CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

EVIDENCE SUMMARY

Inpatient exercises – rotator cuff & stabilisation

Inpatient (Early In-Hospital) Phase – Rotator Cuff Repair &/or Shoulder Stabilisation

Topic scope: This is the **early in-hospital / early-protected phase** of a *combined* pathway covering patients who had a **rotator cuff repair** and/or a **shoulder stabilisation** procedure (anterior labral/Bankart repair, Latarjet, or posterior labral/capsular repair). It deliberately stops at the point of discharge plus the first protected weeks – the gentle hand/elbow/shoulder exercises that keep the limb moving while the repair is protected by the sling. **The full, operation-specific rehabilitation course lives in the parent protocols**, which this page hands the patient back to once they go home:

- Rotator cuff repair
- Anterior stabilisation & Latarjet
- Posterior stabilisation

> *Defining principle of this early phase – PROTECT the repair: Unlike a frozen-shoulder release (where immediate aggressive motion is the goal), a cuff repair and a labral/capsular stabilisation both create a construct that must heal undisturbed. So the early phase is the same for both: sling immobilisation, gentle/passive-only motion within safe limits, and NO active or resisted shoulder work. Tendon-to-bone and labrum-to-bone healing is weak in the first weeks, so the sling and the movement limits are the protectors. The hand, wrist and elbow are kept moving freely throughout (these don't stress the repair) to prevent swelling and stiffness; the shoulder itself is only moved passively/with assistance within the limits the surgeon and physiotherapist set.*

The early in-hospital phase (what this page covers)

In the first hours-to-days after surgery the aims are simple and shared across both operation families:

1. **Protect the repair** – arm in the sling, no active lifting or reaching, no loading.

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2. **Keep the rest of the limb moving** – wrist, fingers and elbow exercises to prevent swelling and stiffness (these put no stress on the cuff or labral repair).
3. **Gentle, assisted shoulder motion only** – pendulums and assisted/passive elevation within a safe arc; for an anterior repair, external rotation is limited; for a posterior repair, internal rotation and reaching behind the back are limited (the at-risk directions are *opposite*).
4. **Pain control and a safe discharge plan** – analgesia before exercise, sling instructions, and a physiotherapy follow-up arranged in the discharge pack.

The standalone protocols then drive the rest of recovery (the full sling-weaning schedule, when active motion and strengthening begin, and return to work/sport). The same first-phase principles appear at the head of each of those protocols – this inpatient page simply consolidates that shared early phase for patients who had the procedure(s) performed together or are still in hospital.

Evidence by theme

THEME 1 — EARLY VS DELAYED MOTION AFTER ROTATOR CUFF REPAIR (THE CENTRAL DEBATE)

This is the best-studied question that shapes the early phase, and the corpus is rich on it. Two competing concerns: **early passive motion** reduces post-operative stiffness, while **delayed/immobilisation** may better protect tendon-to-bone healing (lower retear), especially in larger tears.

- Multiple **RCTs and systematic reviews of overlapping meta-analyses** converge on the same bottom line: early and delayed passive motion give **superior early range of motion for the early group but equivalent final outcomes** by ~6–12 months for **small-to-medium** tears – so timing is largely surgeon preference and does not change the end result [Saltzman 2017; Mazzocca 2017].
- For **large/massive** tears the balance tilts toward a **delayed / protected** approach to favour healing [systematic-review/meta-analysis evidence; *BMC Musculoskelet Disord* 2025].
- A "**knowing the speed limit**" theme runs through the reviews: tendon repairs are mechanically weak early, and *very* aggressive early therapy can compromise the construct [Thigpen 2015 review].

Practical consequence for this page: the early in-hospital phase is **passive/assisted-only with the sling on** regardless of which approach the surgeon ultimately chooses for the home phase – the disagreement in the literature is about *how soon* to progress, not about whether to protect the repair in the first days. A defining surgical decision (early vs delayed progression, and how it is size-stratified) is made by the surgeon and detailed in the cuff-repair protocol.

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THEME 2 — IMMOBILISATION AFTER STABILISATION (ANTERIOR AND POSTERIOR)

The stabilisation literature also supports an early protected phase, though high-level evidence is sparser and protocols are more consensus-driven.

- **Anterior (Bankart/capsulolabral) repair:** the American Society of Shoulder and Elbow Therapists' consensus guideline recommends **0–4 weeks of absolute immobilisation, then relative immobilisation (out of the sling only for exercises) to ~6 weeks**, with **no forced external rotation/extension for ~3 months**; early ER is progressed gradually (e.g. ~15° at 0–2 wk → ~35° at 2–4 wk → ~55° at 4–6 wk). A simple sling is used in the large majority of published protocols.
- **Posterior (labral/capsular) repair:** the precaution is **reversed** — the sling is positioned in slight abduction and neutral/slight external rotation, the arm is kept **in front of the body**, and **internal rotation, adduction and reaching behind the back are avoided** early. Posterior instability is uncommon (~3–5%), so the protocols are biomechanically reasoned (Level IV–V) rather than RCT-tested.
- Both share the same headline as the cuff-repair early phase: **sling on, gentle motion within the safe arc, no active/resisted shoulder work** while the labrum/capsule heals.

Early-phase timeline (consolidated; first weeks only)

This focuses on the shared early-protected window and is consistent with the synthesis page. The full operation-specific schedules continue in the parent protocols.

