CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

PATIENT INFORMATION — IN DEPTH

Mucous Cyst Excision (with Local Flap)

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 and consider surgery when that has not given enough improvement.

This procedure removes a fluid-filled lump on your finger and covers the area with a small skin flap. It is typically offered when conservative treatments fail to relieve symptoms. The main benefit is the removal of the cyst to improve comfort and function. Our evidence shows a low recurrence rate of 1.4% with this approach. Most recurrences happen early after initial surgery, so we monitor you closely. We aim for a reliable result with high patient satisfaction regarding the scar.

Before the operation

Please fast for seven hours before your appointment. This allows us to bring you forward if the list runs early. Bring a list of all your current medications and wear comfortable clothing. Arrange a lift home for after the procedure. Your surgeon will advise which medicines to stop, but please follow their specific instructions. Imaging such as an X-ray, MRI, or ultrasound may be needed to plan the operation. Blood tests and an anaesthetic review are not routine. If you have other medical conditions, you may need these checks. Otherwise, most patients do not require them.

On the day

You present to the hospital's surgical admissions unit, where you are checked in and prepared for theatre. You meet the anaesthetist to discuss your care. 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.

CQ HAND + UPPER LIMB
Dr Kieran Hirpara — Specialist Orthopaedic Surgeon
Suite 2, Level 1, Mater Private Hospital Rockhampton, 31 Ward Street, The Range, QLD 4700
Phone 07 4863 6556 · office@cqupperlimb.com.au · cqupperlimb.com.au

You are then taken into the operating theatre, where the operation is performed. You wake up in the recovery area, where 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.

What the operation involves

Your surgeon makes a small cut over the cyst to remove it. This approach gives a clear view of the area, making it easier to explore and treat the problem thoroughly. In some cases, your surgeon may also remove small bone spurs (osteophytes) from the joint underneath. Removing these spurs helps prevent the cyst from coming back.

To close the cut, your surgeon uses a local skin flap. This means a small section of nearby skin is gently moved and folded over the area where the cyst was removed. This technique covers the wound neatly and helps it heal well. In other situations, your surgeon might use a total dorsal capsulectomy, which involves removing the lining of the joint capsule, or a Wolfe graft, which uses a small piece of tissue to cover the site. The choice of method depends on what works best for your specific anatomy and your surgeon's preference.

After the procedure, the cut is closed with stitches or glue. Your surgeon will apply a dressing to protect the area while it heals. This is a straightforward operation designed to remove the cyst and address the underlying cause, helping to keep the skin smooth and functional.

After the operation

You will wake up in the recovery ward with your hand dressed and supported. We manage pain using standard medication to keep you comfortable. Your team will tell you whether you go home the same day or stay one night in hospital. You must have someone stay with you for the first 24 hours. Keep the dressing clean and dry. You can gently move your fingers to reduce swelling, but avoid using the hand for heavy tasks. We ensure your wound heals well with minimal stiffness. Follow our specific instructions for care. Contact us if you notice increased pain, redness, or drainage. Your recovery is a gradual process, so be patient with your healing hand.

Recovery

You can expect some swelling and discomfort in the days following your procedure. This is a normal part of healing. We keep your hand elevated to help reduce the swelling and ease the ache. You will likely wear a light dressing or splint to protect the area while it settles.

Your hand therapist, Ruby Doolan at Extend Rehabilitation, will guide your recovery. She directs your exercises and makes any splint you need. You will start gentle movements early to keep your finger flexible. This helps prevent stiffness and supports the skin flap as it heals. We focus on restoring your grip and dexterity without straining the repair.

As the swelling goes down, you will notice your hand feeling more like itself. You can return to light daily tasks as comfort allows. Your surgeon will clear you to drive once you are off strong pain medication and can hold the

wheel with both hands. You can also resume work or sport when your therapist confirms you have regained the necessary strength and movement.

Your timeline may differ; your surgeon and hand therapist will guide you based on how your body responds.

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.

Cyst returning The main concern is that the cyst comes back. You might notice a small, fluid-filled lump reappearing under the skin near your original surgery site. It may feel soft or firm. It could cause mild discomfort or make the joint feel stiff. If you see the lump growing or feel new pressure, let us know. We can check if it needs further attention.

Scarring issues Some people worry about how the scar looks or feels. You might notice the scar is raised, thick, or red. It could feel itchy or tight. In some cases, the scar might pull on the skin, making movement slightly uncomfortable. If the scar becomes very red, hot, or painful, it could be a sign of irritation or infection. Contact our clinic for advice. We can recommend creams or treatments to help the scar heal smoothly.

Infection Although rare, infection can happen. You might see increasing redness spreading from the wound. The area could become swollen, warm to the touch, or painful. You might notice pus or cloudy fluid leaking from the incision. If you develop a fever or feel generally unwell, seek medical help immediately. Do not wait for your next appointment if symptoms worsen quickly.

Numbness or tingling You might experience temporary numbness or tingling around the surgical site. This is often due to swelling pressing on small nerves. It usually improves as the swelling goes down. If the numbness persists or spreads, tell us. We can assess if any nerve irritation needs specific care.

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 urgent care for sudden severe pain, loss of sensation, or inability to move your hand. Go to emergency if you notice calf swelling or shortness of breath. These signs need immediate assessment to rule out serious complications.

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

CQ HAND + UPPER LIMB
Dr Kieran Hirpara — Specialist Orthopaedic Surgeon
Suite 2, Level 1, Mater Private Hospital Rockhampton, 31 Ward Street, The Range, QLD 4700
Phone 07 4863 6556 · office@cqupperlimb.com.au · cqupperlimb.com.au

debridement, as the figures above show — is never zero, because the arthritis that caused the cyst is still an arthritic joint.

REFERENCES

1. Lee HJ, Kim PT, Jeon IH, et al. Osteophyte excision without cyst excision for a mucous cyst of the finger. J Hand Surg Eur Vol. 2013;39(3):258-261.
2. Johnson SM, Treon K, Thomas S, Cox QG. A reliable surgical treatment for digital mucous cysts. J Hand Surg Eur Vol. 2013;39(8):856-860.
3. Jiménez I, Delgado PJ, Kaempf de Oliveira R. The Zitelli bilobed flap on skin coverage after mucous cyst excision: a retrospective cohort of 33 cases. J Hand Surg Am. 2017;42(7):506-510.
4. Orieux A, Maximen J, Yvonnet T, et al. Aesthetic outcome of biquadrangular and Hueston dorsal flaps in digital mucous cyst surgery. J Hand Surg Eur Vol. 2026;.
5. Jamnadas-Khoda B, Agarwal R, Harper R, Page RE. Use of Wolfe graft for the treatment of mucous cysts. J Hand Surg Eur Vol. 2009;34(4):519-521.
6. Kanaya K, Wada T, Iba K, Yamashita T. Total dorsal capsulectomy for the treatment of mucous cysts. J Hand Surg Am. 2014;39(6):1063-1067.

CQ HAND + UPPER LIMB
Dr Kieran Hirpara — Specialist Orthopaedic Surgeon
Suite 2, Level 1, Mater Private Hospital Rockhampton, 31 Ward Street, The Range, QLD 4700
Phone 07 4863 6556 · office@cqupperlimb.com.au · cqupperlimb.com.au