



# Rotator Cuff Repair — Rehabilitation Protocol

## Overview

- Arthroscopic or mini-open repair of rotator cuff tendons
- Sling for 4–6 weeks (6 weeks for large/massive tears)
- Passive motion only for 6 weeks to protect repair
- Full return to overhead sport typically 9–12 months
- Physiotherapy commences within 1–2 weeks of surgery

## Rehabilitation Phases

Phase 1 — Protection	Weeks 0–6
<p><b>Goals:</b></p> <ul style="list-style-type: none"><li>• Protect repaired tendon</li><li>• Minimise pain and swelling</li><li>• Maintain hand, wrist, and elbow mobility</li></ul>	<p><b>Exercises &amp; Interventions:</b></p> <ul style="list-style-type: none"><li>• Pendulum exercises (gravity-assisted)</li><li>• Passive shoulder flexion and external rotation only</li><li>• Elbow, wrist, and hand ROM</li><li>• Scapular retraction (pain-free)</li><li>• Ice and elevation</li></ul>
<p><b>Precautions:</b></p> <ul style="list-style-type: none"><li>■ No active shoulder elevation — sling at all times except exercises</li><li>■ No active internal rotation against resistance</li><li>■ Range limits per surgeon directive (typically <math>\leq 90^\circ</math> flexion, <math>\leq 30^\circ</math> ER)</li></ul>	
Phase 2 — Active Motion	Weeks 6–12
<p><b>Goals:</b></p> <ul style="list-style-type: none"><li>• Restore full active range of motion</li><li>• Begin rotator cuff activation</li><li>• Normalise scapular kinematics</li></ul>	<p><b>Exercises &amp; Interventions:</b></p> <ul style="list-style-type: none"><li>• Active-assisted progressing to active shoulder flexion and abduction</li><li>• External and internal rotation (theraband — light resistance)</li><li>• Scapular stabilisation exercises</li><li>• Closed-chain upper limb exercises</li><li>• Hydrotherapy if available</li></ul>
<p><b>Precautions:</b></p> <ul style="list-style-type: none"><li>■ No aggressive stretching — avoid pain with ROM</li><li>■ No lifting &gt; 1–2 kg until 12 weeks</li></ul>	



### Rehabilitation Phases (continued)

Phase 3 — Strengthening	Weeks 12–20
<b>Goals:</b> <ul style="list-style-type: none"><li>• Progressive rotator cuff and periscapular strengthening</li><li>• Restore muscle endurance and proprioception</li><li>• Sport- or work-specific conditioning</li></ul>	<b>Exercises &amp; Interventions:</b> <ul style="list-style-type: none"><li>• Progressive resistance training — theraband and light weights</li><li>• Closed- and open-chain strengthening</li><li>• Plyometric upper limb exercises (late Phase 3)</li><li>• Throwing/overhead sport-specific drills as tolerated</li><li>• Dynamic stabilisation and neuromuscular training</li></ul>
Phase 4 — Return to Sport / Activity	Months 6–12
<b>Goals:</b> <ul style="list-style-type: none"><li>• Full return to overhead sport and heavy manual work</li><li>• Confident shoulder function in all planes and loads</li></ul>	<b>Exercises &amp; Interventions:</b> <ul style="list-style-type: none"><li>• Sport-specific progressive loading programme</li><li>• Return-to-throwing protocol (if applicable)</li><li>• Maintenance strengthening 2–3x per week ongoing</li></ul>

### Clinical Notes

- Larger tears (> 3 cm) and massive tears require extended sling use and slower progression
- Fatty infiltration > Grade 2 (Goutallier) associated with higher re-tear risk
- Biceps tenodesis/tenotomy performed concurrently — no resisted elbow flexion for 6 weeks
- MRI at 6 months if clinical progress is inadequate or re-tear suspected

### References

1. Thigpen CA, et al. The American Society of Shoulder and Elbow Therapists' consensus statement on rehabilitation following arthroscopic rotator cuff repair. J Shoulder Elbow Surg. 2016.
2. Parsons BO, et al. Does slower rehabilitation after arthroscopic rotator cuff repair lead to long-term stiffness? J Shoulder Elbow Surg. 2010.
3. Kluczynski MA, et al. Passive versus active-assisted range of motion after rotator cuff repair. Am J Sports Med. 2015.
4. Cuff DJ, Pupello DR. Prospective evaluation of postoperative compliance and outcomes after rotator cuff repair. J Shoulder Elbow Surg. 2012.
5. Warth RJ, et al. Protocols and outcomes after arthroscopic rotator cuff repair. Orthop Clin North Am. 2014.

*This rehabilitation protocol is intended as a general guide for qualified physiotherapists and healthcare professionals. It should be adapted to individual patient presentation, surgical findings, tissue quality, and progress. All progression decisions should be made in consultation with the treating surgeon.*