

Reverse Shoulder Arthroplasty

X-ray after reverse shoulder replacement. The ball is now fixed to the shoulder blade and the cup to the arm bone — the opposite of normal anatomy — which lets the deltoid muscle lift the arm when the rotator cuff is torn.

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

This procedure replaces the shoulder joint to restore function when the rotator cuff is damaged. It is often recommended for complex fractures or arthritis where other treatments have failed. The operation aims to provide pain relief and stability. Revision surgery shows an implant survival rate of 85% at ten years. You can expect maximum improvement at one year.

Before the operation

Please fast for seven hours before your surgery. We ask for this specific window so your procedure can start early if the list runs ahead. Please arrange for someone to drive you home and stay with you afterward. Wear comfortable, loose-fitting clothing to your appointment. Bring a complete list of all medications you are currently taking. Your surgeon will review these with you and advise which ones to stop before the operation. Imaging such as X-rays or scans helps us plan your care. If you have other medical conditions, you may need blood tests or a review with the anaesthetist. Most patients do not require these unless specifically indicated.

On the day

You present to the hospital's surgical admissions unit for check-in and preparation. You meet the anaesthetist, who explains your care 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 for your surgery. Once the procedure is complete, you wake up in the recovery area. Nurses monitor you closely while the anaesthetic wears off and your vital signs stabilize. Once you are stable, you either go to the ward or go home, depending on the procedure and your recovery. We ensure you are comfortable and ready for the next step in your healing journey.

What the operation involves

Your surgeon makes a single cut over the shoulder area to access the joint. The worn-out surfaces of the ball and socket are removed. Your surgeon then replaces them with a reverse joint replacement. This device uses metal and plastic parts arranged in a specific way. This design creates a stable pivot point. It allows the large shoulder muscle (the deltoid) to lift your arm, even if the rotator cuff tendons are damaged or missing.

If you are having this operation for a fracture, your surgeon may also repair broken bone pieces. These pieces are held in place with small implants to help them heal correctly. Proper positioning of these bone fragments is important for restoring full movement later.

Once the new joint is in place, your surgeon closes the cut. A fine self-adhesive mesh is laid over the wound first to hold the skin edges together. A liquid skin adhesive is then painted over the mesh. This sets to seal the area. The dressing stays on for roughly one to two weeks and then lifts and peels away by itself. There is nothing to be taken out.

After the operation

You will wake up in the recovery ward with your arm in a simple sling for comfort. Most patients stay one night in hospital after this operation, though some are able to go home the same day. We will manage your pain with medication and care for your wound with dressings. You must have someone stay with you for the first 24 hours. Your arm rests in the sling, which you remove only for exercises and washing. We do not use hinged braces or abduction pillows. You must not drive while in a sling. You can drive again once your surgeon clears you, typically at the six-week review. See [Driving after upper-limb surgery](#) for details.

Recovery

You can expect some swelling and discomfort in the first few days. This is normal. Your surgeon will guide you on pain relief. Most people find their pain drops significantly after the first two weeks. You will wear a simple sling for comfort. It comes off for exercises and washing. We do not use hinged braces or abduction pillows.

Your physiotherapist will guide your rehabilitation. Early, active movement is safe and effective. You may start self-directed home therapy if it suits you. This shows similar results to supervised sessions. Your arm rests in the sling until you are ready to move. Gentle exercises begin as soon as your surgeon clears you.

You will notice steady gains in movement. Many people feel much better within two weeks. You will work towards full function over the next year. Your timeline may differ; your surgeon and physio will guide you. You can return to driving once your surgeon clears you, typically at the six-week review. See our guide on [Driving after upper-limb surgery](#).

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.

If you have had previous shoulder surgery, your risk of needing another operation is higher than if this is your first procedure. However, if your previous surgery was a standard joint replacement that failed, the results of this revision are often similar to a primary operation.

Loosening of the shoulder blade component can happen over time. You might notice increased pain or a feeling of instability where the shoulder feels like it is slipping or giving way. If you feel sudden instability or increasing pain, contact the clinic for an assessment.

