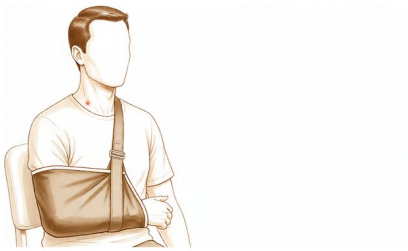
CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

INFORMATION & CONSENT

Clavicle Fracture Fixation

A break in the clavicle (collarbone). When the bone ends are out of line, fixation with a plate and screws restores normal shape.



At-a-glance recovery. Pooled from 85 published studies — your own pace will vary.

LIGHT DUTIES desk work, driving, daily tasks	MOST EVERYDAY ACTIVITIES manual work, sport, gym	FINAL OUTCOME PLATEAU pain and strength
2-6 weeks	**3-6 months**	**12 months**
Return to desk work and light activities typically occurs within 2 to 6 weeks, with driving often permitted by 2 weeks if not on narcotics.	Return to manual work, full strength, and sport typically occurs between 3 and 6 months, with adolescents returning to sport significantly faster (approx. 38 days) with TEN fixation.	Functional outcomes and strength typically plateau by 12 months, with long-term follow-up showing equivalence between surgical and nonoperative groups.

Why this operation has been suggested

Your surgeon may suggest this operation to fix a broken collarbone, also called a clavicle fracture. This surgery is typically offered when the bone is severely displaced, shortened by more than 2 cm, or if the skin is at risk of breaking open. While most fractures heal well with a sling, surgery is chosen when non-operative care is unlikely to restore normal function or prevent a permanent bump.

The main goal of this operation is to bring the bone fragments back together so they heal firmly. This helps reduce pain, prevents the bone from healing in a crooked position, and allows you to return to your daily activities and work sooner. By stabilizing the bone, your surgeon aims to restore shoulder stability and improve your long-term movement.

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Before the operation

You will need to fast for several hours before your surgery and stop certain medications as your surgeon instructs. Please arrange for someone to drive you home and bring a list of all current medicines. You may need X-rays, an MRI, or blood tests to check your injury and overall health. Your surgeon will also review these results with you. We use a single open incision over the fracture site to fix the bone. Wear comfortable clothing to your appointment. Most patients heal well with this approach, though some may need hardware removal later.

On the day

You will arrive at the hospital and meet your anaesthetist to discuss your care. This operation is done under general anaesthetic. You will be fully asleep for the operation. Some patients may also have a regional nerve block for post-operative pain relief; the anaesthetist decides on the day based on your individual circumstances.

Your surgeon will make a single incision over the fracture site to fix the bone. You will then move to the recovery area to wake up safely. Most patients feel groggy at first but are monitored closely until they are ready to go home or to a ward.

What the operation involves

Your surgeon will make a single cut over the front of your shoulder to reach the broken bone. This open approach allows direct access to the fracture site. The surgeon carefully releases tissues from the bottom of the collarbone to protect the nerves and blood vessels nearby. This step is done to ensure no shortening occurs during the repair.

Once the bone is visible, your surgeon will realign the broken pieces to their correct position. A metal plate is then placed over the bone to hold it steady. Screws are used to secure the plate firmly to the bone fragments. If the bone has not healed in the past, a small piece of healthy bone may be added to help it grow back together.

After the bone is fixed in place, the cut is closed with stitches. The surgeon may use dissolving stitches under the skin or removable ones on the surface. A dressing is applied to protect the area as it begins to heal. This procedure restores the length and alignment of your collarbone to help your shoulder function normally.

After the operation

You will wake up in a recovery ward where your team will manage your pain. Your arm will be in a sling to protect the repair, and a dressing will cover the single incision over your shoulder. Most patients stay one night in hospital after this operation, though some are able to go home the same day. You must have someone stay with you for the first 24 hours to help you. Most patients begin gentle movement of their fingers and wrist right away. Your surgeon will guide you on when to start using your arm more fully as healing begins.

Recovery

In the first few days, you will feel pain and swelling around your collarbone. This is normal. Your surgeon will prescribe medication to help you stay comfortable. You will wear a sling to support your arm and protect the healing bone. Try to sleep propped up on pillows to reduce swelling and make breathing easier.

As the swelling settles, you will begin gentle movements. Your physiotherapist will guide you through exercises to keep your shoulder moving without straining the repair. You can perform light daily tasks like eating or brushing your teeth, but avoid lifting anything heavy. Your surgeon will tell you when it is safe to drive once you have full control of your arm.

Most people return to normal activities as their strength improves. If you had a displaced fracture, surgery helps you heal faster and return to work sooner than non-surgical care. However, your personal timeline may differ. Your surgeon and physiotherapist will guide you based on how your bone heals.

