

POST-OPERATIVE REHABILITATION PROTOCOL

# Arthroscopic Bankart Repair with Remplissage

William McLaughlin, MD | Sports Medicine Surgery | Advanced Bone & Joint

This protocol guides rehabilitation following arthroscopic anterior Bankart repair with remplissage (infrapinatus capsulotenodesis into the Hill-Sachs defect). The remplissage component requires specific attention to posterior cuff protection and a conservative approach to early external rotation. Progression is criteria-based; timelines are approximate guidelines.

## Remplissage-Specific Precautions

### GOALS FOR THIS PHASE

- Avoid combined abduction + external rotation in early phases to protect the capsulotenodesis.
- Delay isolated infrapinatus loading until weeks 10-12.
- Expect a mild (~8-10°) external rotation deficit compared to the contralateral side — typically clinically insignificant.

## Phase 1 | Protection & Early Motion | 0-6 Weeks

### GOALS FOR THIS PHASE

- Protect the surgical repair.
- Control pain and swelling.
- Restore early passive ROM.

### Precautions

- Sling immobilization for 4-6 weeks (remove only for exercises and hygiene).
- No combined abduction + external rotation.
- No shoulder extension or horizontal abduction.
- No active rotator cuff contraction against resistance.

### Range of Motion Progression

- Weeks 0-2: forward elevation (FE) to 90°, external rotation (ER) to 25-30° at side.
- Weeks 2-4: FE to 120°, ER to 30-35°.
- Weeks 4-6: FE to 145°, ER to 40-45°.

### Exercises

- Passive and active-assistive ROM (supine wand, table slides, pulley).

- Submaximal isometrics (shoulder and elbow) with arm adducted in neutral.
- Scapular retraction/depression with minimal resistance.
- Elbow, wrist, and hand active ROM.
- Cryotherapy and edema management.

## Phase 2 | Intermediate Rehabilitation | 6-12 Weeks

### GOALS FOR THIS PHASE

- Restore full passive ROM.
- Begin active ROM.
- Initiate light strengthening.

### Criteria to Enter Phase 2

- Minimal pain at rest ( $\leq 2/10$ ).
- Adequate passive ROM per Phase 1 goals.
- Good scapular posture and control.

### Sling

- Discontinued at week 6.

### Range of Motion Progression

- Weeks 6-8: FE to 160°, ER to 55-60°.
- Weeks 8-10: full FE, ER to 70-75°.
- Weeks 10-12: near-full passive ROM; begin ER at 90° abduction cautiously (goal 70-80°).
- Full passive ROM target: ~week 9.
- Full active ROM target: ~week 12.

### Strengthening

- Weeks 6-8: light isotonic rotator cuff (internal rotation, scaption, forward flexion).
- Closed-chain exercises (wall push-ups, ball-on-wall stabilization).
- Periscapular strengthening (rows, serratus anterior, lower trapezius).
- Weeks 10-12: begin infraspinatus-specific loading (sidelying ER, prone horizontal abduction).

## Phase 3 | Advanced Strengthening & Neuromuscular Training | 12-24 Weeks

### GOALS FOR THIS PHASE

- Achieve full ROM.
- Progressive strengthening.
- Dynamic stability.
- Sport-specific preparation.

### Criteria to Enter Phase 3

- Full passive ROM (accept ~5-10° ER deficit as normal).
- Pain-free active ROM.
- Manual muscle test  $\geq$  4/5 for rotator cuff and periscapular muscles.

### Exercises

- Progressive rotator cuff and periscapular strengthening with increasing resistance.
- Emphasis on endurance over maximal load for rotator cuff.
- Open- and closed-kinetic-chain exercises in functional patterns.
- Proprioceptive and dynamic stabilization drills (perturbation training, rhythmic stabilization, PNF).
- Core and lower extremity kinetic chain training.
- Sport-specific movement patterns beginning at weeks 16-20.

## Phase 4 | Return to Sport | 6-9 Months

### GOALS FOR THIS PHASE

- Safe return to full sport participation.

### Minimum Time Before Clearance

- Non-contact sport: 4-6 months.
- Contact / collision sport: 6-9 months.

### Expected Outcomes

- Return to sport at any level: ~86% of athletes.
- Return to preinjury level: 63-100%.
- Mean time to return to sport: ~6.5-7 months.
- Recurrence rate: 5-10%.

## CRITERIA FOR RETURN TO SPORT / FULL ACTIVITY

- Full, pain-free ROM (accept ~5-10° ER deficit).
- Strength  $\geq$  90% of contralateral side (isokinetic or manual muscle testing).

- Negative apprehension and relocation tests.
- Successful completion of sport-specific functional testing.
- Psychological readiness confirmed.

*This protocol is a general guideline. Progression is patient-specific and at the discretion of William McLaughlin, MD.*