Phase	Window	Sling	Shoulder motion	Active / strengthening	Notes
Inpatient / immediate	**Day 0 – discharge**	On at all times (off only for exercises & showering)	Wrist/hand/elbow moving freely; pendulums; gentle **assisted/passive** elevation within safe limits	**None for the shoulder** (no active lift, no resisted work)	Analgesia before exercises; ice for comfort; physiotherapy follow-up arranged
Early protected	**Week 0–6**	Worn ~6 weeks, especially out of the house; not needed for sleep	Continue gentle assisted/passive motion within limits — **anterior repair: limit external rotation; posterior repair: limit internal rotation / no reaching behind the back**	Still no active/ resisted shoulder work	The sling and the direction limits are the protectors; ease back if pain rises

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Phase	Window	Sling	Shoulder motion	Active / strengthening	Notes
Handover to parent protocol	**~Week 6 onward**	Weaned per the operation-specific protocol	Active-assisted → active motion **begins in the parent protocol**, not here	Strengthening **begins later** (cuff repair typically ~12 wk; stabilisation per its own schedule)	Recovery continues with the rotator cuff repair, anterior stabilisation & Latarjet, or posterior stabilisation protocol

The sling duration, the exact motion limits, and when active motion and strengthening begin are surgeon-set clinical decisions; the windows above are the typical shared early phase, not trial-derived precise cut-offs.

Key controversies / evidence quality

1. **Early vs delayed progression after cuff repair** is the one well-studied question, and it is about the *home* phase rather than the in-hospital phase. RCTs/meta-analyses show equivalent final outcomes for small/medium tears and a protect-healing tilt for large/massive tears — the early in-hospital protected phase is common ground either way. *Strong (RCT / SR-MA), but Cochrane-level certainty for any single optimal schedule remains low.*
2. **Stabilisation immobilisation duration and sling position** are largely **consensus/biomechanical** — there is no RCT defining the optimal early regimen, and posterior protocols in particular are extrapolated. *Weak–moderate / consensus.*
3. **The combined early-phase protocol itself** is a surgeon patient-guidance consolidation, not a trial-derived schedule. It is deliberately brief and defers to the parent protocols for the full course.

Evidence-strength flags (summary)

- **STRONG (RCT / SR-MA):** early-vs-delayed passive motion after cuff repair → equivalent final outcomes for small/medium tears, protect-healing tilt for large/massive (Saltzman 2017; Mazzocca 2017; *BMC Musculoskelet Disord* 2025 SR-MA).
- **MODERATE / CONSENSUS:** anterior stabilisation immobilisation schedule (ASSET/JOSPT consensus guideline); graded early ER limits.
- **WEAK / CONSENSUS (Level IV–V):** posterior stabilisation sling position and precautions (biomechanical, no RCT); the consolidated early in-hospital protocol itself.

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Citations

RAG CORPUS (180,000+ ORTHOPAEDIC ARTICLES)

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- Mazzocca AD, Arciero RA, Shea KP, et al. The Effect of Early Range of Motion on Quality of Life, Clinical Outcome, and Repair Integrity After Arthroscopic Rotator Cuff Repair. *Arthroscopy.* 2017. DOI: 10.1016/j.arthro.2016.10.017
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- Which is better? Early versus delayed rehabilitation after arthroscopic rotator cuff repair. *Knee Surg Sports Traumatol Arthrosc.* 2024. DOI: 10.1002/ksa.12129
- Thigpen CA, Shaffer MA, Kissenberth MJ. Knowing the Speed Limit (post-cuff-repair rehab progression). *Clin Sports Med.* 2015. DOI: 10.1016/j.csm.2014.12.007
- Rehabilitation Following Arthroscopic Rotator Cuff Repair. *J Bone Joint Surg.* DOI: 10.2106/jbjs.m.00034
- Anterior Shoulder Instability Part I – Diagnosis, Nonoperative Management, and Bankart Repair – An International Consensus Statement. *Arthroscopy.* 2021. DOI: 10.1016/j.arthro.2021.07.022

LITERATURE / CONSENSUS GUIDELINES (URLS)

- The American Society of Shoulder and Elbow Therapists' Consensus Rehabilitation Guideline for Arthroscopic Anterior Capsulolabral Repair of the Shoulder. *JOSPT.* 2010. https://www.jospt.org/doi/10.2519/jospt.2010.3186
- Rehabilitation Protocol Variability Following Arthroscopic Bankart Repair and Remplissage: A Systematic Review. *Int J Sports Phys Ther.* https://pmc.ncbi.nlm.nih.gov/articles/PMC11446737/
- Current Concepts in Rehabilitation for Traumatic Anterior Shoulder Instability. PMC. https://pmc.ncbi.nlm.nih.gov/articles/PMC5685970/
- Rehabilitation Following Posterior Shoulder Stabilization (clinical commentary). PMC8168996. https://pmc.ncbi.nlm.nih.gov/articles/PMC8168996/

PUBLISHED PATIENT/REHAB PROTOCOLS (BASIS FOR THE EARLY-PHASE STRUCTURE)

- Massachusetts General Hospital – Rehabilitation Protocol for Bankart Repair. https://www.massgeneral.org/assets/MGH/pdf/orthopaedics/sports-medicine/physical-therapy/rehabilitation-protocol-for-bankart-repair.pdf
- University of Virginia Sports Medicine – Posterior Labral Repair Rehabilitation Protocol. https://med.virginia.edu/orthopaedic-surgery/wp-content/uploads/sites/242/2021/06/Posterior-Labral-Repair.pdf

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- Brigham & Women's Hospital — Arthroscopic Rotator Cuff Repair Protocol (early protected phase, tear-size stratification). https://www.brighamandwomens.org/assets/BWH/patients-and-families/rehabilitation-services/pdfs/shoulder-arthroscopic-rct-repair-protocol-hybrid-patient-therapist.pdf

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