

Extensor Tendon Repair

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
4-6 weeks	3 months	6-12 months
Splint-protected early; light use of the hand builds from about weeks 4-6 as guided motion starts, depending on the zone injured.	Grip and manual work by about 3 months once the repair tolerates load and any lag has been addressed.	Final motion and comfort settle over 6-12 months; small extension lags of 10-15° are common and usually functionally minor.

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 hand, and arrange imaging if it is needed to work out what has happened.

Extensor tendons are the cords on the back of your hand and fingers that straighten them. They can be cut by a laceration, torn by a crush or sporting injury, or rupture after a fracture. Many of these injuries, such as mallet finger, are treated without surgery using a splint. Others need repair, especially open cuts, long-standing tears, or injuries where the tendon has been badly damaged. We consider surgery when splinting has not given enough improvement, or straight away when the injury is acute and the tendon will not heal on its own. The aim is to restore the tendon's length and strength so your finger or thumb can straighten again, giving you a working, pain-free hand.

Before the operation

Once your operation is booked, we will give you clear instructions to follow in the days before you come in. You will need to stop eating and drinking seven hours before surgery. We ask for seven hours so you can be brought forward if the theatre list runs early. Your surgeon will tell you which of your usual medicines to stop and which to keep taking, so bring a written list of everything you take, including any blood thinners. Arrange for someone to drive you home afterwards, as you will not be able to drive yourself. Wear loose, comfortable clothing with sleeves that are easy to remove. Most people need no other preparation. If you have other medical conditions, you may need blood tests or a review with the anaesthetist, the doctor who gives the anaesthetic.

On the day

You will come to 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. 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 go to the ward or go home, depending on the procedure and your recovery.

What the operation involves

The exact steps depend on where the tendon is torn and how badly. Extensor tendons run just under the skin on the back of the hand and fingers, so your surgeon can usually reach the injury through a cut over the back of the affected finger or hand. If the skin itself was injured, damaged tissue is cleaned away first, and healthy skin cover may be brought over the area.

Once the tendon ends are found, your surgeon sews them back together. The repair is made strong enough to cope with the early movements your hand will do afterwards. If a length of tendon is missing or too damaged to sew, the gap can be bridged instead. This may be done with a piece of tendon taken from a finger that cannot be saved, with a graft, or by moving a nearby tendon to take over the job of the torn one. Your surgeon aims to restore the tendon's natural length, because a tendon left too loose or too tight will not straighten the finger properly.

The cut is closed with stitches and covered with a dressing. You will go home with written instructions on caring for your hand.

What happens next matters as much as the repair itself. Some repairs need a splint that holds the finger still, while others are started on early, protected movement within the first weeks. One approach allows 30 degrees of active movement in the first two weeks, increasing to 40 degrees in the third week and 50 degrees in the fourth week. Your surgeon will match the plan to your injury and tell you exactly what you can and cannot do.

After the operation

You will wake up in the recovery area, where nurses watch you as the anaesthetic wears off. Your hand will be dressed and may be resting in a splint, depending on your injury. Pain relief is planned before you leave theatre, and you can tell the nurses if you are sore at any point. Someone should stay with you for the first 24 hours. Most people move around normally soon after waking; the operation is on your hand, not your legs. Your team will tell you whether you go home the same day or stay one night in hospital. 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.

Recovery

Your hand will be sore and swollen for the first days and weeks. This is normal. Keeping your hand raised on pillows, even while you sleep, helps the swelling settle. Simple pain relief as directed by your team usually eases the discomfort.

Your dressing stays on for about 10 days. Depending on your injury, you may wear a splint that holds the finger still, or you may be started on early protected movement. If early movement is part of your plan, you will be shown exactly how far to bend and straighten the finger and how often. The movements are small at first and increase as the repair strengthens. Rehabilitation is with Ruby Doolan, a hand therapist at Extend Rehabilitation. She will guide your exercises and make any splint you need.

At home you can do most everyday things that do not strain the hand. You will need to avoid lifting, gripping and anything that could knock the repair until your therapist clears you. Keep the hand clean and dry until we review the wound. As the swelling settles and movement returns, the exercises become easier and the finger starts to straighten more smoothly.

Recovery varies from person to person. Your timeline may differ, and your surgeon and hand therapist will guide you at each review.

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 most common problem after this surgery is stiffness. The finger may not straighten fully or bend into a full fist, and grip strength can stay weaker than before. This happens when the tendon scars down to the tissue around it while the hand is held still. Your therapist will watch for this at each visit and adjust your exercises. If movement stalls or the finger feels increasingly tight, bring it up at your next review rather than waiting.

Sometimes a small amount of straightening power is lost even when everything else goes well. You may notice the finger sits slightly lower than its neighbours when you try to straighten it, or that it will not bend all the way into your palm. This is called an extensor lag. It is worth knowing this can happen, especially if the injury was old before it was treated. Mention it at review so your therapist can work on it.

The repair itself can fail. If you feel a sudden pop or the finger that was straightening well suddenly droops again, contact the clinic straight away. Do not wait for the next appointment.

Infection is uncommon but needs quick attention. Watch for pain that keeps getting worse instead of easing, redness spreading out from the wound, swelling that builds rather than settles, or any fluid leaking from the stitches. A fever with a sore hand is also a warning sign. If you see any of these, call the clinic the same day or go to the emergency department if it is after hours.

If surgery is needed to free a scarred tendon later, this is called tenolysis. It is not part of the original plan, but it is an option if stiffness does not respond to therapy. Your surgeon will discuss it with you only if your movement plateaus.

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

When to call us

Problems are easier to fix when they are caught early. Call us if your pain keeps getting worse instead of easing, or if the skin around the wound becomes redder, hotter or starts leaking fluid. Call us if you feel feverish, if your fingers or hand go numb, or if you cannot move the finger at all. If you notice sudden swelling and pain in your calf, or you become short of breath, go to emergency. If the finger that was straightening well suddenly droops, or you feel a pop, call us straight away.

COMPLICATIONS & CONSENT

Extensor Tendon Repair

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
extension lag	common (10-15°)	Minor lags are the signature imperfection of extensor repairs; larger lags may need further splinting or surgery. Across early-active-motion programmes, combined lag results were good/excellent in 72-96% by Miller criteria.
stiffness / limited flexion	—	Adhesions over the back of the hand and fingers; the reason therapy starts early.
re-rupture	—	Uncommon with staged loading - no ruptures occurred across the zone IV early-active-motion cohorts in the systematic review; the splint regime exists to keep it that way.
recurrent deformity	—	Boutonnière and swan-neck corrections can relapse through secondary fibrosis and may need repeat procedures.
poorer outcomes in central slip fracture cases	—	Bony central slip injuries carry guarded expectations.

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