



Ms. Ruth A. Delaney, FRCS

Consultant Orthopaedic Surgeon, Shoulder Specialist
Sports Surgery Clinic - Mater Private Hospital – Beacon Hospital

Correspondence to: Suite 4, Sports Surgery Clinic, Dublin 9, Ireland.

Tel: +353 1 5262335 Fax: +353 1 5262336

Email: delaneyshoulder@sportsurgeryclinic.com

Arthroscopic Rotator Cuff Repair Protocol:

This protocol is intended as a guideline to the post-operative pathway for a patient who has undergone an arthroscopic rotator cuff repair. It is not intended as a substitute for a Chartered Physiotherapist's clinical decision-making as to how their patient is progressing. Clinical exam findings, individual progress, and/or the presence of post-operative complications will determine progress through the pathway. If there are any concerns as to how your patient is progressing, please contact Dublin Shoulder Institute.

Patients are discharged from hospital wearing a shoulder immobilizer with an abduction pillow (usually a DonJoy Ultrasling IV) and with a home exercise program consisting of AROM for elbow/wrist/hand. Depending on the individual cuff tear, some gentle passive shoulder ROM may also be prescribed. Patients will then attend Dublin Shoulder Institute for their 2-week post-op review where they will be provided with a detailed physio script that they bring to their first appointment with their own Chartered Physiotherapist.

A video explaining how to correctly wear the shoulder immobilizer can be found here: <https://www.dublinshoulder.com/services/shoulder-surgery/>

Progression to the next phase is based on Clinical Criteria and/or Time Frames as Appropriate.

Phase I – Immediate Post Surgical Phase (Weeks 1-4):

Goals:

- Protect surgical repair and wound/incision sites.
- Manage pain.
- Prevent muscular inhibition.
- Independent for ADL's with modifications, while maintaining integrity of repair.

Precautions:

- Shoulder immobiliser to be worn at all times – can remove for bathing and any home exercises that may have been prescribed (not all patients will have shoulder ROM exercises prescribed in the first 2 – 4 weeks).
- NO driving.
- NO active range of motion (AROM) of Shoulder
- NO lifting of objects.
- NO shoulder motion behind back.
- NO excessive stretching or sudden movements.
- NO supporting of body weight by hands.
- Keep incision clean and dry.

DAY 1 TO 6:

- Shoulder immobiliser to be worn AT ALL TIMES except for bathing.
- Scapula musculature isometrics; cervical spine ROM.
- Patient education: posture, joint protection, positioning, hygiene, etc.
- Ice for pain relief (Ice Band).

DAY 7 TO 14:

- Continue use of shoulder immobilizer.
- Continue elbow/wrist/hand AROM.
- Continue use of ice for pain relief.

DAY 15-28:

- Continue to wear shoulder immobiliser until end of week 4. ****Some patients may need to wear it until end of week 6 depending on extent of repair. See physio script.**
- Please refer to physio script from 2-week post-op review for instructions on commencing passive movements in flexion, scaption, ER and IR (scapular plane)
 - encourage use of swimming pool where appropriate to aid with passive ROM.
- Continue elbow, wrist, and hand AROM.
- Continue use of ice as needed. Heat can also be used from this stage if advised at 2-week post-op review.
- Pendulum exercises
 - to begin 28 days after surgery, no pendulums before this time.

Phase II – Protection Phase (Week 4-10):

Goals:

- Allow healing of soft tissue.
- Do not overstress healing tissue.
- Gradually restore full passive ROM (week 4-5).
- Continue to manage pain.

Precautions:

- NO lifting
- NO supporting of body weight by hands and arms
- NO sudden jerking motions

WEEK 5-6:

- Initiate active assisted range of motion (AAROM) flexion in supine position – if not already commenced as advised by DSI physio or surgeon prior to this.
- Continue progressive passive ROM.
 - This ROM should be PAIN FREE.
- Gentle scapular/glenohumeral joint mobilization as indicated to regain full passive ROM
- Continue previous exercises in Phase I as needed.
- Continue Phase II precautions.
- Initiate prone rowing to neutral arm position.
- Continue use of ice as needed.
- May use heat prior to ROM exercises.
- Continue to encourage pool work for ROM exercises where possible.
- Kinetic chain exercises can commence (bridge; 1 leg bridge, hip hinge in standing).
- **ACTIVE ROM can begin before week 6 for some patients – see patient's individual physio script.**

WEEK 6-8:

- Continue AAROM and stretching exercises, including HBB stretch (hand behind back) for internal rotation/posterior capsule.
- Begin rotator cuff isometrics.
- Begin/continue ACTIVE ROM (flexion, scaption)

Phase III - Intermediate phase (week 10-14):

Goals:

- Full AROM (week 10-12)
- Maintain Full PROM
- Dynamic Shoulder Stability
- Gradual restoration of shoulder strength, power, and endurance (after week 12)
- Optimize neuromuscular control
- Gradual return to functional activities

Precautions:

- NO lifting of heavy objects (no heavier than 2 kg)
- NO sudden lifting/ jerking or pushing activities

WEEK 10:

- Continue stretching and passive ROM
- Dynamic stabilization exercises
- No strengthening before week 12, and then only on approval of operating surgeon (patients will attend clinic with surgeon at the 12-week mark & a further, updated physio script will be provided)

WEEK 12:

- Initiate strengthening programme **ONLY when full ROM regained and ONLY on approval of operating surgeon (exact timing of introduction of strengthening may vary for individual patients)**
 - External rotation (ER)/Internal rotation (IR) with Therabands/sport cord/tubing
 - ER Side-lying
 - Lateral Raises*
 - Full Can in Scapular Plane* (avoid empty can abduction exercises)
 - Prone Rowing
 - Prone Horizontal Abduction
 - Prone Extension
 - Elbow Flexion
 - Elbow Extension

*Patient must be able to elevate arm without shoulder or scapular hiking before initiating isotonic; if unable, continue glenohumeral joint exercises.

WEEK 14:

- Continue all exercises listed above.

- Progress to fundamental shoulder exercises

Criteria for progression to the next phase (IV):

- Able to tolerate the progression to low-level functional activities.
- Demonstrates return of strength / dynamic shoulder stability.
- Re-establish dynamic shoulder stability.
- Demonstrates adequate strength and dynamic stability for progression to higher demand work/sport-specific activities.

Phase IV – Advanced strengthening phase (week 16-22):

Goals:

- Maintain full non-painful active ROM.
- Advance conditioning exercises for enhanced functional use of upper extremity.
- Improve muscular strength, power, and endurance.
- Gradual return to full functional activities.

WEEK 16:

- Continue ROM and self-capsular stretching for ROM maintenance.
- Continue progression of strengthening.
- Advance proprioceptive, neuromuscular activities.

WEEK 20:

- Continue all exercises listed above.
- Continue ROM and self-capsular stretching for ROM maintenance.

Phase V – Return to activity phase (week 20-26):

Goals:

- Gradual return to strenuous work activities.
- Gradual return to recreational activities.
- Gradual return to sport activities.

WEEK 23:

- Continue strengthening and stretching.

WEEK 26:

- May initiate interval sport program (i.e. golf, tennis etc.), if appropriate.