



Dr. Harold Schock III, MD Shoulder Stabilization

This protocol will be used for the following procedures: shoulder capsule plication, Bankart repairs, reverse Bankart and SLAP repairs. A range of motion check will be performed 4 weeks following surgery (see below expectations). A typical rehabilitation should start at week 6 following surgery with emphasis on protected ROM. Extra precaution to be taken with athletes and occupational athletes with complex repairs involving one or more of the surgeries listed above.

Phase 1 – Maximum Protection Phase (0-6 weeks)

Goals for Phase 1

- Protect integrity of repair
- Minimize pain and inflammation
- Prevent negative effects of elbow and wrist mobilization
- Activation of scapular stabilizers

Precautions

- No AROM or AAROM exercises for first 6 weeks, pulleys are considered an AAROM exercise and should NOT be utilized in this phase
- No upper extremity ergometer
- No overhead swimming for 16 weeks
- SLAP** repairs: no active elbow flexion or active biceps contraction for at least **6 weeks**

Range of Motion

- Shoulder PROM **CHECK** at **4 weeks** (performed in scapular plane)
 - 90° Flexion
 - 60° Abduction
 - 30° External rotation with shoulder in 45° of abduction
 - 30° Internal rotation with shoulder in 45° of abduction
- AROM elbow flex/ext, wrist flex/ext, radial/ulnar deviation, pronation/supination
- If patient meets the above listed shoulder ROM expectations, formal physical therapy is NOT to start until **week 6** following surgery.

Brace

- Immobilization in abduction sling – **6 weeks**, including while sleeping

Manual Therapy/Strengthening

- If patient does not pass PROM check at **week 4**
 - Grade 1-2 joint mobilization for pain reduction
 - PROM within above listed measurements
 - Scapular mobilization
 - Scapular retraction strengthening
- If patient passes PROM check at **week 4**, review initial post-operative HEP
 - Pendulums if able to perform passively
 - Elbow, forearm, wrist, and hand AROM as above
 - Postural correction exercises
 - Cervical and scapular strengthening in sitting without resistance

Aquatics

- May be a candidate for aquatic therapy (to remain below shoulder height)

Modalities

- Vasopneumatic compression for edema management 2-3x/week
- Cryotherapy at home, 3 x per day for 20 minutes each



Phase 2 – Moderate Protection Phase (6-12 weeks)

Goals for Phase 2

- Protection of surgical repair
- Minimize pain and inflammation
- Initiate AAROM (not to exceed 85% total arc of motion of contralateral arm)
- Restore scapular strength and proprioception
- Strengthening within 2 lb weight restriction and below shoulder height

Precautions

- PROM/AAROM/AROM not to exceed 85% total arc of motion of contralateral arm
- No upper extremity ergometer
- Lifting restriction of 2 lb until week 12
- No overhead swimming for 16 weeks
- Do **NOT** exercise through shoulder shrug sign

Range of Motion

- Shoulder AROM
 - 120° Flexion
 - 90° Abduction
 - 45° External rotation with shoulder in 90° of abduction
 - 60° Internal rotation with shoulder in 90° of abduction
- Continue PROM exercises in all planes as tolerated

Manual Therapy

- Manual joint mobilization (grade 1-2) for pain management or grade 3-4 for excessive capsular tightness
 - Do **NOT** aggressively perform mobilization until **week 10**
- Continue manual scapular and thoracic mobilization as needed

Strengthening

- AAROM exercises with progression to AROM as tolerated
 - Progress from gravity reduced positions to movement against gravity
 - Ex. Table slides, physio-ball on table, wand exercises, UE ranger
- Sub-maximal rhythmic stabilization exercises at 100° of flexion
 - Progress to multi-angle rhythmic stabilization exercises as tolerated
- Initiate sub-maximal isometrics in all planes
- Initiate light isotonic strengthening for scapular musculature
 - Ex. Serratus press outs, prone row, prone extension, prone horizontal extension
- Initiate sub-body weight closed kinetic chain exercise
 - Ex. Quadriped exercises, wall lift offs or countertop slides

