



DR HARRY CONSTANTIN
ORTHOPAEDIC SURGEON

Large Rotator Cuff Repair Rehabilitation Protocol



Phase Overview

The following protocol is designed to guide you and your physiotherapist through your recovery. This protocol is evidence based and uses the recommendations from the Consensus Statement (2016) of The American Society of Shoulder and Elbow Therapists' consensus statement on rehabilitation following arthroscopic rotator cuff repair

Your treatment may be adjusted to meet your individual needs.

Avoid forcing any movement that causes sharp pain and maintain your exercises within your safe external rotation range

Phase 1

Protection & Passive Motion
(Weeks 0-6)

Phase 2

Active Motion & ROM Restoration
(Weeks 7-12)

Phase 3

Strengthening & Functional Control
(3-6months)

Phase 4

Advanced Strengthening & Return to Sport
(6 months+)

Important Message for Physiotherapists

This protocol is to act as a guide but is also a summary of a more detailed protocol which I recommend reading:
Consensus Statement (2016) The American Society of Shoulder and Elbow Therapists' consensus statement on rehabilitation following arthroscopic rotator cuff repair ([https://www.jshoulderelbow.org/article/S1058-2746\(15\)00751-X/abstract](https://www.jshoulderelbow.org/article/S1058-2746(15)00751-X/abstract)).

The key concepts include:

- No component of rehabilitation is more important than **patient education**
- Balancing rehabilitation goals and healing: early range of motion after repair has nearly a 2-fold risk of re-tear.
- Supervised rehabilitation should monitor ER in neutral abduction and forward elevation in plane of scapula as indicators of progress
- Stiffness at 1 year is not common
- Poor compliance leads to poor outcomes particularly in the first 6 weeks

Thigpen CA, Shaffer MA, Gaunt BW, Leggin BG, Williams GR, Wilcox RB 3rd. The American Society of Shoulder and Elbow Therapists' consensus statement on rehabilitation following arthroscopic rotator cuff repair. *J Shoulder Elbow Surg.* 2016 Apr;25(4):521-35. doi: 10.1016/j.jse.2015.12.018. PMID: 26995456.

Important Movement Restrictions

Protect the Repair: Avoid jerky, lifting, or pulling movements early; respect healing limits.

Individualised Recovery: Progress depends on tear size, tissue quality, age, and any additional procedures.

Gentle Movement: ROM should be *pain-free and as tolerated* — never force end-range.

Team Communication: Ongoing contact between surgeon, physiotherapist, and patient ensures safe progress.

Healing Takes Time: Tendon-to-bone healing is slow; timelines are guides and may need extending.

Phase 1

Protection & Passive Mobility

(Weeks 0-6)

Goals: Protect surgical repair and allow tendon healing. Control pain and swelling. Maintain hand, wrist, and elbow mobility. Begin gentle scapula activation. Achieve safe, pain-free active assisted shoulder motion

Precautions: Wear sling day and night. It can come off for showers. Keep elbow bent to protect the biceps tenodesis. No active shoulder (glenohumeral joint) movement early on. Avoid weight-bearing, lifting, or overhead motion. Stop activity if sharp pain, swelling, or night pain occurs

Progression:

0–2 weeks: Pendular exercises. Gentle elbow ROM out of sling.

3–6 weeks: Physio led supine or standing: Passive forward elevation in plane of scapula and **passive** external rotation in 30deg abduction. **PASSIVE ONLY.**

Functional Drills / Strength / Control: Hand, wrist, and elbow exercises. Gentle pendular; no resisted cuff work. Rest and ice on the shoulder.

Return to Work / Sport: Light desk work only (if approved). No lifting, pushing, pulling, or overhead activity

Maintenance: Continue sling use. Maintain distal mobility and scapular control.
Avoid compensatory shoulder movement

Phase 2

Active Motion & ROM Restoration

Weeks (7-12)

Goals: Achieve near-full active/assisted ROM. Restore shoulder coordination and scapula control. Maintain tendon protection. Gradually reintroduce functional activities

Precautions: No heavy or high-resistance loading. Avoid overhead or end-range movements. No sudden jerks, lifting, or impact through the shoulder. Monitor pain and swelling; reduce load if pain returns.

Progression:

7–9 weeks: Progress toward active assisted to active range of motion

10–12 weeks: Full AROM; ER/IR to 45° at side and in abduction.

Functional Drills / Strength / Control: **Pulley or cane assisted exercises if not overactivating scapula or shrugging.** Scapula setting (elevation/retraction). Assisted flexion (supine), side-lying ER. Towel slide or horizontal dusting. Wall push-up, scapula protraction/retraction holds. Closed-chain wall drills (as tolerated).

Return to Work / Sport: Desk/light work: 6–8 weeks (no overhead or heavy lifting). Manual labour/sport: delay until next phase. Can do light aerobic activity.

Maintenance: Continue daily ROM and scapula exercises. Correct compensations (avoid scapula hiking). Maintain posture: thoracic extension, scapula retraction.



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Phase 3

Strengthening & Functional Control

(3-6 months)

Goals: Regain full functional ROM. Begin moderate cuff and scapula strengthening. Achieve multi-directional shoulder control. Prepare for work/sport-specific loading.

Precautions: Avoid heavy or rapid overhead loading (>3–4 kg early on). No incline bench, dips, or chin-ups until later phases. Regress if pain, swelling, or night pain develops.

Progression: Gradually introduce light weight-bearing drills: wall then knees then normal push-ups. Increase resistance from endurance to moderate loads. Begin sport/work-specific tasks: overhead, rotational, and plyometric control.

Functional Drills / Strength / Control: Prone horizontal extension to 90° abduction (short lever). ER/IR above 90° only when cuff is strong and pain-free. Closed-chain scapular drills and functional reach/lift patterns. Sport-specific mechanics: throwing, swinging, swimming. Emphasise endurance, then gradually add moderate strength loads.

Return to Work / Sport: Light/moderate work when pain-free with full ROM and good control. Heavy manual or overhead sport: delayed to next phase. Focus on quality of movement and not loading shoulder.

Maintenance: Continue strengthening and stretching. Focus on scapula/core stability, posture, and thoracic mobility.



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Phase 4

Advanced Strengthening & Return to Sport/ Work

(6 months +)

Goals: Achieve full strength and endurance of shoulder and scapula. Restore full functional and sport-specific movement. Safely return to overhead, high-load, or impact activities. Maintain tendon integrity while resuming normal activity

Precautions: Avoid maximal resistance if pain or swelling occurs. Progress sport-specific loading gradually. Monitor for night pain or shoulder fatigue

Progression: Continue closed-chain and open-chain strengthening. Progress to heavier resistance and functional multi-planar movements. Incorporate plyometric and dynamic overhead tasks. Gradual return to sport-specific or work-specific drills

Functional Drills / Strength / Control: Full push-ups, bench press, rows, overhead lifts (pain-free). Sport-specific drills: throwing, swimming, racket sports, lifting tasks. Emphasize endurance, then power and strength. Monitor scapular mechanics and posture

Return to Work / Sport: Light/moderate work: 12+ weeks, if pain-free and strong. Heavy manual or overhead sport: usually 4–6 months. Full return when strength $\geq 90\%$ of opposite side and pain-free

Maintenance: Continue strengthening, stretching, and posture control for 6–12 months. Emphasise scapular and core stability. Monitor for pain or weakness and adjust load proactively

Key Principles for your Recovery

Avoid pain and sharp sudden movements.

Focus on control, posture, and gradual progression, not speed

Regular physiotherapy reviews will ensure a guided safe and steady recovery