

Olecranon Fracture Fixation (ORIF)

At-a-glance recovery. Pooled from 15 published studies — your own pace will vary.

LIGHT DUTIES	MOST EVERYDAY ACTIVITIES	FINAL OUTCOME PLATEAU
desk work, driving, daily tasks	manual work, sport, gym	pain and strength
2-6 weeks	3-4 months	12 months
Sling for comfort only; hand, wrist and shoulder move from day one, elbow bending opens up from about week 4 and desk work is realistic early.	No lifting, pushing or pulling through the arm in the early weeks while the bone unites; manual work and load-bearing from about 3-4 months as union establishes.	Final strength and comfort — including kneeling on the point of the elbow — settle by about a year. A small permanent loss of terminal straightening is common and rarely matters.

Why this operation has been suggested

Dr Kieran Hirpara, an upper-limb surgeon at Mater Private Hospital Rockhampton, matches the treatment to your specific injury. Patients are generally referred to our clinic by their GP; if a physiotherapist has suggested you see us, you will still need a referral from your GP in order to be eligible for the Medicare rebate. At your appointment we take a history, examine your elbow and arrange imaging if it is needed. This tells us whether the broken bone at the point of your elbow has moved out of place.

If the pieces have barely moved, the break can often be managed without surgery, using a splint and check X-rays to make sure nothing shifts. This is usually the first option we discuss. Surgery is suggested when the break has moved enough that it will not heal in a useful position on its own. The aim of the operation is to hold the pieces back in their normal position while they join together, so the elbow surface stays smooth. A rough surface can lead to wear-and-tear arthritis in the joint over time. Holding the bone securely also lets you start moving the elbow early, which lowers the chance of lasting stiffness. Most people who have this operation keep their implants in place, and only 3% experience movement of the implant afterwards.

Before the operation

Once surgery is planned, we will give you clear instructions to follow. You will need to stop eating and drinking seven hours beforehand. We ask for seven hours rather than the usual six so your time can be brought forward if the theatre list runs early. Some medications can affect the operation, so bring a written list of everything you take and we will tell you which ones to pause. Arrange for someone to drive you home afterwards. Wear loose, comfortable clothing with sleeves that slide over your elbow easily. Imaging such as X-rays, MRI or ultrasound may be arranged beforehand to plan the operation. If you have other medical conditions, you may need blood tests or a review with the anaesthetist, but most people do not.

On the day

You will arrive at the hospital's surgical admissions unit, where you are checked in and prepared for theatre. You will then meet the anaesthetist, the doctor who looks after your anaesthetic and pain relief. This operation is done under general anaesthetic. A regional nerve block is sometimes added for post-operative pain relief; the anaesthetist will discuss this with you on the day. You are then taken into the operating theatre, where the operation is performed. Afterwards you will wake up in the recovery area, where nurses monitor you while the anaesthetic wears off. Once you are stable, you will either move to a ward or go home, depending on the procedure and how your recovery is going.

What the operation involves

The operation is called open reduction and internal fixation. Open means the surgeon reaches the break through one cut at the back of your elbow, over the point of the elbow itself. Reduction means the broken pieces are eased back into their normal position, and internal fixation means they are held there with metal implants while the bone joins together.

The surgeon chooses the implant that suits your fracture, because no single technique suits every break. For a simple break in two pieces, the pieces may be held with a wire loop that presses them together as you move, or with a screw placed down the middle of the bone. For breaks in several pieces, or in softer bone, a plate moulded along the back of the elbow and held with small screws is often used. Some breaks can be held with strong stitches anchored into the bone instead of metal. Whichever method is used, the aim is the same: a firm hold that lets you start moving the elbow early.

Once the pieces sit in their normal position and the implant is secure, the surgeon checks that the elbow surface is smooth and that the joint moves freely. The layers of tissue are stitched back together and the skin is closed with stitches, then covered with a dressing.

After the operation

When you wake up, your arm will rest in a simple sling for comfort. Nurses will check on you and give you pain relief if you need it. Someone should stay with you for the first 24 hours after you go home. Your team will tell you whether you go home the same day or stay one night in hospital. You can move around as soon as you feel steady, and the sling comes off for washing and for the exercises your team shows you. We leave the dressing on for about 10 days; please do not take it off before then unless we tell you to. We change or remove it when we see you. Keep your hand and fingers moving from the first day, as this helps with swelling and comfort.

