

Phalangeal Fracture Fixation

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. We start with the least invasive options that suit your condition. For a broken finger bone, that often means splinting and hand therapy first. Surgery is considered when the broken bone has moved out of place, is unstable, or has not improved enough with those measures. Some breaks, such as ones that run into the joint or have shifted a lot, may need surgery straight away.

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. This tells us the pattern of the break and whether the pieces are stable.

The aim of the operation is to hold the broken pieces in their normal position so the bone can heal straight. This lets you move your finger early, which helps prevent stiffness. It also aims to restore movement, strength and grip so you can use your hand with confidence again.

Before the operation

Your surgeon will give you clear instructions on what to do before surgery. You will need to stop eating and drinking seven hours beforehand. We ask for seven hours so you can be brought forward if the theatre list runs early. Tell your surgeon about any medicines you take, as some may need to be paused. Bring a written list of them on the day. Arrange for someone to drive you home afterwards, as you will not be able to drive yourself. Wear loose, comfortable clothing that is easy to change out of. Imaging such as an X-ray, MRI or ultrasound is used to plan the operation. If you have other medical conditions, you may need blood tests or a review with the anaesthetist, the doctor who gives the medicine that keeps you comfortable during surgery.

On the day

You will go 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. 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 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

There are two ways your surgeon may do this operation, chosen to suit your fracture. The first is a closed approach. The bone is lined up without opening the skin, and it is held with fine wires or a screw passed in through small puncture wounds. The second is an open approach. Your surgeon makes a single cut over the broken bone, moves the pieces into place under direct view, and holds them with metal implants. This is used when the break runs into a joint, has broken into several pieces, or will not line up closed.

The implant depends on the shape and position of your break. Fine wires (Kirschner wires) may be passed across the bone. A small screw may be placed down the inside of the bone, which is called an intramedullary screw; this suits some shaft and neck fractures. Small screws may be placed across a long oblique or spiral break, one that runs around the bone. Or a small plate with screws may hold the pieces together. Wires left out through the skin are usually removed in the clinic after a few weeks, once the bone is stable. Buried screws and plates are usually left in place unless they cause a problem.

The wound is closed with stitches. A dressing goes over the top, and you will keep it on for about 10 days. Your surgeon will explain which implant was used and what that means for your recovery before you go home.

After the operation

You will wake up in the recovery area, where nurses watch over you while the anaesthetic wears off. You may go home the same day or stay one night in hospital after this operation. Both are common, and your team will talk with you about which suits you. Pain relief is planned for you before you leave, and your team will explain how to manage any discomfort at home. Your hand will be in a dressing and a splint made by your hand therapist. 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. Keep your hand raised on pillows when resting, as this helps settle swelling. Move your shoulder, elbow and free fingers as you are able. Please have someone stay with you for the first 24 hours after you get home.

Recovery

For the first few days your finger will be sore and swollen. This settles gradually. Keeping your hand raised on pillows eases the swelling, and the pain relief planned for you will keep you comfortable. Some throbbing is normal in the early days.

Your hand will be in a splint made by your hand therapist, Ruby Doolan at Extend Rehabilitation. She will also guide your exercises. Please do not drive while the splint is on, as it stops you gripping the wheel safely. Once the splint is off and your surgeon clears you, driving can resume; see our page on [driving after upper-limb surgery](#).

Moving your finger early matters. Starting gentle active exercises soon after surgery helps your finger regain movement. Your therapist will show you which movements to do and when to start them. You will keep the dressing on for about 10 days, and we will check the wound when we see you. Between visits, keep your hand raised when resting and move your shoulder, elbow and free fingers as you are able.

Recovery happens in stages. First the swelling settles. Then movement returns as you work through your exercises. Grip strength follows, and most people notice steady progress as the bone heals. Everyday tasks like writing, eating and typing usually come back before heavier jobs.

Everyone heals at their own pace, so your timeline may differ from the typical ranges shown above. Your surgeon and your hand therapist will guide you at each visit and tell you what to do next.

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 is a stiff finger. The finger may feel tight and slow to bend or straighten, and the joints may not reach their full range even after the bone has healed. Moving your finger early with your therapist's exercises helps guard against this, so follow the plan you are given.

Infection is a risk with any surgery. Watch for pain that keeps getting worse rather than easing, redness that spreads out from the wound, warmth around the area, or fluid leaking from the wound. If you notice any of these, call the clinic straight away rather than waiting for your next visit.

The metal used to hold the bone can sometimes cause trouble. A screw or plate left in place may press on nearby tissue or sit in a spot that catches as you move. You might feel a sharp edge under the skin, a clicking feeling, or ongoing soreness at the spot once the break itself has settled. If the metal keeps causing symptoms, it can be taken out in a further operation. Bring this up at your review if it is bothering you.

Wires that pass out through the skin track through the wound and can irritate it. The pin sites may look red or weep a little. Keep them clean and dry as instructed, and tell your therapist or the clinic if the skin around a wire becomes inflamed or painful.

Some ways of holding the bone give a firmer hold than others. Where the hold is less rigid, the finger may need more time in a splint, which can add to stiffness. Your surgeon chooses the method that suits your fracture and will explain what it means for your recovery.

Scarring is part of any open operation. The skin over the finger may feel thick or tethered as it heals, and this can limit movement until it softens.

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

CQ HAND + UPPER LIMB

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When to call us

Call us straight away if you have a fever, or if the skin around your wound becomes more red, warm or swollen, or starts leaking fluid. Call us too if your pain keeps getting worse rather than easing, or if your fingers go numb or you cannot move them. Go to emergency if you have sudden shortness of breath, chest pain, or new swelling and pain in a calf. These signs need checking urgently. If you are worried at any stage, call us rather than waiting for your next visit.