success rate of 47%. This means nearly half of patients find lasting relief from this treatment. If injections do not help, your surgeon may recommend a procedure to remove a small part of the collarbone. This limited distal clavicle excision reduces pain and improves shoulder function at midterm follow-up for patients who do not respond to conservative treatment.

You can expect predictable pain relief if you choose surgery. Both open and arthroscopic resection techniques provide this relief. However, each approach has a unique set of potential complications. Your surgeon will discuss which method is best for your specific anatomy and lifestyle.

If you leave symptomatic arthritis untreated, it may persist. Some patients experience ongoing discomfort that limits daily activities. If you undergo other shoulder surgeries, such as rotator cuff repair, untreated AC joint osteoarthritis is associated with a low percentage of failure. However, osteoarthritis is generally associated with poorer final clinical outcomes after rotator cuff repair. An unhealed or re-torn rotator cuff also increases the risk of developing this arthritis.

For severe cases, particularly if you are having a reverse shoulder replacement, severe AC joint osteoarthritis is associated with acromial stress fractures. Radiographic AC joint osteoarthritis is common in patients undergoing this type of surgery. Your surgeon will monitor these risks closely.

Overall, the course of AC joint arthritis varies. It can settle with conservative care, persist despite treatment, or progress slowly. Most patients find that targeted treatments provide significant improvement in function and comfort.

When to see someone

See your GP if you have persistent pain that does not improve with rest. Ask for a specialist review if you notice weakness or instability in the shoulder. Seek care if the joint locks or gives way. Contact your surgeon if symptoms interfere with your sleep or work. Sudden worsening of pain is also a reason to seek help. Note that asymptomatic wear-and-tear arthritis often remains painless for seven years. However, untreated issues can sometimes affect other shoulder repairs. Your doctor will check for tenderness and discuss if an injection might help. Early assessment ensures you get the right care before the condition progresses.