

Mucous Cyst Excision (with Local Flap)

At-a-glance recovery. Pooled from 10 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
2-6 weeks	2 months	6 months
Light use within days once the dressing allows; sutures out at about two weeks. Most people are back to desk work well within the first fortnight.	Gripping and manual work comfortable by about 2 months, once the flap has settled and the joint is no longer tender.	If the nail was ridged or grooved by the cyst pressing on its growth zone, the improvement only shows as the new nail grows out — about 6 months.

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, including your history, an examination and imaging where needed, establishes the diagnosis.

A mucous cyst is a small, fluid-filled lump that forms near the end joint of a finger, usually in skin worn by wear-and-tear arthritis in that joint. This operation removes the cyst and covers the area with a small flap of nearby skin. We usually try non-operative care first, such as activity change, hand therapy or splinting, and consider surgery when that has not given enough improvement. For some people, surgery may be recommended straight away.

The operation aims to remove the cyst for good. Recurrence after this type of surgery is low, at 1.4%, and most people are happy with how the scar looks and would choose the operation again. We will discuss whether it suits you and decide together.

Before the operation

Your surgeon will plan the operation using imaging such as an X-ray, MRI or ultrasound. Most people need no other tests. If you have other medical conditions, you may need blood tests or a review with the anaesthetist. Stop eating and drinking seven hours before surgery; we ask for a little longer than usual so your time can be brought forward if the theatre list runs early. Your surgeon will tell you which medications to stop and when. Bring a list of everything you take, arrange a lift home, and wear comfortable clothing with a loose sleeve.

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 can be done under general anaesthetic (fully asleep) or under local anaesthetic (an injection that numbs just the finger, with you awake). We will talk through which suits you before the operation.

You are then taken into the operating theatre, where the operation is performed. Afterwards you go to the recovery area, where nurses monitor you (if you had a general anaesthetic, while it 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

Your surgeon makes a small cut over the lump, near the end joint of the finger. Through this cut, they remove the cyst and clear away the small bony spur that often sits beside it. That spur comes from wear-and-tear arthritis in the joint and is a common reason these cysts keep coming back, so removing it is a key part of the operation.

Once the cyst and the bone spur are gone, your surgeon covers the area with a small flap of nearby skin. The flap is lifted, moved across the gap left by the cyst, and stitched into place. This brings fresh skin over the joint and helps the area heal in one go. The stitches may be dissolving or removable, and your surgeon will let you know which type has been used.

The whole operation is done through this one small area at the end of the finger. Nothing is done to the deeper joints or tendons unless the findings during surgery call for it.

After the operation

You go to the recovery area, where nurses keep an eye on you (if you had a general anaesthetic, while it wears off). Your finger will have a dressing and may feel numb for a while. Pain relief is planned for you before the numbness settles; tell the nurses if you are uncomfortable, as they can adjust it. You can move around as soon as you feel steady, and your hand does not need to be kept still. Someone should stay with you for the first 24 hours. 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

For the first few days your finger will be sore and a little swollen. This settles steadily. Keeping your hand raised on a pillow, especially at night, eases the throbbing. Simple pain relief as directed by your team is usually enough.

You go home with the dressing on, and it stays in place for about 10 days until we see you and change it. Your hand does not need to be kept still, so you can use it for light tasks around the house as soon as you feel steady. Avoid heavy gripping, and keep the dressing dry.

Once the dressing comes off, the flap of skin over the joint is usually healing well. The scar softens and fades over time, and published series report that the appearance settles well. Movement in the end joint of the finger returns as the swelling settles. Hand therapy after surgery is with Ruby Doolan at Extend Rehabilitation; she will guide your exercises and make a splint if you need one.

Recovery varies from person to person, and your timeline may differ. Your surgeon and your hand therapist will guide you at each review, and you will know things are on track as the swelling goes down, the wound closes over, and you can grip and bend the finger without pain.

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 cyst grows back at the same spot. You would notice a small, firm lump near the end joint of the finger again, much like the one you had before. If you see one forming, mention it at your next review. Removing the small bony spur beside the joint is done to stop this happening.

The flap of skin used to cover the area needs to heal well. If it does not, you might see the wound edges pulling apart, the flap looking pale or dark, or the area staying raw and weepy instead of closing over. Healing can also be slower than expected. If you notice any of these signs, contact the clinic so we can check the wound and adjust your care.

A wound infection is another thing to watch for. This usually looks like redness that spreads out from the wound, with warmth, swelling or tenderness that gets worse rather than better. You might see fluid or pus leaking from the wound, or feel a deep, throbbing pain that does not ease with simple painkillers. You may feel hot and generally unwell. If you notice these signs, call the clinic straight away. If you cannot reach us and you feel unwell, go to your nearest emergency department.