Wound healing issues are more likely if you need blood-thinning medication after surgery. You may see redness spreading from the cut, drainage that does not stop, or increased tenderness. If you notice signs of infection or poor healing, call the clinic promptly so we can check the wound.

Fractures of the upper arm bone near the shoulder are more common when revising a previous replacement. You might feel a sudden pop or sharp pain during movement, followed by significant swelling and bruising. If you experience sudden severe pain or inability to move the shoulder, seek urgent medical attention.

Younger patients may experience instability, where the joint feels loose or slips out of place. This can feel like a clicking sensation or a fear that the shoulder will dislocate. If you feel recurrent instability, bring it up at your next review so we can adjust your care plan.

Infection is a risk, but this procedure can still be successful even if the previous joint was infected. Signs include persistent fever, chills, or warmth around the shoulder. If you suspect an infection, contact the clinic immediately for evaluation.

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. Go to emergency if you experience sudden severe pain, calf swelling, shortness of breath, loss of sensation, or inability to move your limb. These signs may indicate infection, blood clots, or fracture. We need to assess you promptly to protect your recovery and ensure your safety during the healing process.

In more depth

This section goes further than you need for your own treatment decisions. Reverse shoulder replacement is worth the extra reading because it is the operation that solved a problem previously thought unsolvable – a shoulder with no working rotator cuff – and because its characteristic complication is one most patients have never heard of.

WHY REVERSING THE JOINT WORKS

A normal shoulder is a ball on the arm and a socket on the shoulder blade, and it depends on the rotator cuff to hold the ball centred while the deltoid lifts. Where the cuff is gone, a conventional replacement has nothing to stabilise it and the ball simply rides upwards.

The reverse design swaps them: the ball is fixed to the shoulder blade and the socket to the arm. That moves the centre of rotation inwards and downwards, which lengthens the deltoid's lever arm and lets it lift the arm on its own. It is a mechanical solution rather than a biological one – it does not repair anything, it makes the remaining muscle sufficient.

That also explains the pattern of what it restores. Overhead elevation usually returns well. Rotation depends on muscles the operation does not replace, so reaching behind the back often remains limited, and that should be part of the expectation set before surgery rather than a disappointment after it.

WHERE IT HAS DISPLACED OLDER OPERATIONS

For fractures, the shift has been decisive. Pooling **228,523** patients, reverse total shoulder arthroplasty gave better functional outcomes and complication rates than hemiarthroplasty, and a more favourable revision profile than plate fixation, in elderly patients with proximal humerus fractures [1].

An implant detail worth knowing, because it is often raised: comparing standard components with fracture-specific components in reverse replacement for these fractures across **436** patients found **no significant differences** in clinical outcomes or complication rates [2].

THE COMPLICATION TO KNOW ABOUT

The one that matters here is the **acromial or scapular stress fracture** – the bone above the joint cracking under the increased deltoid tension the design deliberately creates. It is the direct consequence of the mechanism that makes the operation work.

A meta-analysis identified the risk factors: patients who sustained these fractures were **older with lower BMI**, and other risks included **osteoporosis, inflammatory arthritis, female sex and previous rotator cuff repair** [3]. A separate review found the literature reports these fractures inconsistently – significant discrepancies in how they are defined, diagnosed and counted [4] – so quoted rates should be read with caution.

Set against that, the short-term picture is reassuring: overall rates of mortality and medical and surgical complications are low in the first 90 days, with only **6%** of patients requiring readmission [5].

TWO THINGS THE EVIDENCE DOES NOT SUPPORT

That the subscapularis must be repaired. Across **267** patients, there were **no differences** in abduction, internal rotation or external rotation strength after reverse replacement with or without subscapularis repair, though the authors note the literature on strength outcomes is limited [6].

That the indication does not affect the result. It does. At two or more years, Constant scores were significantly higher in patients having reverse replacement for primary osteoarthritis with an **intact** cuff than for primary osteoarthritis with cuff tears or for secondary osteoarthritis [7]. The same operation gives different results depending on why you needed it – which is worth knowing when you are quoted an average.

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