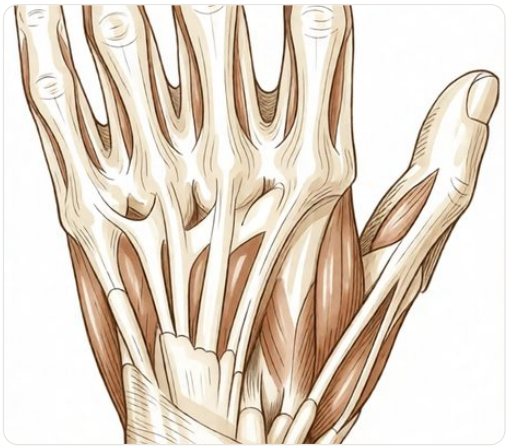
CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

REHABILITATION PROTOCOL

Extensor Tendon Repair



The extensor tendons that straighten your fingers run across the back of the hand; after repair they are protected while the join heals.

Kieran Hirpara 4.0

This protocol guides your recovery after surgical repair of an **extensor tendon** – one of the tendons on the **back of the finger or hand** that straightens the finger – with Dr Kieran Hirpara at Mater Private Hospital Rockhampton. It covers repairs across the back of the finger, hand and wrist (the zones surgeons call **IV to VII**). It does **not** cover a mallet finger (a repair right at the fingertip) or a central-slip / boutonnière repair over the middle knuckle – those follow different plans. 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 therapist may adjust the plan depending on how your recovery progresses.

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

An extensor tendon repair stitches a divided tendon back together on the back of the finger or hand. The old way to protect that repair was to splint the hand still for several weeks – but that often left the fingers stiff and slow to recover. Instead, your recovery uses a clever, modern approach called **relative-motion** rehabilitation (the Merritt method).

The key is a small splint called a **yoke**, worn across the back of the hand. It holds the big knuckle of the **repaired** finger about **15 to 20 degrees more straightened** than the knuckles of the fingers on either side. That small difference quietly takes the load off the healing tendon – so you can **start using the hand straight away**, gently and within comfort, instead of waiting weeks with it splinted still. Moving early in this protected way keeps the tendon gliding so it does not stick down, while the offset stops it being over-strained.

For most repairs (the common zones on the back of the finger and hand) the **yoke on its own is all you need**. For some repairs – those closer to the wrist, weaker repairs, or where extra protection is sensible – a **wrist splint** is added for the first few weeks as well. **Your hand therapist will tell you if you also have a wrist splint.**

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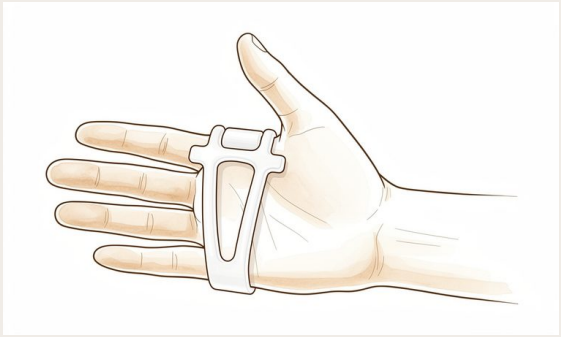
The plan then opens up in careful stages: the yoke is worn full-time for about **six weeks** and weaned from around **week five**; coupled wrist-and-finger movement is added in the middle weeks; **strengthening begins from about eight weeks**; and **full activity returns around ten to twelve weeks**, once the repair is solid.

Precautions and limitations

- **Wear your yoke splint full-time** for about the first six weeks — including for exercises and everyday tasks — and only remove or wean it as your hand therapist directs. **Your hand therapist will tell you if you also have a wrist splint.**
- Do **light** everyday use of the hand in the splint from the start, within comfort. Do **NOT** do any lifting, forced gripping or resisted work for the first several weeks.
- Do **NOT** start grip or pinch strengthening until you are cleared — usually around **eight weeks**.
- Do **NOT** make a hard full fist or force the finger early; move only in the gentle, controlled ranges you are shown.
- Keep the **smaller finger joints** moving so they do not stiffen — gentle passive straightening helps with this.

For wound, swelling and scar management, see the practice's wound care guidance.

Your exercises



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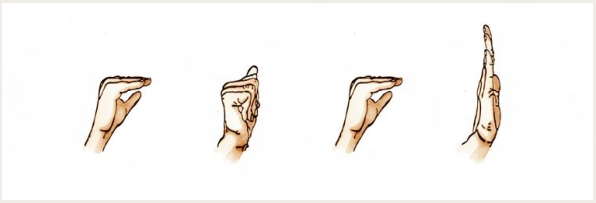
Wearing your relative-motion (yoke) splint

Your repaired finger is held in a small splint called a yoke (or relative-motion splint). It keeps the big knuckle (the MCP, where the finger meets the hand) of the repaired finger about 15 to 20 degrees more straightened than the fingers either side. This small difference takes the strain off the healing tendon, which is what lets you use the hand straight away. Wear it full-time for about six weeks — including for your exercises and for everyday tasks — and only take it off as your hand therapist directs. Your hand therapist will tell you if you also have a wrist splint.

