CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

REHABILITATION PROTOCOL

Lateral Epicondylitis (Tennis Elbow)

Tennis elbow affects the common extensor tendon where it attaches to the bony bump on the outside of the elbow (the lateral epicondyle).

Kieran Hirpara 4.0

This page explains how tennis elbow is managed and how to rehabilitate it — whether you are treating it without surgery (which is the case for almost everyone) or recovering after an operation to clean up the tendon. It is overseen by Dr Kieran Hirpara at Mater Private Hospital Rockhampton. It begins with your home exercise program, followed by the structured clinical protocol written **for your physiotherapist or hand therapist** — bring this page or its PDF to your therapy visits so your rehabilitation stays coordinated. Your therapist may adjust the plan depending on how your recovery progresses.

What to expect

Tennis elbow (lateral epicondylitis) is a problem with the tendon on the outside of the elbow — the common extensor tendon, and in particular a small muscle called the ECRB. Despite the "-itis" in the name, it is **not** an inflammation that you can rest away. It is a **wear-and-tear change in the tendon** (a tendinosis), where the tendon fibres have become disorganised and have not healed properly.

This matters because it completely changes the treatment. You do not get better by resting and protecting the elbow — in fact, prolonged rest tends to make the tendon weaker and slower to settle. You get better by **gradually loading the tendon** so that it remodels and rebuilds its tolerance for work and gripping. The pattern is: first settle the pain down, then progressively strengthen, starting with gentle held (isometric) exercises and building up to controlled, slow strengthening such as the Tyler twist.

The good news is that tennis elbow usually settles on its own with the right loading program. Around 80–90% of people are better within a year, though it can occasionally take 12–18 months to fully resolve. Surgery is only considered after at least six months of good-quality, consistent rehabilitation has failed — and only a small minority (roughly 4–11%) ever reach that point.

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Precautions and limitations

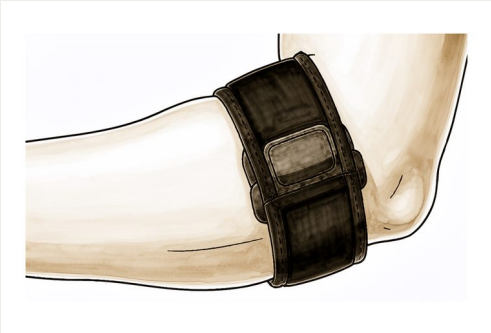
Do:

- Keep using the arm — load the tendon, do not rest it.
- Use pain as your guide: a mild ache during and after exercise is fine and expected; sharp or escalating pain means ease back.
- Lift with the palm facing up (like carrying a bowl of soup) to take load off the sore tendon.
- Use a counterforce brace over the forearm muscle during gripping and lifting tasks.

Do not:

- Do not immobilise the elbow in a cast or sling for tennis elbow — that is the wrong treatment for a tendinosis.
- Do not do heavy provocative gripping with the elbow straight and the wrist bent (for example, lifting a heavy object palm-down).
- Do not rush to a steroid injection. Cortisone can feel good for a few weeks, but the evidence shows it leads to **worse** results and more recurrences at 6–12 months than physiotherapy or simply waiting. It is not a first-line treatment.

Your exercises



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Counterforce brace

Wear the counterforce strap around your forearm, a couple of finger-widths below the elbow, over the bulk of the muscle (not on the bony point itself). It should be firm but not tight enough to make your hand tingle. Use it during gripping and lifting tasks to take load off the sore tendon; you do not need to wear it at rest or in bed.

During aggravating activities; loosen if your hand tingles

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Isometric wrist extension

Rest your forearm on a table with your palm facing down and your hand over the edge. Place your other hand on the back of your sore hand. Try to lift the back of your hand towards the ceiling while your other hand holds it still, so nothing actually moves — this is a held, push-against-resistance exercise. It should feel like firm effort but should not sharply hurt. Hold the push, then relax.

Hold 30–45 seconds, 5 times, 1–2 times daily

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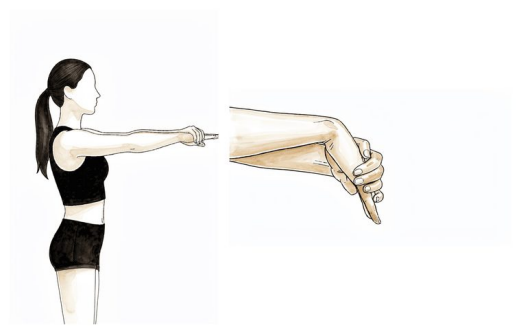

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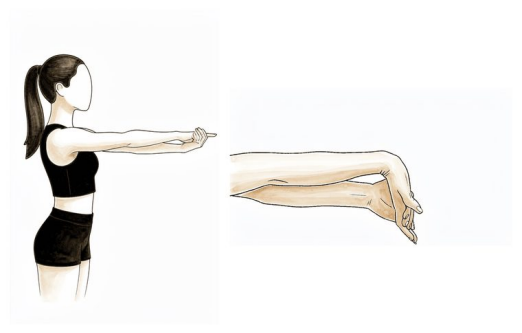
Wrist extensor stretch

Hold your sore arm out in front of you with the elbow straight and the palm facing down. With your other hand, gently bend the wrist down so the fingers point towards the floor, until you feel a comfortable pull along the top of your forearm. Keep the elbow straight. Start with the elbow slightly bent if straightening it is too sharp, and progress to a fully straight elbow as it eases.

