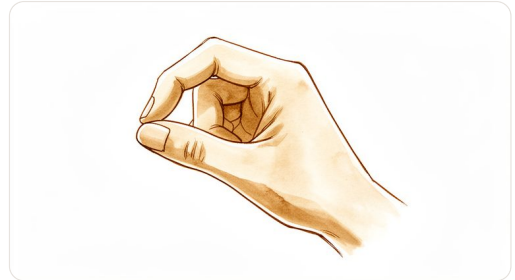


# Thumb Base Joint Replacement (Touch)



Thumb base joint replacement – a dual-mobility implant resurfaces the worn trapeziometacarpal joint.

Kieran Hirpara 4.0

This protocol guides your recovery after a **thumb base joint replacement** – a dual-mobility total joint replacement (the Touch implant) for arthritis of the joint at the base of the thumb – with Dr Kieran Hirpara at Mater Private Hospital Rockhampton. It begins with your home exercise program, followed by the structured clinical protocol written **for your hand therapist** – bring this page or its PDF to your first therapy visit so your rehabilitation stays coordinated. Your hand therapist may adjust the plan depending on how your recovery progresses. **All of your recovery is guided through formal hand therapy.**

If you have any concerns about your wound after surgery, get in touch with the rooms. It is often helpful to take a photo of the wound and email it for review.

## What to expect

The joint at the base of your thumb – the trapeziometacarpal (or CMC) joint – is where the thumb meets the wrist, and it is a very common site of arthritis. In this operation, the worn joint surfaces are removed and replaced with a small artificial joint: a **dual-mobility implant**, a tiny ball-and-socket with an extra moving surface that makes it stable and smooth. Importantly, the **trapezium bone is kept and the length of your thumb is preserved** – so recovery is generally **faster than a trapeziectomy** (the older operation, which removes a bone and relies on scar tissue forming over many months).

A well-seated implant is **stable and able to share load straight away**, which is why the thumb only needs to be protected for a short time rather than immobilised for weeks. The plan is to settle the soft tissues, then quickly get your thumb **opposing** (touching the fingers) and moving again, and then build strength.

The recovery runs in three stages:

- **First, protect (about the first 2–3 weeks).** A soft bulky dressing for the first week or so, then a **thumb splint** to rest the new joint while the wound and soft tissues settle. You keep your fingers, wrist and the rest of the hand moving.

- **Then, move (from about 2–3 to 6 weeks).** Out of the day splint, you begin **gentle active movement** – opposition, lifting the thumb, opening the web space and circling – and use the hand for light everyday tasks.
- **Then, strengthen (from 6 weeks onwards).** Once the implant has bonded to the bone, **pinch and grip strengthening** begins and is built up gradually. Strength keeps improving over the following **6 to 12 months**.

The one thing to respect early on is that the new joint can **dislocate** if it is forced into an extreme position before the tissues around it have healed. This is uncommon, and the early plan is simply built around **not forcing the thumb** while it settles.

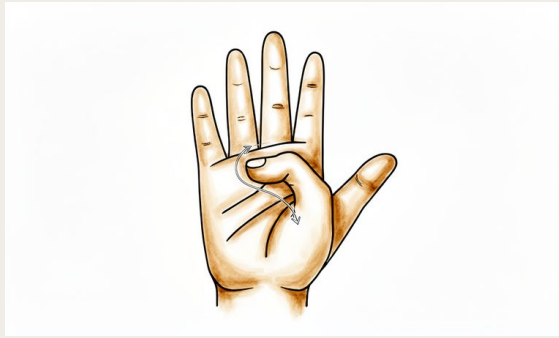
## Precautions and limitations

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- Wear your **thumb splint** as directed – a day splint for the first **2–3 weeks**, then a **night splint through to 6 weeks** – and keep the splint on for protection until your hand therapist advances you.
- Do **NOT** force the thumb into extreme positions, and avoid sudden or awkward grabs in the early weeks – the new joint can dislocate if pushed too far before it settles. Move within comfort only.
- Do **NOT** do any strong pinching, gripping, twisting (jar lids, keys, taps) or lifting until about **6 weeks** – strengthening starts only when your hand therapist begins it.
- Keep your **fingers, wrist and the rest of the hand moving** from the start, and keep your hand elevated early on to settle swelling.
- Do **NOT** drive while you are in the day splint or while you cannot grip the wheel comfortably and painlessly.

