

Elbow Arthroscopy

Why this operation has been suggested

Dr Kieran Hirpara, an upper-limb surgeon at Mater Private Hospital Rockhampton, starts with the least invasive options that suit your condition. 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. A clinic assessment establishes the diagnosis. For degenerative or long-standing problems we usually try non-operative care and consider surgery when that has not given enough improvement. For structural or acute problems, surgery may be recommended straight away.

Elbow arthroscopy is a keyhole procedure that lets us see inside your joint to treat pain, stiffness, or instability. We use small cameras and instruments to remove loose pieces of bone or cartilage, repair torn ligaments, or smooth out worn surfaces. This approach causes less tissue damage than open surgery. The main benefit is improved movement and reduced pain. Evidence shows complication rates vary, with a median of 3%, but the procedure is generally safe. We aim to restore your ability to use your arm for daily tasks.

Before the operation

Please fast for seven hours before your procedure. This allows us to bring you forward if the list runs early. Bring a list of your current medications and wear comfortable clothing. Arrange for someone to drive you home. We use imaging like X-rays, MRI, or ultrasound to plan your treatment. Blood tests and an anaesthetic review are not routine. If you have other medical conditions, you may need blood tests or a review with the anaesthetist. Your surgeon will give you specific instructions on stopping certain medications.

On the day

You will present to the hospital's surgical admissions unit. Here, you are checked in and prepared for theatre. You meet the anaesthetist to discuss your care. 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. You wake up in the recovery area, where nurses monitor you while the anaesthetic wears off. Once you are stable you either go to the ward or go home, depending on the procedure and your recovery. We aim to keep your experience as smooth and comfortable as possible during this transition.

What the operation involves

Elbow arthroscopy uses small keyhole cuts to look inside and treat your joint. This approach causes less scarring and pain than open surgery. Your surgeon will choose a position for you based on what works best for your specific condition. Options include lying on your back, on your side, or face down. The arm is supported and stabilised throughout the procedure to keep it safe and steady.

Through tiny incisions, your surgeon inserts a small camera and thin instruments. This gives a clear view of the joint. Your surgeon can remove loose pieces of bone or cartilage, smooth out rough surfaces, or release tight tissue that is limiting your movement. For example, if you have a fractured radial head that cannot be fixed, your surgeon may remove the broken piece through these small cuts. The procedure allows your surgeon to treat several issues at once with minimal damage to the surrounding soft tissues.

Before starting, your surgeon checks the best access points for each part of the joint. Care is taken to avoid putting pressure on the front of the elbow to protect the nerves and blood vessels. A tourniquet may be used to keep the area clear of blood. After the work is done, the small cuts are closed with stitches or glue, and a dressing is applied. This minimally invasive technique helps you recover with less discomfort and a lower risk of infection compared to traditional open surgery.

After the operation

You will wake up in the recovery ward. We manage your pain using standard methods to keep you comfortable. Your arm will be in a soft dressing and a sling to protect the joint. Rest is essential. Your team will tell you whether you go home the same day or stay one night in hospital. Please ensure someone stays with you for the first 24 hours to help with care. We will show you how to care for the wound and move your fingers gently. Avoid lifting anything heavy. Keep your arm elevated when resting to reduce swelling. Follow our specific instructions for your dressings. Contact us if you notice increased redness, warmth, or unusual pain.

Recovery

You will notice swelling and stiffness in your elbow as it heals. This is normal. We manage this discomfort with prescribed medication and gentle movement. Your hand therapist, Ruby Doolan at Extend Rehabilitation, guides your exercises. She also makes any splint you need. You do not see a physiotherapist for this care.

Early on, you may wear a sling for comfort. We do not use hinged braces or abduction pillows. Keep your arm elevated when resting to reduce swelling. Sleep on your back or the opposite side, supporting your arm with pillows. Avoid heavy lifting or gripping until your surgeon clears you.

As swelling settles, you will regain movement. Your therapist helps you stretch and strengthen the joint. You start using your hand for light tasks when pain allows. Milestones depend on your healing speed. Your timeline may differ; your surgeon and therapist will guide you.

If you drive, remember the universal rules: no driving while in a sling, splint, or cast. You must be able to hold the wheel with both hands and react in an emergency stop. You must also be off strong pain medication. See our guide on [Driving after upper-limb surgery](#) for full details.

