CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

REHABILITATION PROTOCOL

Elbow Instability

The collateral ligaments on the outer (lateral) and inner (medial) sides of the elbow, which are repaired or protected after an instability injury.

Kieran Hirpara 4.0

This protocol guides your recovery after surgery for **elbow instability** with Dr Kieran Hirpara at Mater Private Hospital Rockhampton. It covers two different kinds of instability, and your surgeon will tell you which applies to you:

- **(A) A lateral (outer-side) injury** – such as a "terrible triad" injury, a fracture-dislocation, or a repair of the lateral collateral ligament (LCL). These injuries are stabilised so the elbow no longer slips or pivots out of place.
- **(B) A throwing (medial, inner-side) injury** – a repair or reconstruction of the ulnar collateral ligament (UCL), usually in overhead athletes.

The whole plan is built on one idea: **protected early movement, not immobilisation.** Long spells in a cast or splint are the main cause of a permanently stiff elbow, so the goal is to start moving safely and soon. 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

The elbow is held in place by ligaments on the inner and outer sides of the joint. When these are injured – by a dislocation, a fracture-dislocation, or repeated throwing – the joint can become unstable. Surgery repairs or reconstructs the damaged structures so the joint sits properly again.

Dr Hirpara's approach avoids a bulky external hinged brace. If the repair is stable through its full range at the time of surgery, you will simply wear a **light sling for comfort and begin moving the elbow early**, within safe positions. If the stability needs more protection, an **internal joint stabiliser** can be fitted at the time of surgery – a small internal hinge that holds the elbow correctly reduced from the inside while still letting you bend and straighten it early. Because the protection is internal, you still avoid an external arc-limiting brace. If used, this internal device is usually removed once the ligaments have healed, at around four to six months.

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

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

The single most important habit in this recovery is to **keep moving within your safe range** while respecting the positions your surgeon asks you to avoid. The exercises below are your starting point.

Precautions and limitations

The positions to protect depend on which injury you have. Your surgeon and therapist will confirm yours.

For a lateral (outer-side) injury – terrible triad / LCL:

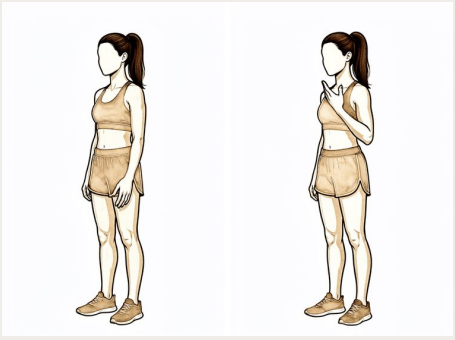
- **Do** keep your forearm turned **palm-down (pronated)** for movement – this seats the joint and protects the outer repair.
- **Do** exercise with your arm in front of your body, or lying down with the arm reaching toward the ceiling if asked, so gravity helps hold the joint together.
- **Do not** let the arm fall out to the side (avoid shoulder abduction) or take weight through it early – gravity then pulls the repair apart.
- **Do not** combine fully straightening the elbow with a palm-up (supinated) forearm until your surgeon clears it (around 16 weeks) – this is the position that can make the joint slip again.
- **Do not** push or stretch the elbow into pain, and avoid weight-bearing and contact loading for the first few months.

For a throwing (medial, inner-side) injury – UCL:

- **Do** keep your forearm biased **palm-up (supinated) or neutral**, as directed.
- **Do not** load the shoulder into outward (external) rotation early – this stresses the inner repair. This is usually avoided until about 6 weeks.

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

Your exercises

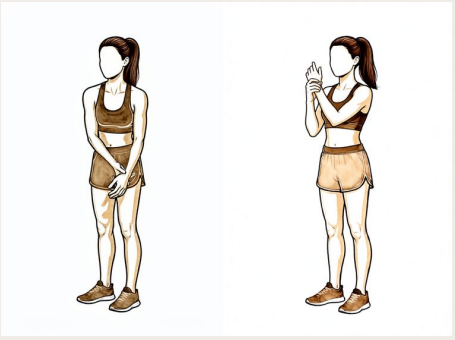


Kieran Hirpara CC BY NC SA 4.0

Active elbow bends

Gently bend your elbow as far as is comfortable, then straighten it again to the point your surgeon and therapist allow. Keep your forearm turned the way you have been instructed — for a lateral (outer-side) injury this usually means palm-down (pronated). Move only your own muscles; do not force the joint.