For wound, swelling and scar management, see the practice's [wound care](#) guidance.

# Your exercises



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## Thumb opposition (Kapandji ladder)

Slowly touch the tip of your thumb to the side of your index finger, then to the tip of each finger in turn, and then walk it down the little finger towards its base — climbing the 'ladder' a little further as you loosen up. Move only as far as is comfortable. This is the key movement to recover after a thumb base replacement, and it is started gently once you are out of your day splint (around two to three weeks).

**Work through the ladder 5–10 times, 2–3 times a day, within comfort**

## Palmar abduction (lift thumb off palm)

Rest your hand flat, palm up. Keeping your thumb straight, lift it up away from your palm towards the ceiling, as if opening your hand to hold a can — then lower it back down. This opens the web space and restores the thumb's reach. Keep it gentle and unforced; do not push into the end of the movement in the early weeks.

**10 times, 2–3 times a day, within comfort**

## Radial abduction (thumb out to the side)

Rest your hand flat with the palm down. Slide your thumb out sideways, away from your index finger, keeping it in the same flat plane as your palm — like making an 'L' shape — then bring it back. This restores the sideways reach of the thumb. Move slowly and stop short of any strain.

**10 times, 2–3 times a day, within comfort**

## Web-space stretch

Open the space between your thumb and index finger as wide as is comfortable, feeling a gentle stretch across the web. You can rest your hand on a table and let the thumb ease open, or cup it around a rounded object. Hold the open position briefly, then relax. This keeps the web space from tightening as you heal — keep it gentle, never forced.

**Hold ~5 seconds, 5–10 times, 2–3 times a day**

### Thumb circumduction

With your hand relaxed, draw slow, smooth circles with your thumb, taking it gently around its full range in both directions — as if stirring a small pot. Keep the circles easy and within comfort. This restores the combined, rolling movement of the new joint and is started gently once you are out of the day splint.

**5–10 circles each direction, 2–3 times a day**

### Putty / key pinch (from week 6)

A LATER exercise — only from around six weeks, once your hand therapist starts strengthening. Pinch a piece of therapy putty between your thumb and the side of your index finger (a 'key' pinch), and press your thumb tip to your fingertips (a 'tip' pinch), building the effort up gradually over the following weeks and months. Do NOT do strong pinching or gripping before six weeks — the new joint needs that time to settle and bond to the bone.

**As guided by your hand therapist (from ~6 weeks), building gradually**

These are the exercises from your handout. Start them only as guided by Dr Hirpara and your hand therapist, staying within whatever range and limits you have been given. The early exercises — **opposition, lifting the thumb, the sideways movement, the web-space stretch and gentle circles** — restore the thumb's movement **without loading the new joint**, and begin once you are out of your day splint. The **putty and key pinch** is a **later** strengthening exercise and should not be started until about six weeks, when your hand therapist begins it. Keep every movement gentle and unforced in the early weeks, and stop anything that causes sharp pain at the base of the thumb.

## Your clinical protocol

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The rest of this page is the staged clinical protocol for rehabilitation after a dual-mobility trapeziometacarpal (Touch) total joint replacement. This section is to be provided to your hand therapist, and each phase opens with a plain-English explanation of what is happening. Unlike a trapeziectomy, the implant is **immediately stable and load-sharing**, so immobilisation is minimal and active opposition is restored early; the implant-specific early risk is **dislocation if forced into extreme range**, so the first weeks protect against forced/end-range positions while restoring motion, then progress to loaded strengthening once osseointegrated.

*Prior to treatment, check the patient's operation report and past medical history, and liaise with the treating surgeon regarding implant seating/stability and any intra-operative concerns. Dr Hirpara's regimen is a soft bulky dressing for 7–10 days, then a thumb spica DAY splint for 2–3 weeks, followed by a NIGHT splint continuing to 6 weeks (wrist neutral, thumb in mid palmar abduction, IP free). The trapezium is retained and thumb length preserved.*

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### 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

### PHASE I – PROTECT (WEEK 0 TO ~2-3)

The first few weeks settle the soft tissues and protect the new joint. The thumb rests in a soft bulky dressing, then a thumb spica day splint, while the fingers, wrist and rest of the hand keep moving. No resisted thumb work, and no forced or extreme thumb positions (early dislocation is the implant-specific risk).

