Rehabilitation Protocol for Anterior Bankart Repair

This protocol is intended to guide clinicians through the post-operative course for Anterior Bankart Repair. This protocol is time based (dependent on tissue healing) as well as criterion based. Specific intervention should be based on the needs of the individual and should consider exam findings and clinical decision making. The timeframes for expected outcomes contained within this guideline may vary based on surgeon's preference, additional procedures performed, and/or complications. If a clinician requires assistance in the progression of a post-operative patient, they should consult with the referring surgeon.

The interventions included within this protocol are not intended to be an inclusive list. Therapeutic interventions should be included and modified based on the progress of the patient and under the discretion of the clinician.

Considerations for the Post-operative Bankart Repair Rehabilitation Program
Many different factors influence the post-operative Bankart rehabilitation outcomes, including the severity of the damage to the labral and capsular structures and individual co-morbidities. It is recommended that clinicians collaborate closely with the referring physician.

Post-operative considerations
If you develop a fever, unresolving numbness/tingling, excessive drainage from the incision, uncontrolled pain or any other symptoms you have concerns with, please contact referring physician.

PHASE I: IMMEDIATE POST-OP PHASE (0-3WEEKS AFTER SURGERY)

Rehabilitation Goals	● Protect surgical repair ● Reduce swelling and pain ● Maintain elbow, hand and wrist ROM ● Enhance scapular function ● Gradually increase shoulder PROM ● Minimize muscle inhibition ● Patient education
Sling	● Sling on at all times, only remove for showering and therapy including elbow and wrist ROM ○ Neutral Rotation, 30-45 degrees ABD ○ Sleep in sling for 6 weeks ○ Shower with arm by your side
Precautions	● **No carrying objects until 12 weeks post-op** ● No shoulder AROM ● No lifting objects ● No reaching behind back ● No supporting body weight with hands ● Can shower after 48 hours ○ Do NOT get into a bathtub, pool or spa until sutures are removed and wound is healed ● Avoid abduction/external rotation activity to avoid anterior inferior capsule stress ● Driving may start at week 6 based on MD clearance
Interventions	*Pain/Swelling Management* ● Ice, compression, modalities as indicated *Range of motion/Mobility* ● Wrist AROM ○ Flexion ○ Extension ○ Radial and Ulnar deviations

	• PROM: **Begin week 2**
	  ○ Flexion ≤ 90 degrees
	  ○ Pendulums
	  ○ Seated GH flexion table slide
	  ○ External rotation in scapular plane to < 20 degrees
	• AAROM: **Begin week 3**
	  ○ Supine flexion with cane and self-support to 90 degrees
	  ○ Cane ER to <20 degrees
	
	Strengthening
	• Ball Squeezes
	• Week 2:
	  ○ Scapular retraction
	  ○ Standing scapular setting
	  ○ Inferior glide
	• Week 3 Submaximal shoulder isometrics **– Avoid ER/IR**
	  ○ Flexion
	  ○ Extension
	  ○ Abduction - **With Brace on**

Criteria to Progress	• PROM shoulder flexion to 90 degrees • PROM shoulder ER to 20 degrees • Palpable muscle contraction felt in scapular and shoulder musculature • No complications with phase 1

PHASE II: PROTECTION PHASE (4-5WEEKS AFTER SURGERY)

Rehabilitation Goals	• Protect surgical repair • Promote dynamic stability and proprioception • Reduce swelling and pain • Gradually restore shoulder PROM • Minimize substitution patterns with AAROM • Patient education
Sling	• Continue use of sling unless instructed otherwise by surgeon
Precautions	• **No carrying objects until 12 weeks post-op** • No lifting objects • No supporting body weight with hands • No AROM • Driving may start at week 6 based on MD clearance

Additional Intervention **Continue with Phase I interventions*	*Pain/Swelling management*
	• Cryotherapy and Modalities as indicate
	
