CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

PATIENT INFORMATION — IN DEPTH

Glomus Tumour Excision

Why this operation has been suggested

Dr Kieran Hirpara, an upper-limb surgeon at Mater Private Hospital Rockhampton, treats glomus tumours by removing them completely, and that removal is the treatment. A glomus tumour is a small, uncommon growth in the soft tissue of the fingertip, usually under or beside the nail. It is not a cancer. It is one of the most painful conditions that can affect a finger, and it causes far more trouble than its small size suggests. Most people come to us with a long history of pain, often after the tumour was missed or mistaken for something else at first.

Once the diagnosis is confirmed by examination, X-ray and MRI, we recommend removal. There is no non-operative treatment that removes a glomus tumour, so there is nothing to try first. The reason removal is advised is simple: taking out the whole tumour relieves the pain, and the relief is usually immediate. Careful, complete removal also means the tumour very rarely comes back. We will talk through the findings on your scan with you and decide together whether this operation suits you.

Before the operation

Once your diagnosis is confirmed, we will plan the operation around your scan. You will have an X-ray and an MRI (a detailed scan that shows the soft tissues of the fingertip) before surgery. No other scans are needed as a routine.

On the day, the operation is done under a general anaesthetic (you are fully asleep) as day surgery, so you go home the same day. Do not eat or drink for seven hours before your operation. We ask for seven rather than six so you can be brought forward if the theatre list runs early. Your surgeon will tell you which of your usual medicines to stop or take as normal, so bring a list of everything you take. Arrange a lift home, as you will not be able to drive yourself. Wear loose, comfortable clothing.

If you have other medical conditions, you may need blood tests or a review with the anaesthetist (the doctor who gives the anaesthetic). Most people need neither.

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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.

You wake up in the recovery area, where 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 how you recover.

What the operation involves

The operation is a careful removal of the tumour through a small incision at your fingertip. Where we make that incision depends on what your MRI shows. If the tumour sits in the centre of the nail bed, we lift the nail away, open the nail bed over the tumour, and then repair the nail bed with fine stitches. Your own nail is put back on top, where it acts as a splint while everything heals underneath. If the tumour sits towards one side of the nail, we reach it through an incision along the side of your fingertip, coming in from beneath the nail bed without opening the nail bed itself.

Once we can see the tumour, we remove the whole of it. The removed tissue is sent to the laboratory, where it is examined under a microscope to confirm the diagnosis. The wound is then closed with stitches.

Afterwards, your finger wears a light dressing for about 10 days. There is no splint. If your nail was lifted, a new nail grows out over several months.

The tumour pain usually goes straight away once it is out. The wound itself is sore for a week or two.

After the operation

You wake up in the recovery area, where nurses watch over you while the anaesthetic wears off. This is a day case, so you will go home the same day. Someone should stay with you for the first 24 hours. Your finger will have a light dressing on it, and there is no splint. The tumour pain usually goes straight away, though the wound itself is sore for a week or two, so take your usual pain relief as directed. Keep your hand raised when you can to help it settle. 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. Most people move their hand gently and get back to light daily tasks within one to two weeks.

Recovery

The deep, throbbing pain that brought you here usually goes straight away once the tumour is out. What you feel afterwards is the wound itself: sore for a week or two, tender when you knock it, and a little swollen in the

early days. Keeping your hand raised on a cushion when you sit or sleep helps the swelling settle, and your usual pain relief, taken as directed, keeps the soreness manageable.

Your finger wears a light dressing for about 10 days, and there is no splint, so you can move your hand gently from the start. You will do simple exercises to keep the finger bending and the rest of the hand from stiffening. Hand therapy after surgery is with Ruby Doolan at Extend Rehabilitation. Ruby is a hand therapist: she will guide these exercises and check the finger is moving as it should. At home, you can use the hand for light tasks like eating, dressing and typing as comfort allows. Avoid heavy gripping, lifting and getting the dressing wet until we see you.

Once the swelling settles and the wound is comfortable, most people find they can grip and turn things without thinking about the finger. Desk work and light duties usually resume after one to two weeks, and driving follows the same rule: when you can hold and turn the wheel without protecting the hand. See Driving after upper-limb surgery for more detail. If your nail was lifted, a new nail grows out over several months, and it may look different for a while before it settles.

Recovery varies from person to person, so your timeline may differ. We and your therapist will guide you along the way.

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 two problems this operation is watched for are the tumour coming back and changes in the way the new nail grows.

If the tumour comes back, you would notice the old pain returning: a deep, throbbing ache in the fingertip, often with tenderness to touch and sensitivity to cold. This usually happens because a small piece of tumour was left behind, or because a second tiny tumour was there all along. Call the clinic if the pain you had before surgery comes back, so we can arrange a scan and talk about what to do next.