#### For your hand therapist:

**Education and precautions** - Immobilise the thumb base: **soft bulky dressing 7-10 days** → **thumb spica DAY splint for weeks ~2-3** (wrist neutral, thumb in mid palmar abduction, IP joint free) - **Avoid forced/ extreme thumb positions** and sudden grasps – dislocation is the early implant-specific risk - **No resisted thumb work** (no pinch, grip, twisting or lifting) - Keep the implant unloaded; light unloaded hand use only

**Management** - Wound: surgical dressings as directed; monitor for infection - Oedema: elevation, gentle hand pump, ice as needed - Exercises: active ROM of the **IP joint of the thumb, the fingers, and the wrist**; maintain full-hand mobility; **no active CMC/opposition work yet, no loading**

**Criteria to progress** - Wound settling; comfortable; out of the day splint at around 2-3 weeks for active motion

### PHASE II – ACTIVE MOTION IN A NIGHT SPLINT (WEEK ~2-3 TO 6)

From about two to three weeks the day splint comes off and gentle active thumb movement begins – opposition (a Kapandji progression), palmar and radial abduction, gentle circumduction and web-space mobilisation. A night splint continues to six weeks. Light everyday use is encouraged; heavy grip and pinch are still withheld.

#### For your hand therapist:

**Assessments** - Active thumb opposition (Kapandji score), palmar/radial abduction, web-space width; pain and swelling; wound/scar review

**Education and precautions** - **Out of the day splint; continue the NIGHT splint to 6 weeks** - Active **unresisted** thumb motion only – **still no heavy grip or pinch** before 6 weeks - Keep movement within comfort; avoid forcing end-range

**Management** - Exercises: **active unresisted opposition (Kapandji progression), palmar and radial abduction, gentle circumduction, web-space mobilisation**; light everyday functional use of the hand; commence scar massage once the wound is healed

**Criteria to progress** - Good active opposition restored; wound healed; pain-free unresisted motion at around 6 weeks

### PHASE III – LOAD AND STRENGTHEN (WEEK 6 ONWARDS)

From about six weeks the implant is osseointegrated and can be loaded. Pinch and grip strengthening begins – putty pinch, key and tip pinch, opposition strengthening – and is progressed gradually. Strength continues to mature over the following 6 to 12 months.

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#### CQ HAND + UPPER LIMB

## For your hand therapist:

**Assessments** - Key/tip pinch and grip strength versus the other side; opposition; pain/swelling response to loading; functional and work-specific testing as appropriate

**Education and precautions** - Begin **progressive pinch and grip strengthening from 6 weeks**; build load gradually - Expect **strength to mature over 6–12 months**; counsel patience with heavier loading

**Management** - Exercises: **putty pinch, key/tip pinch, opposition strengthening**, progressive resistance; grip strengthening; continue any residual mobility and scar work - Consider discharge once strength is functional and a suitable return of function is achieved - Consider referral back to the treating doctor if recovery plateaus or there is a poor outcome

**Criteria for discharge** - Functional, near-symmetrical pinch and grip; pain-free everyday and work-specific use

## Getting back to work and activity

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Light everyday hand use – eating, writing, light self-care – is encouraged within comfort from early on, as long as it does not involve forcing the thumb or strong pinching and gripping. Because you must not drive while in the day splint or while you cannot grip the wheel comfortably, plan for help with transport in the first couple of weeks. **Driving usually resumes once you are out of the day splint and can grip the wheel painlessly – commonly around two to four weeks – as confirmed by Dr Hirpara.**

Office and light work is usually possible within **two to four weeks**; **manual and heavier work waits until about six weeks** and then builds up gradually, because strong pinch and grip loading only begins at six weeks. **Strength keeps improving for 6 to 12 months**, so heavier and more demanding tasks are returned to progressively rather than all at once – judged by how your thumb is responding, with Dr Hirpara and your hand therapist, not by the calendar alone.

## After your protocol

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This protocol works alongside the practice's general recovery advice – see [managing post-operative pain](#), [wound care](#) and [scar management](#). The phased plan above reflects published rehabilitation guidance after dual-mobility thumb base joint replacement, and your ongoing recovery is guided individually by Dr Hirpara and your hand therapist according to how your thumb progresses.