

Rotator Cuff Repair

A torn supraspinatus tendon — the most common rotator cuff tear pattern. The repair operation re-attaches the torn tendon back onto the upper arm bone using small anchors.

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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 problems we usually try non-operative care first. We consider surgery when that has not given enough improvement.

This operation repairs torn shoulder tendons to restore strength and reduce pain. It is typically offered when conservative treatment fails or for acute tears. Most patients achieve clinically significant outcomes within 12 months. Long-term results remain durable over 15 years. The main benefit is improved shoulder function and pain relief.

Before the operation

Please fast for seven hours before your surgery and arrange for someone to drive you home. Bring a list of all current medications. Your surgeon will advise which medicines to stop. We use an arthroscopic approach through small incisions around the shoulder, including one at the back, to repair the tear. X-rays, MRI, or ultrasound help us plan the procedure. 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. Wear comfortable clothing to your appointment.

On the day

You present to the hospital's surgical admissions unit. You are checked in and prepared for theatre. You meet the anaesthetist. They explain your pain management plan. This operation is done under general anaesthetic combined with a regional nerve block. You will be fully asleep for the operation, and the block — an injection

that numbs the nerves supplying the arm before you wake up – provides pain relief for the first 12 to 24 hours after surgery. The anaesthetist will meet you before the operation and talk you through both parts.

You are then taken into the operating theatre, where the operation is performed. You wake up in the recovery area. 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 provide detailed instructions to help you manage your comfort and movement during this time.

What the operation involves

Your surgeon performs this procedure using an arthroscopic, or keyhole, approach. This involves several small incisions placed around your shoulder, including one at the back. A tiny camera is inserted through these cuts to give your surgeon a clear view inside the joint. This method allows for precise treatment while minimising damage to the surrounding muscle and tissue.

Inside the shoulder, your surgeon prepares the bone surface where the torn tendon attaches. Small soft suture anchors are then inserted into the bone at the inner edge of the tear. The sutures from these anchors are passed through the torn tendon tissue. These same sutures are then secured further out by strong medical-grade plastic anchors. This double-row technique presses a broad area of the tendon flat against the bone, providing stable fixation to support healing.

In many cases, an EnFix biological scaffold is placed under the tendon at the repair site to encourage it to heal back onto the bone. [EnFix biological scaffold](#). Once the tendon is securely reattached, the small incisions are closed with sutures, and a dressing is applied. This approach helps reduce postoperative pain and supports a smoother recovery process.

After the operation

You will wake up in the recovery ward with your arm in a simple sling for comfort. We manage your pain using a mix of medications to keep you comfortable. Your wound will be covered with a dressing that stays dry and intact. Most patients stay one night in hospital after this operation, though some are able to go home the same day. Please ensure someone stays with you for the first 24 hours to help you rest. You must not drive while in the sling. You can safely return to driving once your surgeon clears you, typically at the six-week review. See our guide on [Driving after upper-limb surgery](#) for more details.

Recovery

You can expect some pain and swelling in the first few days. This is normal. We use pain relief methods tailored to your needs to keep you comfortable. Ice and rest help reduce swelling. Most people find their discomfort eases as the initial inflammation settles.

Your arm will be in a simple sling for comfort. You will take it off for exercises and washing. Your physiotherapist will guide you through gentle movements. These exercises help restore motion and strength without straining the repair. You will learn how to perform daily tasks safely while protecting your shoulder.

Sleeping may be difficult at first. Try propping yourself up with pillows to find a comfortable position. As your movement returns, you can gradually resume light activities. You must not drive while in a sling. Your surgeon will clear you to drive, typically at the six-week review. See our [Driving after upper-limb surgery](#) guide for more details.

Recovery varies between individuals. Your timeline may differ; your surgeon and physio will guide you.

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.

Healing can be unpredictable. Some repairs may not hold, especially if the tear was very large or if you wait more than a year to have surgery. You might notice that your shoulder feels weaker or less stable than expected. Pain may also return or persist longer than hoped. If your recovery stalls or symptoms worsen, contact the clinic for a review.