10–15 times, several times a day

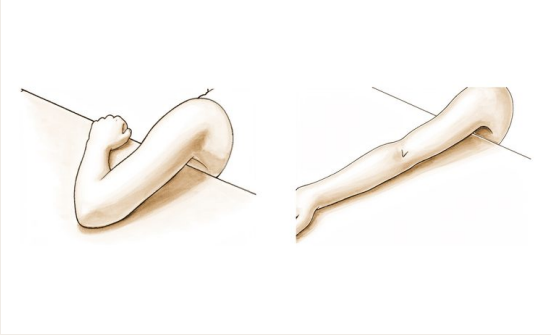


Kieran Hirpara CC BY NC SA 4.0

Assisted elbow flexion

When your therapist allows, use your other hand to gently help your elbow bend a little further than it moves on its own. Take it to a comfortable stretch only — never to pain — and ease off slowly.

Hold 10–15 seconds, 5–10 times, as directed

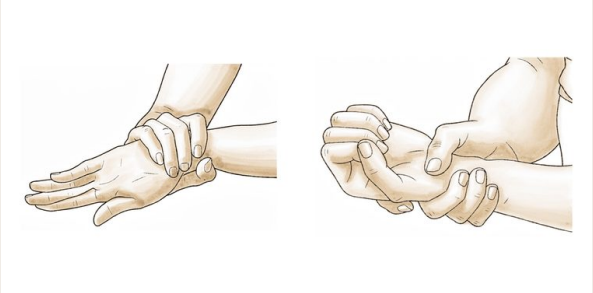


Kieran Hirpara CC BY NC SA 4.0

Elbow straightening (extension to comfort)

Straighten your elbow as far as is comfortable within the range your surgeon has set. For a lateral injury, keep your palm turned down as you straighten. Do not push into full straightening combined with palm-up rotation until your surgeon clears it.

10–15 times, several times a day



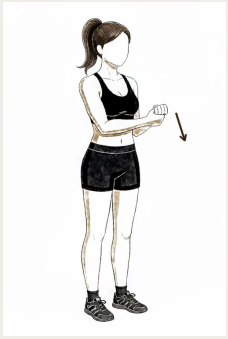
Kieran Hirpara CC BY NC SA 4.0

Forearm rotation (palm up / palm down)

With your elbow tucked at your side and bent to about 90°, gently turn your palm up, then palm down, within the range you have been given. Your safe direction depends on your injury — a lateral injury favours palm-down (pronation); a medial throwing injury favours palm-up (supination). Follow the direction your surgeon and therapist set.

10 times each allowed direction, several times a day

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



Kieran Hirpara CC BY NC SA 4.0

Elbow muscle holds — straightening (isometric)

With your elbow held still, gently press as if to straighten it against your other hand or a fixed surface. The elbow should not actually move. This wakes the muscles up without loading the healing ligaments.

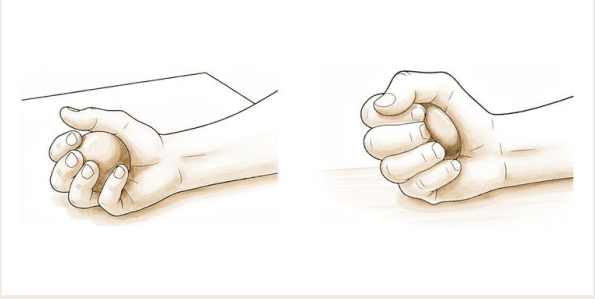
Hold 5 seconds, 10 times, once or twice daily — only when cleared

Kieran Hirpara CC BY NC SA 4.0

Elbow muscle holds — bending (isometric)

With your elbow held still, gently press as if to bend it against your other hand. The elbow should not move. Keep the effort comfortable — this is muscle activation, not a workout.

Hold 5 seconds, 10 times, once or twice daily — only when cleared



Kieran Hirpara CC BY NC SA 4.0

Grip strengthening

Squeeze a soft ball or therapy putty in your hand and hold briefly, then release. This keeps your hand and forearm strong while your elbow is protected.

10–15 squeezes, 2–3 times a day

These are the exercises from your handout, for regaining safe movement and keeping your hand, forearm and shoulder working while the elbow is protected. Start them, and progress them, only as guided by Dr Hirpara and your therapist — the safe forearm position and range depend on your specific injury.

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

Your clinical protocol

The rest of this page is the clinical protocol for your physiotherapist or hand therapist. It is written in two tracks because the two injuries are protected differently. Each phase is criteria-gated — progress when the milestones are met, not simply by the calendar.