The good news is that when this operation is done with a skin flap, wound problems like these are uncommon in the cases that have been reported, and the cyst rarely comes back [2, 3].

If you spot anything about your finger that worries you between reviews, do not wait. Call us and describe what you can see and feel. Early attention makes most 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 feel feverish, notice the redness around the wound spreading, or see fluid or pus leaking from it. Call us if the pain suddenly gets worse and simple painkillers do not touch it, if your finger feels numb, or if you cannot bend or straighten it. Go to your nearest emergency department if you have calf swelling or shortness of breath, or if you feel hot and generally unwell and cannot reach us. If anything about the finger worries you between reviews, do not wait.

In more depth

This section goes further than you need for your own treatment decisions. Mucous cyst surgery is worth the extra reading because the operation is not really about the cyst at all, and once you see why, everything about how it is done makes sense.

THE CYST IS A SYMPTOM. THE OSTEOPHYTE IS THE DISEASE.

A mucous cyst is a small ganglion of the joint nearest the fingernail, and it almost always sits on top of wear-and-tear arthritis in that joint. The worn joint grows small spurs of extra bone (osteophytes), the joint fluid finds a way out past them, and the cyst is where it collects under the thin dorsal skin.

That is why simply removing the cyst has a poor record: leave the osteophytes and the leak refills. The clearest demonstration comes from a series that did the opposite, **removed only the osteophytes and left the cyst alone**, with complete resolution in most cases [1]. The operation is best understood as joint debridement with the cyst dealt with along the way, not cyst removal with the bone as an afterthought.

WHY A FLAP, AND WHY IT DOES NOT MATTER MUCH WHICH ONE

The skin over a long-standing cyst is often stretched paper-thin, and once the cyst and thinned skin are excised there can be too little healthy skin to close directly. That is the job of the **local flap**: a small tongue of neighbouring skin is rotated across the defect, bringing its own blood supply with it.

The technique Dr Hirpara most often uses follows the approach described by Johnson and colleagues [2]: a day-case operation under local anaesthetic ring block, an elliptical excision of the cyst in its entirety, including the thinned skin, with the cyst's neck followed down to the joint and resected together with the attached capsule, the accessible dorsal osteophytes excised while protecting the extensor tendon, and the defect closed with a **full-thickness local advancement flap** raised from the same side of the finger, without tension. Sutures come out at about two weeks.

In the published series of that technique, 75 consecutive patients over ten years, the recurrence rate was **1.4%**, with high patient satisfaction with the scar and a stated willingness to have the operation again [2].

Flap design is not the deciding factor. The Zitelli bilobed flap provides good-quality coverage **without added risk to the nail matrix** [3], which matters, because the nail's growth zone sits immediately beyond the cyst, and a recent comparison of two other flap designs found **no difference in aesthetic satisfaction or complications between them** [4]. Other centres report full-thickness skin grafting with acceptable recurrence [5], and total excision of the dorsal joint capsule with no recurrences in a small series [6]. The common thread is the same everywhere: deal with the joint, and get sound skin cover.

WHEN THE JOINT ITSELF IS THE PROBLEM

Sometimes the cyst is the smaller issue and the arthritis beneath it is what actually hurts. If the joint is painful in its own right, not just lumpy, removing the cyst treats the messenger and leaves the message. In that situation the definitive answer can be to **fuse the joint** (an arthrodesis), which removes the arthritis, the pain and the source of the cyst in one operation. That option, its trade-offs and its recovery are covered on the [DIP joint fusion](#) page.

WHAT CAN GO WRONG

The specific risks follow from the anatomy: the **nail matrix** is millimetres away, so a nail groove or ridge is possible (and, conversely, a cyst pressing on the matrix may have already caused one that surgery can improve); the thin skin means healing occasionally needs longer; and recurrence – though uncommon after proper joint debridement, as the figures above show, is never zero, because the arthritis that caused the cyst is still an arthritic joint.

CQ HAND + UPPER LIMB

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COMPLICATIONS & CONSENT

Mucous Cyst Excision (with Local Flap)

Complication rates from published literature

Pooled from 10 published studies. These are population-level rates, not your individual risk — your surgeon will discuss what applies to you.

COMPLICATION	REPORTED RATE	NOTES
recurrence	1.4%	In the published series of the advancement-flap technique used here (75 consecutive patients); recurrence is higher when the joint osteophytes are not debrided.
nail deformity	—	The nail matrix sits millimetres from the cyst; a groove or ridge can result — though a deformity the cyst itself caused often improves after excision.
joint stiffness	0%	No loss of DIP flexion reported in the flap series; some temporary stiffness is normal.
wound healing problems	—	The dorsal skin is thin, especially where the cyst had stretched it; occasionally healing takes longer.
progression of arthritis	—	The operation removes the cyst and osteophytes, not the arthritis; a painful arthritic joint may later warrant fusion — see the DIP joint fusion page.

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