Worn full-time for about 6 weeks, weaned from around week 5 as guided



Knuckle-bend, fingers-straight (intrinsic-plus)

Keeping the splint on, bend at the big knuckles (where the fingers meet the hand) while keeping the rest of each finger straight — like making a flat 'tabletop' or 'shelf' shape. Then return to straight. Move smoothly within comfort. This glides the repaired tendon a safe, controlled amount so it does not stick down, without putting it under strain.

10 times, every couple of hours through the day

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Knuckles-straight, finger-curl (intrinsic-minus / hook)

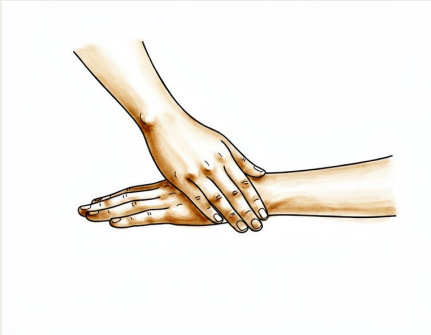
Keeping the splint on, keep your big knuckles straight and curl only the smaller joints of the fingers down into a hook (claw) shape, then straighten them again. This moves the repaired tendon through its other range, again in a safe and controlled way. Stay within comfort and do not force it.

10 times, every couple of hours through the day

Coupled wrist-and-finger motion (tenodesis)

A LATER exercise — added by your hand therapist from around three to six weeks. Gently tip the wrist back and let the fingers relax open, then let the wrist drop forward as the fingers gently close. The wrist and fingers move together as a pair. This naturally and safely glides the extensor tendons and is started once the repair is stronger.

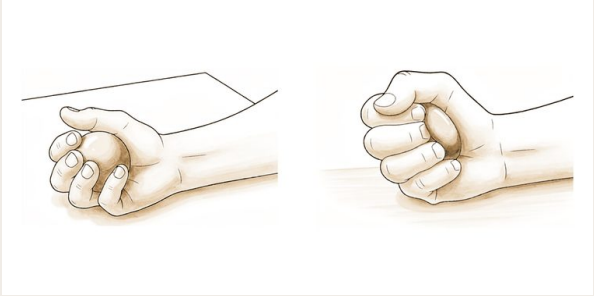
10 times, 2 to 3 times a day (from ~3 to 6 weeks, as guided)



Passive finger straightening

Gently use your other hand to support and straighten the smaller joints of the repaired finger, helping it reach full straight without forcing. This keeps the finger from stiffening into a bent position while the tendon heals. Keep it gentle and pain-free, and only as your hand therapist guides.

Hold a few seconds, 5 to 10 times daily, as guided



Grip/pinch strengthening (from wk 8)

A LATER exercise — only from around eight weeks, once your hand therapist clears strengthening. Squeeze a soft ball or putty in the whole hand, and pinch it between your thumb and fingers, building the effort up gradually over several weeks. This rebuilds grip and pinch strength once the repair is solid. Do not start resisted gripping before you are cleared.

10 to 15 squeezes, 2 to 3 times a day (from ~8 weeks only)

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 are done **with the yoke splint on** – gentle knuckle bends and finger curls that glide the repaired tendon a safe, controlled amount without straining it. The coupled wrist-and-finger movement and the grip/pinch strengthening belong to **later phases** and should not be started until you are specifically cleared. Stop anything that causes sharp pain over the back of the finger or hand.

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Your clinical protocol

The rest of this page is the staged clinical protocol for rehabilitation after extensor tendon repair (zones IV to VII) using **relative-motion extension (RME)**. This section is to be provided to your hand therapist, and each phase opens with a plain-English explanation of what is happening. The repair is protected by a **yoke splint** that holds the repaired digit's MCP **15 to 20 degrees more extended** than the adjacent digits — offloading active extensor excursion via the quadriga effect and the juncturae tendineae — so **immediate active motion is safe**.

Prior to treatment, check the patient's operation report and past medical history, and liaise with the treating surgeon regarding the zone(s) repaired, tendon(s) involved, repair strength, and whether a supplementary wrist orthosis is indicated. Dr Hirpara's default for zones V to VI is yoke-alone (relative-motion extension splint, repaired MCP held 15–20° more extended than neighbours). A wrist orthosis (~20–25° extension, first ~3 weeks) is added for zone VII, weaker repairs, or non-compliant patients. This protocol is for dorsal extensor repairs zones IV–VII only — NOT mallet (zones I–II) or central-slip/boutonnière (zone III).