	Range of motion/Mobility
	• PROM
	  ○ Flexion to 140
	  ○ ER to 45 degrees in scapular plane
	  ○ ER to 45 @ 90 degrees ABD
	  ○ Full Abduction in scapular plane and Internal rotation
	• AAROM: Same ROM guidelines as above
	  ○ Washcloth press-up
	  ○ Table slides flexion and abduction
	  ○ Seated/standing shoulder elevation with cane
	  ○ Wall climbs
	  ○ Pulleys
	
	Strengthening
	• Submaximal rotator cuff isometrics: ER, IR, flexion, abduction and extension

	• Periscapular strengthening: Row, shoulder extension on physio-ball, serratus punch

Criteria to Progress	• ROM guidelines: Unless otherwise specified by surgeon:
	  ○ PROM shoulder flexion to 140 degrees
	  ○ PROM shoulder ER in scapular plane to 45 degrees
	  ○ PROM shoulder ER in 90 degrees ABD to 45 degrees
	  ○ PROM shoulder IR in scapular plane to 50 degrees
	  ○ Full abduction PROM
	• Minimal substitution patterns with AAROM
	• Pain < 2/10
	• No complications with Phase II

PHASE III: INTERMEDIATE PHASE (6-8 WEEKS AFTER SURGERY)

Rehabilitation Goals	• Gradually increase shoulder PROM/AROM • Preserve integrity of surgical repair • Independence with ADLs • Initiate rotator cuff strengthening • Progress periscapular strengthening • Enhance neuromuscular control • Patient education
Sling	• Discontinue use of sling
Precautions	• No aggressive ROM/stretching • Avoid strength activities that produce a large amount of anterior shoulder stress (i.e. push-ups, pec flys) • No anterior mobilizations • Avoid running on treadmill • No lifting > 10 lbs

Additional Intervention **Continue with Phase I-II Interventions as appropriate.*	*Range of motion/Mobility*
	• PROM: ER: 50-65 deg scapular plane, ER @ 90 < 75 deg, Flexion < 160 deg
	• AAROM
	• AROM
	  ○ Start in gravity minimized positions and progress to full AROM in gravity resisted positions
	• Enhance Pec Minor length
	• Begin posterior capsule stretching:
	  ○ Cross arm stretch
	  ○ Sleeper stretch
	  ○ Posterior/inferior GHJ mobilizations if needed
	
	Strengthening
	• Rotator cuff: side-lying external rotation, standing external and internal rotation with band
	  ○ Begin with gentle isotonics and rhythmic stabilization
	  ○ Start with closed chain and progress to open chain
	• Periscapular: shoulder extension with band, row with band, push up plus on knees, prone shoulder extension, forward punch dumbbell or band.
	
	Motor Control
	• Rhythmic Stabilization Internal and external rotation in scaption and 90-125 deg flexion
	• Rhythmic stabilization IR/ER and flexion 90-125 deg
	• Quadruped alternating isometrics and ball stabilization on the wall
	
	Modalities as needed

Criteria to Progress	• Negative apprehension signs
	• Pain < 2/10
	• ROM Guidelines: Unless otherwise specified by surgeon
	  ○ Flexion: 160 degrees
	  ○ Full Abduction
	  ○ PROM IR to 65 degrees in scapular plane
	  ○ PROM ER to 50-65 degrees in scapular plane
	  ○ PROM ER to 75 degrees in 90 degrees ABD

PHASE IV: TRANSITIONAL PHASE (9-11 WEEKS AFTER SURGERY)