What can go wrong

Most patients do well, but problems can occasionally happen. Your surgeon and the team monitor you closely to spot any issue early.

You might notice a deep, throbbing pain that does not ease with simple painkillers. This could mean the bone has not healed, a condition known as nonunion. If you feel a sudden clicking or grinding in your shoulder, or see a visible bump that irritates your skin, tell your surgeon. While slight deformity is common in adults, a very unsightly bump may need attention.

Redness that spreads out from the wound or a fever can signal an infection. You might also feel a sharp pain if the metal plate or screws irritate the skin over the bone. Sometimes the hardware feels like it is moving under the skin. If you notice these signs, call the clinic immediately. Your surgeon may need to remove the hardware to stop the irritation.

In rare cases, damage to the lung or blood vessels beneath the collarbone can occur. You might feel sudden shortness of breath or severe chest pain. This is a medical emergency, so go to the emergency department right away. Your surgeon takes steps to avoid this, but it is important to know the signs.

Most complications and the need for further procedures are related to the hardware used for fixation. Your surgeon uses a single incision over the operative site to fix the bone. If you have concerns about scars or how the bone looks, discuss this with your team.

The complications table on this page lists typical rates if you want the specifics.

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When to call us

Call us if you have a fever, increasing redness, or drainage from your wound. Go to emergency if you feel sudden severe pain, swelling in your calf, or trouble breathing. Seek help immediately if you lose sensation or cannot move your arm. While damage to the lung or vessels is very rare, these signs need urgent check-ups.

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COMPLICATIONS & CONSENT

Clavicle Fracture Fixation

Complication rates from published literature

Pooled from 85 published studies. These are population-level rates, not your individual risk — your surgeon will discuss what applies to you.

COMPLICATION	REPORTED RATE	NOTES
Overall reoperation rate	**17.6-24.6%**	Approximately one in four patients undergo reoperation within 2 years, most commonly for hardware removal, revision for nonunion, deep infection, or malunion.
Hardware removal	**7.7-40%**	Symptomatic hardware removal is the most common reoperation, with women nearly 3 times more likely to undergo removal than men (28.6% vs 11.5%).
Nonunion	**2-15%**	Failure to heal with modern plate fixation is significantly lower than nonoperative treatment (14.5%), with risk factors including smoking, diabetes, and high comorbidity score.
Refracture after plate removal	**1.4-6.5%**	Refracture occurs at an average of 25.6 days after hardware removal, typically requiring reoperation; patients must avoid impact activities for 6-8 weeks after removal.
Adhesive capsulitis or shoulder stiffness	**1-43%**	Shoulder stiffness occurs in approximately 20% in the early postoperative period, treated with physiotherapy and early mobilization.
Hardware failure or plate breakage	**1-3%**	Plate breakage or screw loosening can occur particularly with inadequate fixation or premature loading, typically requiring revision surgery.
Wound healing problems	**1-2%**	Delayed healing, dehiscence, or hypertrophic scarring can occur due to the clavicle's thin soft tissue coverage.
Delayed union	**1-12%**	Delayed union occurs in 1-12% of cases, often resolving without further intervention.
Malunion	**0.4-37%**	Healing in unacceptable position creates a step deformity and may alter shoulder mechanics, with symptomatic malunion requiring revision osteotomy.

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COMPLICATION	REPORTED RATE	NOTES
Vascular injury	**< 0.4%**	Subclavian artery or vein injury is extremely rare as the vessels lie directly beneath the clavicle, requiring immediate vascular surgery consultation.
Paresthesia or numbness	**0-38%**	Altered sensation over the surgical site and anterior chest due to supraclavicular nerve injury during surgical approach, with most improving over 6-12 months.
Superficial infection	**0-18%**	Superficial wound infections respond to oral antibiotics and local wound care, with risk factors including diabetes, smoking, and obesity.
Deep infection	**0-18%**	Deep infection requiring irrigation and debridement typically occurs at median 5 months and may require surgical washout, prolonged antibiotics, and sometimes hardware removal.
Pneumothorax	**0-4.8%**	Lung injury causing air in the chest cavity; small pneumothoraces resolve spontaneously while large ones require chest tube insertion.
Nerve injury	**0-38%**	Brachial plexus injury is extremely rare, causing weakness, numbness, or altered sensation in the arm or hand, with most injuries being stretch injuries that recover over months.

I have read this information and have had the opportunity to ask Dr Hirpara questions about the procedure, its expected recovery, and the complications listed above.

PATIENT — PRINT NAME

SIGNATURE

DATE

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