Hold 30 seconds, 3 times, 2–3 times daily



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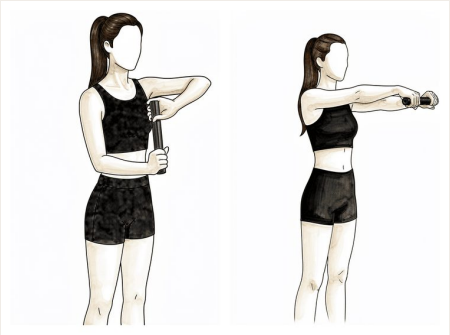
Wrist flexor stretch

Hold your arm out in front of you with the elbow straight and the palm facing up. With your other hand, gently pull the fingers and wrist back and down until you feel a comfortable pull along the underside of your forearm. Keep the elbow straight.

Hold 30 seconds, 3 times, 2–3 times daily



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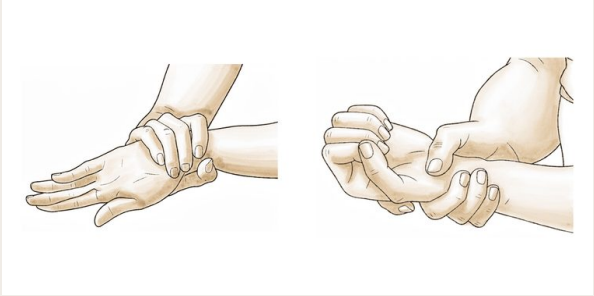
Tyler twist (eccentric wrist extension)

Hold a flexible rubber bar (FlexBar) vertically in your sore hand with the wrist bent back. Grip the top of the bar with your other hand and twist it. Now bring the bar in front of you, keeping the twist, and slowly let your sore wrist uncurl under control over 3–4 seconds — this slow, controlled lowering is the part that builds the tendon. The unwinding should feel like work, but not sharp pain. Mild ache during and a little afterwards is expected and is fine.

3 sets of 15, once daily (the core strengthening exercise)



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Forearm rotation

Tuck your elbow into your side and bend it to a right angle. Slowly rotate your forearm so the palm faces up, then turn it so the palm faces down, keeping the elbow tucked in. As it gets easier, hold a light weight such as a hammer or a tin to add load.

10 each direction, 2–3 times daily; add light weight as able

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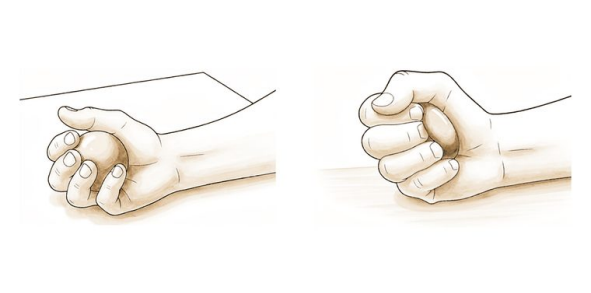

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Grip strengthening

Squeeze a soft ball or therapy putty in your hand, hold the squeeze briefly, then relax. Build up the firmness of the squeeze gradually as your tendon tolerates more. If gripping is still very sore, start later and lighter — grip work belongs in the strengthening phase, once the early irritation has settled.

10–15 squeezes, 2–3 times daily; progress firmness as tolerated

These are the exercises from your handout. They follow the recovery in order: the counterforce brace and isometric holds help settle pain early, the stretches keep the forearm supple, and the Tyler twist, forearm rotation and grip work build the tendon back up. Start them as guided by Dr Hirpara and your therapist, and do not feel you must do all of them from day one — your therapist will tell you which to begin with and when to add the strengthening exercises.

Your clinical protocol

The rest of this page is the clinical rehabilitation protocol for lateral epicondylitis (tennis elbow). This section is to be provided to your physiotherapist or hand therapist, and each phase opens with a plain-English explanation of what is happening.

The protocol has two arms: a **non-operative pathway** (first-line for essentially everyone) and a **post-operative pathway** for the small number who undergo ECRB debridement after failing six or more months of quality conservative care.

NON-OPERATIVE PATHWAY

The core principle is progressive tendon loading, guided by pain. The aim is to shorten the symptomatic course and restore load tolerance — not to rest the tendon.

Phase I — Acute / pain control (0–2 weeks)

The focus here is settling pain and restoring unloaded movement. There is **no immobilisation** — this is relative rest, not casting.