Infection is a rare but serious risk. You might see redness spreading from the small incisions, feel warmth at the site, or develop a fever. There may be drainage or pus coming from the wound. This requires immediate attention. Call the clinic right away or go to the emergency department if you cannot reach them quickly.

Blood clots in the leg are a possible risk during recovery. You might feel sudden swelling, pain, or tenderness in your calf or thigh. The skin may look red or feel warm to the touch. This is an emergency. Seek urgent medical care immediately if you notice these signs in your leg.

Sometimes, a previous repair fails and needs revision surgery. You might feel a new click, grind, or pop in the shoulder, or notice a sudden loss of strength. If you have had shoulder surgery before, your risk of infection after future procedures may be higher. Discuss any new symptoms with your surgeon promptly to determine the next steps.

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 your surgeon immediately if you lose sensation or cannot move your limb. These signs need urgent assessment to protect your recovery and ensure your safety.

In more depth

This section goes further than you need for your own treatment decisions. Rotator cuff repair is worth the extra reading because the factors that best predict your result are largely not surgical – and two of the strongest are things you can act on before the operation.

SMOKING CHANGES THE TENDON, NOT JUST THE WOUND

Smoking is mentioned in every consent discussion and usually filed under wound healing. The tendon data are more specific than that. Pooling **73,817** patients, smokers had a significantly higher **retear** rate after rotator cuff repair, while most clinical scores were similar between smokers and non-smokers apart from a lower Constant score [1].

That combination is the interesting part. The scores look broadly alike, but the repair is more likely to have failed structurally underneath. Smoking is not making the operation feel different; it is making it less likely to hold.

The corollary is that the weeks around surgery are the highest-value moment in a lifetime of being told to stop. The tendon is attempting to reattach to bone, and that is a blood-supply-dependent process.

DEPRIVATION PREDICTS OUTCOME AS STRONGLY AS BIOLOGY

This is the finding that most changes how the operation should be discussed. In a review of **102,372** patients, social determinants of health – the circumstances people live in, not their tendon anatomy – were associated with worse clinical and patient-reported outcomes after rotator cuff repair, including more postoperative complications and more failed repairs [2].

Rehabilitation after a cuff repair takes months, requires attending appointments, and requires being able to not use the arm. Those are conditions of life as much as decisions. When they are absent the repair does worse, and that is a fact about the treatment pathway rather than a judgement about the patient. If getting to therapy or taking time off work is going to be hard, that belongs in the pre-operative conversation, where the plan can be built around it.

STIFFNESS AFTERWARDS IS COMMON, AND THE RISK FACTORS ARE NOT OBVIOUS

Loss of movement after repair is the complication patients least expect. Pooling **23,257** patients, the available evidence pointed to **male sex** and **increased age** as probable *protective* factors against postoperative shoulder stiffness [3].

Both run against intuition – older shoulders are assumed to stiffen more readily, and that is apparently not what happens here. The practical use is expectation-setting: a younger woman having a cuff repair should be told stiffness is a real possibility for her specifically, and early motion work matters, rather than being reassured with an average.

WHAT THIS MEANS FOR YOUR DECISION

None of this argues against the operation. It argues that the published success rate is an average across people whose smoking status, circumstances and demographics differ from yours, and that your own figure is movable. Stopping smoking, and arranging in advance for the rehabilitation to be attendable, are interventions with evidence behind them – which is more than can be said for most of what patients are asked to worry about.

REFERENCES

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2. Mandalia K, Ames A, Parzick JC, Ives K, Ross G, Shah S. Social determinants of health influence clinical outcomes of patients undergoing rotator cuff repair: a systematic review. *J Shoulder Elbow Surg.* 2023;32(2):419-34.
3. Stojanov T, Modler L, Müller AM, Aghlmandi S, Appenzeller-Herzog C, Loucas R, et al. Prognostic factors for the occurrence of post-operative shoulder stiffness after arthroscopic rotator cuff repair: a systematic review. *BMC Musculoskelet Disord.* 2022;23(1).