Recovery

For the first few days your elbow will be sore and swollen, and the skin around it may look bruised. This settles gradually. Keeping your hand and fingers moving from the first day helps, as does resting your arm up on pillows when you sit or sleep. Take the pain relief you have been given regularly at first rather than waiting for the pain to build.

Your arm rests in a simple sling for comfort in the early days. It comes off for washing and for your exercises. Hand therapy after surgery is with Ruby Doolan at Extend Rehabilitation. Ruby will show you exercises that keep your elbow moving while the bone joins together, and she will make a splint if you need one. You will keep your fingers and hand moving from the start, and gentle elbow movement is added as the break settles. Everyday tasks take some planning at first: you will need help with meals, dressing and carrying things until your arm is steady again.

As the swelling settles and movement returns, you will notice the exercises become easier. Once your surgeon is happy the bone is joining well, the sling comes off for good and you start using the arm for light tasks around the home. Heavier lifting, sport and driving come later, once your therapist and surgeon agree the elbow is strong enough. If driving is on your list, see our guide to [driving after upper-limb surgery](#) for the rules that apply.

Everyone heals at a different pace, so your timeline may differ. Your surgeon and your hand therapist will guide you at each visit.

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.

The metal holding the bone can sometimes shift from where it was placed. You might notice a new sharp pain at the point of your elbow, a lump under the skin that was not there before, or the skin becoming sore or rubbed where the implant sits. If you feel this, call the clinic rather than waiting for your next visit.

The wires or implants can also press on or poke through the skin. This causes pain and skin irritation, and the wound can break down over the spot. Tell us promptly if you see this, as the implant may need to be taken out.

Infection is a risk with any operation. Watch for a deep, throbbing pain that does not ease with simple painkillers, redness that spreads out from the wound, fluid leaking from it, or a fever. If you notice any of these, contact the clinic the same day or go to the emergency department if you cannot reach us.

An infection can also slow down the joining of the bone. If healing seems to be taking much longer than your team expected, bring it up at your next review.

The nerve that runs behind the point of your elbow can become irritated. This can cause tingling, pins and needles or numbness down the inside of your forearm and into your little and ring fingers. Mention any of these feelings at your review, or call the clinic if they come on suddenly.

Some people notice a small loss of full straightening of the elbow, even when the break heals well. Others develop wear-and-tear arthritis in the joint over time, which can feel like aching, clicking or grinding. Both are worth raising at follow-up so your team can track them.

The bone can also fail to join, or join in the wrong position. If your elbow stays painful and unstable after several weeks of healing, we will check it with X-rays.

Smoking raises the chance of problems after this operation. If you smoke, talk to your GP about quitting before surgery.

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

When to call us

Most problems show up early, and we would rather hear about them straight away. Call us if you have a fever, if the wound becomes more red or starts leaking fluid, or if pain suddenly gets much worse. Go to emergency if you have swelling in your calf, shortness of breath, or chest pain. Call us as well if your fingers or hand go numb, feel cold, or you cannot move your arm. If you cannot reach us and something feels urgent, go to your nearest emergency department.

Olecranon Fracture Fixation (ORIF)

Complication rates from published literature

Pooled from 15 published studies. These are population-level rates, not your individual risk — your surgeon will discuss what applies to you.

COMPLICATION	REPORTED RATE	NOTES
hardware irritation	35%	The olecranon is subcutaneous, so metalwork is commonly felt: 35% reported hardware irritation in a 199-patient trial cohort, with rates above 50% reported after tension-band wiring and roughly 12-20% needing removal or a secondary operation after plates. Removal once the bone is healed is common and simple.
revision or removal surgery	33-40%	In patients aged 75-85, pooled reoperation was 40% after tension-band wiring and 33% after plate fixation - versus none in those managed nonoperatively - which is the core of the operate-or-not debate in the elderly. Younger patients fare better; metalwork removal remains the commonest second procedure.
post-traumatic osteoarthritis	19%	Median incidence 19% at a median 41 months across studies (range 0-35%); higher for comminuted (24%) and fracture-dislocation patterns (50%) - a property of the joint injury more than the fixation.
stiffness	—	Loss of the last few degrees of extension is common and usually functionally irrelevant.
nonunion / infection / nerve injury	1.8%	Surgical site infection 1.8% and any adverse event 7.2% in a large short-term ORIF cohort; serious complications are concentrated in elderly and comorbid patients.

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