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For your physiotherapist:

- **Goals:** settle pain; restore full unloaded active range of motion (AROM).
- **Management:** activity modification, joint protection and ergonomic advice. Optional **counterforce brace** over the common extensor mass to offload the ECRB origin during grip; a wrist (cock-up) splint may be used if acutely painful with extension activities. Adjuncts to settle pain: ice, soft-tissue / instrument-assisted soft-tissue mobilisation (IASTM), gentle pain-free AROM, optional dry needling, nerve glides.
- **Criteria to progress:** full unloaded AROM without pain; independent with the home program.

Phase II — Sub-acute / early loading (2–4 weeks)

Tendon loading begins gently, and the proximal chain (shoulder blade and rotator cuff) is addressed, because weakness higher up the arm drives overload at the elbow.

For your physiotherapist:

- **Goals:** begin tendon loading; address the proximal kinetic chain.
- **Exercises: isometric** wrist extensor and flexor loading (light load — isometrics are well tolerated and analgesic in reactive tendinopathy); progressive **stretching** of the wrist flexors and extensors with the elbow at 90°; proximal work — serratus anterior, middle/lower trapezius, rotator cuff and scapular stabilisers.
- **Criteria to progress:** full ROM maintained; tolerates the stretch at 90° elbow flexion; approximately **70% of contralateral grip/strength**.

Phase III — Strengthening / return (4–6+ weeks, often running to 12 weeks)

This is where the tendon is rebuilt and load tolerance for work and sport is restored. Eccentric–concentric loading is the core therapeutic driver.

For your physiotherapist:

- **Goals:** restore load tolerance and sport/work capacity.
- **Exercises: eccentric–concentric** loading of wrist extension and forearm pronation/supination — the **Tyler twist (FlexBar)** is the prototypical home eccentric tool. Progress stretching to the **elbow-extended** position; mobilisation-with-movement (Mulligan). **Grip strengthening** and task-/sport-specific loading; plyometrics for athletes. Gradually **wean the counterforce brace** as the patient becomes asymptomatic. Equipment modification for athletes (grip size, string tension, technique).
- **Criteria to progress (return to sport):** approximately **90% of contralateral strength**, pain-free function, and self-management competence.

POST-OPERATIVE PATHWAY (ECRB DEBRIDEMENT ± RELEASE)

Surgery is reserved for the ~4–11% who fail ≥ 6 months of quality conservative care. Open Nirschl-type debridement and arthroscopic ECRB debridement give comparable results. The timeline below follows the Brigham & Women's Standard of Care for lateral epicondyle debridement.

Phase 1 — Protect (Days 1–7)

A sling is used for comfort only in the first week.

For your physiotherapist:

- Sling for comfort; ice 20 minutes, 2–3 times daily; an elbow pad over the incision.
- Gentle **pain-free** hand, wrist and elbow AROM; active shoulder ROM; periscapular exercises.
- Minimise ADLs that stress the extensor mechanism (lifting, combined full-elbow-extension with wrist flexion); lift palm-up to offload the extensors; optional wrist splint if acutely painful.

Phase 2 — Early motion (Weeks 2–4)

For your physiotherapist:

- **Discontinue the sling.** Begin **PROM and active-assisted** motion within pain tolerance.
- Gentle strengthening: active motion and **sub-maximal isometrics**. Commence scar management.

Phase 3 — Strengthening (Weeks 5–7)

For your physiotherapist:

- **Advance resistive strengthening** (weights / Theraband), emphasising wrist-extensor endurance (light load, higher reps). Restore full active and passive ROM.
- Introduce **counterforce bracing** to the common extensor tendon (with education to avoid nerve compression); gentle cross-fibre massage; begin functional preparation.

Phase 4 — Functional / return (Weeks 8–12)

For your physiotherapist:

- **Task-specific functional training**; return to higher-level work and recreational activity.
- Continue the counterforce brace as needed for pain-free ADLs and strengthening.

Getting back to work and activity

If you are treating tennis elbow without surgery, there is no fixed "off work" period — you can keep using the arm throughout, modifying the heaviest gripping and lifting tasks and using a counterforce brace to get through them. The realistic expectation is that the elbow **settles over 6–12 months**, with most people (80–90%) better within a year. It is a slow tendon problem, so progress is measured over weeks and months, not days. Sticking with the loading program is what gets you there — flare-ups along the way are normal and are not a setback as long as a mild ache settles by the next day.

If you have had surgery, the sling is for comfort only in the first week and is discarded as the elbow settles. Strengthening builds through weeks 5–7, and most people make a **functional return to work and recreation around weeks 8–12**. Heavier and sport-specific demands are reintroduced gradually within that window, guided by how the tendon tolerates load.

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Return to sport — for both pathways — is guided by reaching roughly 90% of the strength of your other arm, with pain-free function and confidence to self-manage, rather than by the calendar alone.

After your protocol

This protocol works alongside the practice's general recovery advice — see managing post-operative pain and, if you have had surgery, wound care and hand therapy basics. The phased plan above reflects current best evidence for tennis elbow — progressive tendon loading rather than rest — and your ongoing recovery is guided individually by your physiotherapist or hand therapist according to how your elbow progresses.

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