PHASE I — YOKE (± WRIST SPLINT), IMMEDIATE ACTIVE USE (WEEKS 0 TO 3)

The first three weeks protect the repair with the yoke while the patient uses the hand actively straight away. The relative 15–20° extension offset offloads the repair, so controlled active gliding is encouraged from the outset. Light functional use in the splint is permitted; no lifting or resisted grip.

For your hand therapist:

Education and precautions - Fit the **yoke / relative-motion extension splint**: repaired digit's MCP held **15–20° more extended** than the adjacent digits; worn **full-time** - Add a **wrist orthosis (~20–25° extension)** for the first ~3 weeks ONLY for zone VII / weaker repairs / non-compliant patients (yoke-alone is the default for zones V–VI) - **Light use of the hand in the splint is encouraged**; NO lifting, forced gripping or resisted work - Avoid forced composite fisting; keep ranges controlled

Management - Wound: surgical dressings as directed; monitor for infection - Oedema: elevation, gentle digital pump, ice as needed - Exercises (in the splint, every ~2 h): active **intrinsic-plus** (MCP flexion with IPs extended) and **intrinsic-minus / hook** (MCP extension with IP flexion); **passive IP extension** daily to prevent IP stiffness - Commence scar management once the wound is healed

Criteria to progress - Wound settling; no extensor lag developing; comfortable controlled active motion in the splint at ~3 weeks

PHASE II — WRIST SPLINT OFF, YOKE CONTINUES, COUPLED MOTION (WEEKS 3 TO 6)

From about three weeks any supplementary wrist splint is discontinued (the yoke continues full-time). Coupled wrist-and-finger (tenodesis) motion and composite active flexion/extension are added, increasing tendon excursion in a controlled, repair-safe way.

For your hand therapist:

Assessments - Active and passive ROM (MCP and IP), extensor lag, pain and swelling; wound/scar review

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Education and precautions - Discontinue the supplementary **wrist splint** (if one was used); **continue the yoke full-time** - Progress motion gradually; still NO resisted grip or strengthening

Management - Exercises: add **coupled wrist-and-finger motion (tenodesis)** and **composite active flexion/extension**; continue intrinsic-plus / intrinsic-minus gliding and passive IP extension; light functional use in the yoke - Continue scar massage once healed

Criteria to progress - Composite active ROM progressing ~6 to 8 weeks; no extensor lag; pain settling

PHASE III — WEAN THE YOKE, STRENGTHEN, RETURN (WEEKS 6 TO 12)

From around week five to six the yoke is weaned. Progressive grip and pinch strengthening begins from about eight weeks once the repair is solid, building gradually toward full activity at ten to twelve weeks.

For your hand therapist:

Assessments - Full active and passive ROM, extensor lag, grip/pinch strength versus the other side; functional and work-specific testing as appropriate

Education and precautions - **Wean the yoke from ~week 5**, off by around week 6 as motion and control allow - Introduce **progressive grip/pinch strengthening from 8 weeks** (not before) - Build resistance gradually toward full activity at **10 to 12 weeks**

Management - Exercises: graded **grip and pinch strengthening** (ball/putty squeeze, pinch) from week 8; progressive resistance; continue any residual mobility and IP-extension work - Consider discharge once motion and strength are near-symmetrical and functional return is achieved - Consider referral back to the treating doctor if an extensor lag persists, motion plateaus, or there is a poor outcome

Criteria for return to full activity - Full painless ROM with no significant extensor lag; near-symmetrical grip/pinch; ~10 to 12 weeks

Getting back to work and activity

Light everyday use of the hand **in the yoke splint** — eating, writing, dressing, light self-care — is encouraged from the start, within comfort, as long as it does not involve lifting, forced gripping or resisted work. Strengthening begins from about **eight weeks**, and **full, unrestricted activity returns around ten to twelve weeks** once the repair is solid and your motion and strength are restored — judged by Dr Hirpara and your hand therapist, not by the calendar alone.

Driving: light use of the hand in the yoke is fine, so driving is not banned outright — but you must be able to **grip the wheel and control the car safely**, including in an emergency. For most people that means resuming **as the yoke is weaned (around six weeks)**; it can be earlier if you can control the car comfortably, and your surgeon confirms when it is safe for you.

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After your protocol

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 extensor tendon repair using relative-motion extension, and your ongoing recovery is guided individually by Dr Hirpara and your hand therapist according to how your hand progresses.

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