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.

Infection is a risk that can affect the wound or the joint itself. You might notice increasing redness, warmth, or swelling around the elbow. The pain may feel deep and throbbing, not easing with standard painkillers. You might also develop a fever or see pus draining from the incision sites. If you notice these signs, contact the clinic immediately. Do not wait for your next scheduled review.

Nerve irritation can cause unusual sensations in your arm or hand. You may feel tingling, numbness, or a 'pins and needles' feeling. Sometimes there is weakness in your grip or fingers. Most of these issues are temporary and resolve on their own. However, if you experience sudden weakness or persistent numbness, tell your surgeon right away.

Heterotopic ossification involves extra bone forming in the soft tissues around the joint. You might feel a hard lump under the skin near the inner side of your elbow. This can limit how far you can bend or straighten your arm. It often feels like a stiff block rather than simple muscle tightness. Report any new hard lumps or sudden loss of movement to your care team.

Fluid leakage can occur if the irrigation fluid used during surgery escapes into the surrounding tissue. You may notice significant swelling in your forearm or hand that feels tight and firm. This can sometimes cause discomfort or a feeling of pressure. If the swelling is severe or painful, seek medical advice promptly.

Steroid injections at the end of surgery can increase infection risk. We do not recommend this practice because it raises the chance of complications. If you have had a steroid injection recently, ensure your surgeon knows before your operation. This helps us plan your care safely.

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

When to call us

Call us if you develop a fever, increasing wound redness, or discharge. Seek emergency care for sudden severe pain, calf swelling, or shortness of breath. Contact us immediately if you notice loss of sensation or cannot move your limb. These signs require urgent assessment to ensure your recovery stays on track.

In more depth

This section goes further than you need for your own treatment decisions. Elbow arthroscopy is worth the extra reading because the published complication rate for it is not one number but a range so wide it looks like an error – and understanding why explains most of what matters about the operation.

THE SAME OPERATION, TWO VERY DIFFERENT ANSWERS

A systematic review pooling **16,815** elbow arthroscopies reported a median complication rate of **3%** – with a range across studies of **0% to 71%**. Reoperation followed the same pattern: median **2%**, range **0% to 59%** [1]. A separate meta-analysis of **14,289** procedures concluded, reasonably, that elbow arthroscopy is a relatively safe operation with low complication rates [2].

Both are correct. The reconciliation is in the first review's own finding: higher complication rates occur after more complex surgery [1]. "Elbow arthroscopy" is not one operation. Removing a loose body from a capacious joint and releasing a contracted capsule millimetres from the ulnar and radial nerves share a name and an instrument, and almost nothing else. A quoted risk figure is close to meaningless unless it is attached to the specific procedure being done.

WHY THE ELBOW IS NOT THE KNEE

The elbow has the tightest relationship between joint and nerve of any joint routinely scoped. The ulnar, radial and median nerves all lie within millimetres of standard portal sites, and the working space is small – smaller still in exactly the stiff, contracted elbows that most need the operation. That anatomy is why transient nerve symptoms dominate the complication tables, and why the risk climbs with the extent of the release rather than with the time taken.

WHERE ARTHROSCOPIC TECHNIQUE HAS BEEN COMPARED WITH OPEN

For **arthritic** elbows, a systematic review of **1,097** patients found good mid-term function after debridement arthroplasty, with no increase in complications using an arthroscopic technique compared with open [3]. That is a genuine equivalence result rather than a demonstration of superiority.

For **tennis elbow**, a review of **1,604** patients comparing open, arthroscopic and percutaneous release found that open and arthroscopic releases may give better function than percutaneous, while pain was lower with the arthroscopic and percutaneous approaches. The risk of complications was similar regardless of technique [4].

The pattern across both: arthroscopy is not safer or more effective in itself. Where it wins, it wins on the recovery around the operation, not on the result of it.

AN HONEST NEGATIVE

Adding arthroscopy to another operation "to have a look" does not pay off. In a meta-analysis of **2,118** patients, routine diagnostic arthroscopy performed before ulnar collateral ligament reconstruction did **not** significantly reduce later surgery for other valgus extension overload problems [5]. Looking is not the same as finding something worth treating, and each additional portal carries the nerve risk described above.

CQ HAND + UPPER LIMB

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