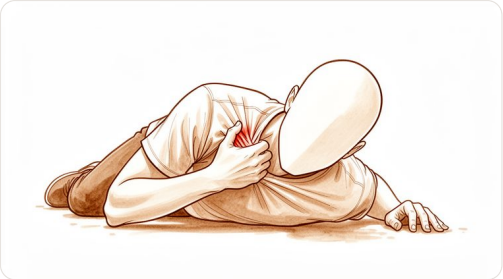
CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

PATIENT INFORMATION

Clavicle Fracture



X-ray showing a displaced fracture of the left clavicle (collarbone).

Kieran Hirpara 4.0

What you're feeling

You likely feel sharp pain in the front of your shoulder or across your collarbone. This injury most often happens after a fall onto your shoulder or a direct blow. It is common in males, especially during sports like football. You may notice swelling and bruising over the bone. The area will be tender to the touch.

Simple daily tasks become difficult because moving your arm pulls on the injured bone. Reaching behind your back to fasten a bra or tuck in a shirt can be painful. Lifting objects, even light ones, may feel heavy or unsafe. You might find it hard to hold your arm away from your body. Your surgeon will advise you to keep your arm close to your side to reduce strain.

Pain often flares up at night, making it hard to find a comfortable sleeping position. Lying on the injured side is usually not possible. Waking up with stiffness is common, especially if you moved during the night. After activity, the ache may increase. Resting typically helps calm the pain, but you must avoid any movement that causes sharp spikes in discomfort.

Most clavicle fractures heal well with non-surgical care. However, you need close follow-up to ensure the bone does not shift out of place. The most common complications are non-unions, where the bone fails to heal, and malunions, where it heals in a slightly different position. These can cause lingering pain or a visible bump. If you have a medial clavicle fracture (closer to your chest), the bone itself usually heals well if you survive the initial trauma. But be aware that a high proportion of patients with this specific type of fracture may face serious health risks within three years of the injury.

For displaced distal fractures (near the shoulder joint), non-surgical treatment leads to higher rates of non-union but still offers excellent shoulder function and a low risk of other complications. Teenagers with completely displaced fractures often see excellent results after five years if treated without surgery. Your surgeon will tailor your care to your specific fracture pattern and expectations.

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What's actually happening

Your collarbone connects your breastbone to your shoulder blade. It acts as a strut that keeps your shoulder wide and stable. Most breaks happen when you fall directly onto your shoulder or take a hard blow to the area. These injuries are common in males and often linked to car accidents, falls, or sports.

When the bone breaks, the normal alignment is lost. This can cause pain and limit how you move your arm. The good news is that your body is very good at healing this bone. Most breaks, especially in the middle section, heal well without surgery. Even if you choose not to have an operation, your surgeon will watch you closely. This is because the bone pieces can shift slightly in the days right after the injury.

For some patients, surgery is the better choice. This is often true if the break is completely displaced or if the bone has shortened by 2 cm or more. Surgery helps hold the bone in place so it heals correctly. It is a safe and effective procedure for both adults and adolescents. In fact, most complications from clavicle fractures—whether treated with or without surgery—are issues with how the bone heals, such as failing to join together or healing in a slightly wrong position.

Overall complication rates for surgical care average 8.1%. For adolescents, non-surgical treatment often leads to fewer complications and similar satisfaction levels compared to surgery. However, in select cases where the break is severe, surgery can lead to better outcomes. Your surgeon will look at the specific shape of your break and your personal goals to decide the best path. The goal is always to restore your shoulder function and comfort safely.

What we can do about it

Most clavicle fractures result from a fall onto the shoulder or a direct blow. The majority occur in males and are linked to vehicular trauma, falls, or sporting injuries. Your surgeon will carefully examine you for any other injuries to the shoulder area, especially if the injury involved compression. Most patients with clavicle fractures have an excellent outcome using conservative management. This means you can expect good clinical and functional results whether you choose surgery or not.

You can start with self-management and physiotherapy. Initial nonsurgical management is reasonable because patients had similar functional outcomes even when surgery was delayed. Close follow-up is warranted due to the risk of progressive displacement in the peri-injury period. Your surgeon may recommend a delay in assessment at 6 weeks following a displaced midshaft clavicle fracture. This timing enables an accurate prediction of patients who are likely to have union with nonoperative management. Physiotherapy aims to restore movement and strength as the bone heals. Once clavicle fractures are healed, further radiographic imaging does not provide any notable information.

Medical management focuses on pain relief. Your surgeon may prescribe pain medication or anti-inflammatories to help you manage discomfort during the healing process. For specific cases like nonunion, bone marrow injection is a promising treatment with low morbidity and preliminary success. However, standard plain unilateral radiographs of the clavicle are insufficient to reliably determine the degree of

shortening of clavicle fractures and the need for surgery among shoulder/sports medicine fellowship–trained orthopaedic surgeons. Your surgeon will use clinical judgment alongside imaging to guide your care.

Surgery is considered when conservative care has reached its limit. High-quality evidence shows that surgical treatment of displaced clavicle fractures in adults results in higher union rates and better early patient-reported outcomes compared with nonsurgical treatment, though long-term outcomes are similar. Operative treatment of displaced midshaft clavicle fractures in adults is associated with higher union rates and better early patient-reported outcomes than non-operative treatment. A select group of patients with completely displaced fractures, shortening of 2 cm or more, or specific indications benefit from surgical fixation which has been shown to result in improved outcomes compared with non-operative measures. Your surgeon will discuss whether this option is right for you based on your fracture characteristics and expectations.

What to expect

Your outlook depends largely on your age and where the break is located. For most adults with a break in the middle of the collarbone, surgery leads to faster healing and better early shoulder function compared to non-surgical care. However, long-term results are similar whether you choose surgery or not. If you are an adolescent, non-surgical treatment is often preferred. It carries lower complication rates and still provides excellent long-term function, even if the bone heals in a slightly shifted position.

Healing takes time. With surgery, the bone typically fuses faster than without it. In some high-demand cases, such as professional athletes, healing can occur in about 8.8 weeks. Without surgery, your surgeon may wait six weeks to see if the bone is healing on its own before making further decisions. Most fractures result from a fall or direct blow. The most common issues are non-unions (where the bone does not heal) or malunions (where it heals in a misaligned position). These can happen with either treatment path.

Complications are relatively uncommon. The average complication rate for surgical care is 8.1%. For teenagers, non-surgical management has even fewer complications. If you have a medial clavicle fracture, your prognosis is generally good once you survive the initial injury, though it is important to note that a high proportion of patients with this specific type of fracture may face serious health risks within three years. For most other clavicle fractures, the risk of long-term shoulder pain or subacromial pain syndrome (pain under the shoulder blade) is not increased by the injury itself.

If you choose non-surgical treatment, close follow-up is essential. There is a risk that the bone fragments may shift further apart in the early weeks. If you do not have surgery, your shoulder side may feel more symptomatic than the other side 10 to 30 years after the trauma. If you do have surgery, you may experience slightly more short-term complications, but you will likely regain function sooner. Once the fracture is fully healed, further X-rays usually do not provide new information. Your surgeon will tailor the plan to your specific fracture pattern and personal goals.

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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 your shoulder. Seek care if your shoulder locks or gives way. Contact your surgeon if symptoms interfere with your sleep or work. Get help for any sudden worsening of your condition. Most fractures result from a fall onto the shoulder or a direct blow. The majority occur in males and are associated with vehicular trauma, falls, or sporting injuries. Close follow-up of nonoperatively treated clavicle fractures is warranted to ensure proper healing.

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