If the nail bed was opened during the operation, the new nail can grow with a ridge or a split in it. You would see this as a line or groove running along the nail as it grows out over several months. This is not painful, and it is not a sign the tumour has returned. Bring it up at your next review if it bothers you, and we can talk about whether anything needs doing.

Some people notice the fingertip stays numb, tender, or sensitive to cold for a while after the operation. This usually settles with time. Mention it at your review if it is not improving.

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

When to call us

Most problems after this operation are easy to treat when they are picked up early. Here is what to watch for.

Go to the emergency department if you have swelling or pain in your calf, or shortness of breath or chest pain. These can be signs of a blood clot. Go to the emergency department if your fingers, hand or thumb turn pale, cold, white, blue or dark, as this can be a circulation problem.

Call the clinic the same day if you have a fever, spreading redness around the wound, or fluid or pus leaking from it. Call the clinic the same day if your pain keeps getting worse despite your pain medicines.

Call the clinic if you have numbness, or you cannot move your arm, hand or fingers, once the nerve block has worn off, about 24 hours after surgery. Numbness and weakness in the first 24 hours are expected while the block wears off.

If you cannot reach the clinic, out of hours or on a weekend, go to your nearest emergency department.

In more depth

This section goes further than you need for your own treatment decisions. The operation is worth the extra reading because its two outcomes that matter, a tumour that does not come back and a nail that grows normally, pull the surgeon in opposite directions, and the published series show the trade-off clearly.

TWO WAYS IN, AND THE TRADE-OFF BETWEEN THEM

A tumour under the nail can be reached in two broad ways [1]:

- **Through the nail (transungual).** The nail is lifted, the nail bed is opened directly over the tumour, the tumour is removed under direct vision, and the nail bed is repaired. The view is the best possible, but the nail bed has been cut.
- **From the side (nail-sparing).** An incision along the side of the fingertip lifts the nail bed from the bone as a flap, and the tumour is removed from underneath. The nail bed is not cut, but the view of a tumour in the centre of the nail is more limited.

The series line up on either side of that trade-off. In **19** patients treated through the side over **29** years, no nail deformities followed, but the recurrence rate was **15.7%** [2]. In **53** patients treated with a side approach for tumours near the edge and a through-the-nail approach for central ones, there were no recurrences; fine lengthwise lines appeared in the new nail in **10** (**18.9%**), all after the through-the-nail approach and all cosmetically minor [3]. In a multicentre study of **72** patients, the nail-sparing approach did **not** lower the rate of nail changes, and no factor reliably predicted recurrence [4].

That is the basis for choosing by site, which is what the operation described on this page does: the MRI shows where the tumour sits, a peripheral tumour is reached from the side, and a central one through the nail.

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WHY TUMOURS COME BACK

Recurrence after removal runs at about **3 to 7%** in the larger modern series: **5 of 72** (**6.9%**) in the multicentre study [4], and **2 of 73** (**2.7%**) in a UK series [5]. Two different things are called recurrence.

- **Tumour left behind.** In the UK series the laboratory reported tumour at the edge of the specimen in **11 of 73** (**15%**), yet only **2** people went on to a recurrence [5]. In a Singapore series, **3** tumours with involved margins did not recur at all [6]. A report of incomplete removal is therefore not the same as a tumour that will come back.
- **A second tumour.** In a series of **12** patients, all **5** recurrences appeared in new, separate places rather than at the original site, which points to small second tumours missed at the first operation rather than regrowth [7].

Recurrent pain is therefore worth a repeat MRI before any second operation, to look for a new tumour as well as for what remains of the old one.

LOOKING AFTER THE NAIL

The nail grows from the matrix under the skin fold at the base of the nail, and the nail bed guides it forward. A cut in the nail bed that heals with a step or scar can show as a ridge or a split in the new nail. Putting the nail plate back over a carefully repaired nail bed acts as a splint while it heals. In one early series, **2** patients operated on without the nail being put back developed a split nail, while none of **4** in whom it was put back did [8]. The new nail takes months to grow out fully: up to around **10 months** in one series [9].

WHAT THE OTHER RISKS LOOK LIKE

- **A numb or sensitive fingertip.** Fingertip numbness followed **2 of 72** operations (**2.8%**) [4]. After a side flap, **11 of 24** people noticed slight numbness over the scar itself when touching it, without other problems [10]. A painful nerve ending (neuroma) developed in **1 of 73** [5].
- **Persistent pain without recurrence. 3 of 53** people still had some pain with no sign of the tumour returning [3].
- **Infection.** A superficial infection followed **2 of 53** operations [3].

WHAT THIS MEANS FOR YOUR DECISION

- Removal is the treatment, and the relief is usually immediate.
- The approach is chosen from the scan to balance a complete removal against the nail. Neither approach removes all risk of a nail change or of the pain returning.
- A laboratory report of tumour at the edge does not mean the tumour will come back.
- If the pain returns, a second small tumour is a common cause, and it can usually be found and removed.

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