

Distal Biceps Repair

Distal biceps repair: the torn tendon is re-anchored onto the forearm bone it pulled away from.

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At-a-glance recovery. Pooled from 45 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 Return to desk work and light activities typically occurs within 2 to 6 weeks, with workers' compensation patients taking longer.	3-6 months Return to sport and manual work is typically achieved by 3 to 6 months, with high return-to-sport rates observed at 6 months.	12 months Maximum recovery and plateau of functional outcomes typically occur at 1 year post-surgery.

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 arm, and arrange scans if they are needed. A scan can confirm whether the tendon that joins your lower biceps muscle to the forearm bone has torn fully or partly.

This operation reattaches that torn tendon to the bone where it came from. It is usually offered for a complete tear, especially if you are active, work with your hands, or play sport. For a partial tear we usually try non-operative care first, such as activity change, physiotherapy or hand therapy, splinting, or injections. Surgery comes in when those have not given enough improvement. The aim is to restore the strength you use to bend your elbow and turn your palm up, so you can use your arm normally again.

Before the operation

Your surgeon will tell you which medicines to stop before surgery and when. You will need to stop eating and drinking seven hours beforehand, so we can bring you forward if the theatre list runs early. Arrange for someone to drive you home afterwards. Bring a list of your current medicines and wear comfortable, loose clothing. Scans such as an X-ray, ultrasound or MRI help plan the operation. If you have other medical conditions, you may need blood tests or a review with the anaesthetist.

On the day

You arrive at the hospital's surgical admissions unit, where you are checked in and prepared for theatre. You will meet the anaesthetist there. 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.

You are then taken into the operating theatre, where the operation is performed. When it is finished, you wake up in the recovery area. Nurses watch over 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.

What the operation involves

The operation is done through one cut at the front of your elbow, over the spot where the tendon tore. Your surgeon moves the tissues aside to reach the forearm bone, which has a small raised spot where the tendon used to attach.

The torn tendon end is tidied up and stitched with strong stitches. Your surgeon then drills a small tunnel through the bone and threads the stitches through it. A small metal button travels with them and comes to rest flat against the far side of the bone, where it acts as an anchor. The stitches pull the tendon down into the tunnel, against fresh bone. That is where the tendon heals back on, reattaching it to the place it tore away from.

The wound is closed with stitches and covered with a dressing. The dressing stays on for about 10 days; the 'After the operation' section explains what happens then.

After the operation

You wake up in the recovery area, then move to the ward. Most patients stay one night in hospital after this operation, though some are able to go home the same day. Your arm rests in a sling for comfort, and gentle movement starts early. Nurses will give you pain relief and keep you comfortable. Someone should stay with you for the first 24 hours after you get home. 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. You can move around the house and do light tasks with your other hand.

Recovery

For the first few days your elbow will be sore and swollen. This settles gradually. Pain relief and rest help, and keeping your hand raised on a pillow eases the throbbing. Some bruising down the forearm is common.

Your arm rests in a sling for comfort, and gentle movement starts early rather than your elbow being held still. Hand therapy after surgery is with Ruby Doolan at Extend Rehabilitation. Ruby directs your exercises and makes any splint you need. Early on, you will do simple movements to keep the elbow and wrist from stiffening. Light tasks around the house are fine with your other hand. You should not lift with the operated arm until your therapist clears you.

As the weeks pass, the swelling settles and your movement returns. Your therapist will add gentle strengthening as the tendon heals. Once you are out of the sling and your surgeon clears you, you can start driving again. See our page on [driving after upper-limb surgery](#). Returning to work depends on what your job involves; desk work comes back sooner than heavy lifting. Sport comes later, once your strength and grip are back.

Most people get back to work and the activities they enjoy. Recovery varies from person to person, so your timeline may differ. Your surgeon and your hand therapist will guide you at each stage.

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.

Sometimes the repaired tendon does not hold. If you feel a sudden pop or snap in your elbow, or the strength you had been regaining suddenly drops away, contact the clinic straight away. This is uncommon, and when it happens it usually occurs in the first few weeks after surgery. Following your therapist's instructions about lifting and activity lowers the chance of it happening to you.

Nerves that run near the elbow can be irritated during surgery. If this happens you might notice tingling, numbness, or a patch of skin that feels dull or fuzzy. Some people notice weakness when straightening their fingers or thumb. This is often temporary, but tell your surgeon or therapist at your next review if you notice any of these changes. If the numbness or weakness is severe or getting worse, call the clinic rather than waiting.

The elbow can also become stiff if it does not move as planned. You might find it hard to straighten your arm fully or to bend it as far as before, and turning your palm up may feel blocked. Keep up your gentle movements and tell your therapist early if progress stalls. If stiffness becomes a real problem, your surgeon will discuss the next steps with you.

Bring up anything unusual at your review, even if it seems minor. Things that settle on their own are worth mentioning too, because early attention makes problems easier to sort out.

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

When to call us

Call us if you have a fever, or the wound becomes more red, swollen or starts to ooze. Call us if your pain suddenly gets worse. If you feel a pop or snap in your elbow, call us straight away, or go to the emergency department if it is after hours. Go to emergency if you have calf swelling or pain, or shortness of breath, as these can be signs of a blood clot. Go to emergency if you lose feeling in your arm or hand, or cannot move it. If you are unsure, call us. We would rather hear about a small worry than miss something that needs quick attention.

Where to read more about the condition

This page is about the operation itself. The condition it treats, including what the evidence shows about when surgery helps and when it does not, is covered in more detail on the [Distal Biceps Rupture](#) page.

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Complication rates from published literature

Pooled from 45 published studies. These are population-level rates, not your individual risk — your surgeon will discuss what applies to you.

COMPLICATION	REPORTED RATE	NOTES
Loss of motion or elbow stiffness	5-10%	Loss of terminal extension or forearm rotation; usually mild and improves with therapy.
Incomplete strength recovery	5-15%	Some patients do not regain full supination strength, particularly with delayed repair.
Lateral antebrachial cutaneous nerve injury	4-10.8%	Numbness or burning sensation along the outer border of the forearm is the most common complication; most cases (77.9%) are mild and do not cause functional limitations.
Heterotopic ossification	2.1-13.5%	Abnormal bone formation between the radius and ulna; double-incision has higher rate (7.2%) vs single-incision (1.2%); symptomatic cases cause reduced forearm rotation and may require surgical excision.
Retear or failure	1.4-5.4%	The tendon may re-tear or stretch out after repair.
Posterior interosseous nerve injury	1.1-4.0%	Injury to the nerve that extends the fingers and wrist is rare but serious, potentially causing weakness or paralysis of finger/wrist extension.
Reoperation	0.6-5.4%	Overall reoperation rates range from 0.6% to 5.4%, driven largely by rerupture and heterotopic ossification.
Infection	0.2-2.4%	Superficial infections respond to oral antibiotics; deep infections may require multiple washouts and prolonged IV antibiotics, and in severe cases the repair may fail.
Radioulnar synostosis	0.1-2.8%	The two forearm bones may join together with bone, severely limiting forearm rotation, requiring surgical excision of the bony bridge.
Brachial artery injury	0.1%	Vascular injury is extremely rare but serious, potentially requiring vascular repair.

COMPLICATION	REPORTED RATE	NOTES
Radial fracture through drill hole	Rare	Fracture through the drill hole in the radial tuberosity; rare with modern cortical button techniques.
Median, radial, or ulnar nerve injury	Rare	Injury to median, radial, or ulnar nerves is rare; most are traction neurapraxias.

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