Prior to treatment, check the patient's x-ray, operation report and past medical history, and liaise with the treating surgeon regarding the stability achieved at surgery, the safe arc and forearm rotation, and whether an internal joint stabiliser was implanted. Dr Hirpara does not use an external hinged brace: a through-range stable repair is managed in a simple sling with early motion to comfort; where stability needs protecting, an internal joint stabiliser holds the reduction internally while permitting extension to comfort.

TRACK A — TERRIBLE TRIAD / FRACTURE-DISLOCATION / LCL (LUCL) REPAIR

Aim: A stable, concentrically reduced elbow that moves early; prevent posterolateral rotatory re-subluxation.

Key precautions throughout the early phase:

- Keep the **forearm pronated** for an isolated lateral injury (tightens the lateral structures and seats the radiocapitellar joint). If both columns were repaired, hold the forearm **neutral**; supination is permitted only with the elbow flexed to ~90°.
- **Avoid varus stress and shoulder abduction** — gravity imposes a varus load on the lateral repair. Perform active range of motion with the arm in front of the body, or supine-overhead (gravity-reduced) if the repair is tenuous.
- **No full-extension-with-supination** until ~16 weeks (reproduces the pivot-shift).
- No weight-bearing / closed-chain loading for 8–16 weeks.

Weeks 0–2 — Early motion. Simple sling for comfort. Begin digit, wrist and shoulder active range of motion immediately. Begin elbow active and active-assisted range of motion **to comfort from day 2–3**, forearm pronated, arm supported in front of the body (or supine-overhead if the repair is tenuous, so gravity compresses the joint). **Where an internal joint stabiliser is in place, progress to full comfortable extension early — the device protects the reduction; no external brace is used.**

Weeks 2–6 — Restore the arc. Progress to full comfortable flexion and extension (extension to comfort throughout; an internal stabiliser, if present, permits this). Maintain the pronation bias; avoid varus loading. *Criteria to progress:* full passive arc regained, no re-subluxation on examination or x-ray, pain ≤ 3/10.

Weeks 6–12 — Strengthening. Once clinically and radiographically healed (~week 6), begin progressive strengthening; introduce a static-progressive splint if a contracture is developing. Continue to avoid varus load. An internal stabiliser, if used, is usually retained until ligament healing.

Weeks 12–20+ — Advanced / return. Progressive resistance; return to heavy labour. **Contact and overhead sport at approximately 6–9 months** (and after any internal-stabiliser removal). Continue to avoid varus-loaded strengthening.

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

TRACK B — THROWING (MEDIAL) UCL REPAIR / RECONSTRUCTION

This is a chronic-overload medial problem. Dr Hirpara's preference is **no external hinged brace**: a suture-tape internal-brace augmentation (repair) or the tendon graft (reconstruction) provides the protection, and rehabilitation is throwing-specific. The forearm is biased to **supination/neutral**; resisted shoulder external rotation is avoided until ~week 6, as it valgus-loads the graft.

Internal-brace–augmented repair (accelerated — matches the no-external-brace approach):

- Early protected motion to comfort, weeks 0–4 (full arc by ~week 6).
- Thrower's Ten program from ~week 3; plyometrics from ~week 6.
- **Interval throwing program from ~week 11; return to sport at ~5–7 months.**

Reconstruction (graft) track, if used — slower:

- Full arc by ~week 6; interval throwing at weeks 14–16; throwing from a mound not before 6 months; competitive return to sport typically 9–16 months.

Getting back to work and activity

How quickly you return depends on which injury you had and on the demands of your job or sport.

- **Lateral injury (terrible triad / LCL):** light desk and self-care tasks resume early, within your safe positions. Strengthening generally begins around 6 weeks once the elbow has healed clinically and on x-ray. **Contact and overhead sport are usually delayed to about 6–9 months**, and after removal of an internal joint stabiliser if one was fitted. Avoid taking weight through the arm or loading it out to the side until your surgeon clears it.
- **Throwing injury (UCL):** with an internal-brace-augmented repair, a structured interval throwing program typically begins around **11 weeks, with return to sport at about 5–7 months**. After a reconstruction, return to competitive throwing is slower — commonly 9–16 months.

Driving is resumed once you have comfortable, safe control of the arm out of the sling and your surgeon has confirmed it is appropriate at review. Your therapist will progress your strengthening and sport- or work-specific drills toward your individual goals.

After your protocol

This protocol works alongside the practice's general recovery advice — see managing post-operative pain and wound care. Your ongoing recovery is guided individually by your physiotherapist or hand therapist according to how your elbow progresses and which injury you had. The clinician-facing evidence summary for this protocol is kept alongside this page.

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