Aquatics

- Continue aquatic-based therapy, namely for painful or guarded patients

Modalities

- NMES if needed to promote scapula-humeral rhythm and strength
- Cryotherapy after activity

Criteria for Progression to Phase 3

- Minimal pain with Phase 2 exercises
- Passive shoulder flexion $\geq 120^\circ$
- Demonstrate neuro-dynamic stabilization of the shoulder and appropriate scapulo-humeral rhythm



Phase 3 – Strengthening Focused Phase (12-18 weeks)

Goals for Phase 3

- Progress ROM to 85% total arc of motion of contralateral arm
- Improve stability, strength, and endurance of shoulder and scapular stabilizers

Precautions

- AROM not to exceed 85% total arc of motion of contralateral arm
- No upper extremity ergometer
- No overhead swimming for 16 weeks
- Lifting restriction of 5 lb until week 18
- Do **NOT** exercise through shoulder shrug sign

Manual Therapy

- Continue manual joint mobilizations (grade 1-2) for pain management or grade 3-4 for excessive capsular tightness as needed
 - Do NOT aggressively perform mobilization until **week 10**
- Continue manual scapular and thoracic mobilization as needed

Strengthening

- AROM exercises within full range against gravity
- Multi-angle rhythmic stabilization exercises
- Continue isotonic strengthening for scapular and rotator cuff musculature with emphasis on posterior cuff strengthening
 - Progress from gravity reduced positions to full gravity
 - Progress elevation from below to above shoulder height
 - Progress shoulder IR and ER from 30° to 60° to 90° abduction and from a supported to unsupported condition
- Begin Thrower's Ten Program
- Progress sub-body weight closed kinetic chain exercise
 - Progress to full body weight exercises
 - Progress from stable surfaces to unstable surfaces (foam, physioball, BOSU, etc.)
- Initiate gradual progression of neuromuscular control exercises (ball on wall, body blade, ball flips, plyoback, etc.)

Aquatics

- Continue aquatic-based therapy as needed

Neuromuscular Control

- Initiate gradual progression of neuromuscular control exercises (ball on wall, body blade, ball flips, plyoback, etc.)

Modalities

- Cryotherapy after activity

Criteria for Progression to Phase 4

- Minimal pain with Phase 3 exercises
- AROM 85% total arc of motion of contralateral arm
- MMT \geq 4/5 with shoulder and scapular testing
- Demonstrate neuro-dynamic stabilization of the shoulder and appropriate scapula-humeral rhythm



Phase 4 – Advanced Strengthening and Plyometric Phase (18-24 weeks)

Goals for Phase 4

- Restore shoulder, scapular, and total arm strength, power, and endurance
- Initiate upper extremity plyometrics
- Sport or work specific tasks

Strengthening

- Continue isotonic strengthening with transition to primarily overhead strengthening
- Gradual progression of sub-body weight suspension training exercises (TRX, GTS, assisted chin or dip machine, etc.)
- Initiate traditional weight lifting exercises with emphasis on musculature balance of rotator cuff, back, and chest
- Initiate sport specific interval training programs (throwing, hitting, or lifting)
- Transition to work specialty program if physical laborer

Neuromuscular Control

- Continue neuromuscular control exercises (ball on wall, body blade, ball flips, bounce-back plyo tosses, hops and lifts, etc.)

Modalities

- Cryotherapy after activity

Return to Function Testing: Aurora BayCare return to function for the upper extremity protocol to be used

- **Week 24: Return to function testing** per MD approval (appt must be scheduled with Aurora BayCare Sports Medicine department – East Side location to complete testing)
- Criteria: pain-free, 85% total arc of motion of contralateral arm, DASH \leq 10% disability, isokinetic strength and functional testing at 85% compared to uninvolved, adequate scapular control with sport specific tasks