Rehabilitation Goals	• Preserve the integrity of the surgical repair • Gradually increase shoulder PROM/AROM • Progress rotator cuff strength • Progress periscapular strength • Improve dynamic shoulder stability
Precautions	• Do not stress anterior capsule with aggressive overhead strengthening • Avoid contact sports • No lifting > 10lbs
Additional Interventions **Continue with Phase I-III interventions as appropriate.*	*Range of motion/mobility* • PROM: Full • AROM: Full • Continue with capsular stretching *Strengthening* • Light resistance until week 12 • Rotator cuff: Side-lying ABD → standing ABD, scaption and shoulder flexion to 90 degrees • Periscapular: Prone T and Y, full push-up plus, prone ER at 90, wall push-up, W exercise, dynamic hug • Biceps and triceps • Shrugs *Motor Control* • PNF D1 and D2 diagonals • Continue PNF strengthening
Criteria to Progress	• No signs of apprehension • Full pain-free PROM and AROM • Minimal to no substitution with shoulder AROM • Demonstrates symmetric scapular mechanics with all exercises • Pain < 2/10

PHASE V: STRENGTHENING PHASE (12-16 WEEKS AFTER SURGERY)

Rehabilitation Goals	• Maintain full pain-free ROM • Enhance functional use of upper extremity • Gradually progress activities with ultimate return to full function
Precautions	• Do not begin throwing or overhead athletic moves until 4 months post-op • Weightlifting: ○ Avoid wide grip bench, military press or lat pulldowns behind the head

Additional Interventions **Continue with Phase II-IV interventions*	*Strengthening*
	• Rotator cuff: ER at 90 degrees, IR at 90 degrees
	• Closed chain exercises:
	  ○ Push-ups: wall → incline → knee → standard
	  ○ Quadruped
	• Lat pull down

	• Throwers ten – if applicable • Endurance training • Restricted sport activities (light swimming, half golf swings) • Progress weights to up to 15lbs *Motor control* • Manual resistance PNF • Body Blade • UE on uneven surfaces • Serratus wall slide with band *Stretching* • ER at 90 degrees ABD • Hands behind head

Criteria to Progress	• No pain or tenderness
	• 5/5 shoulder strength
	• Satisfactory shoulder stability
	• Use Quick DASH and/or PENN shoulder scale
	• Upper Extremity Functional Assessment
	  ○ Full pain-free PROM and AROM
	  ○ Joint position sense ≤ 5-degree margin of error
	  ○ Strength 85% of uninvolved arm with isokinetic testing or handheld dynamometer
	  ○ ER/IR ratio ≥ 64%
	  ○ Scapular dyskinesis test symmetrical
	  ○ Functional performance and shoulder endurance tests ≥ 85% of uninvolved arm
	  ○ Males ≥ 21 taps; females ≥ 23 taps on CKCUEST
	• Negative impingement and stability signs
	• Performs all exercises with symmetric scapular mechanics

PHASE VI: UNRESTRICTED RETURN TO SPORT (4-6 MONTHS AFTER SURGERY)

Rehabilitation Goals	• Maintain full pain-free ROM • Enhance functional use of upper extremity • Gradual return to strenuous work activities • Gradual return to recreational activities • Gradual return to sports activities
Additional Interventions **Continue with Phase III-V interventions, as appropriate.*	• Continue strengthening and motor control exercises • Begin throwing and overhead sport activities – per MD approval • Progress into plyometrics Refer to specific return-to-sport protocols/throwing programs (coordinate with surgeon)
Criteria to Progress	• Last stage, no additional criteria

Revised 10/2021

Contact	Please email MGHSportsPhysicalTherapy@partners.org with questions specific to this protocol

References:

1. DeFroda SF, Mehta N, Owens BD. Physical therapy protocols for arthroscopic Bankart repair. *Sports Health;* 2018. May/June: 250-258.

2. Gaunt BW, McCluskey GM, Uhl TL. An electromyographic evaluation of subdividing active assistive shoulder elevation exercises. *Sports Health;* 2010. 2(5): 424-432.

3. Kibler WB, Sciascia AD, Uhl TL, et al. Electromyographic analysis of specific exercises for scapular control in early phases of shoulder rehabilitation. *The American Journal of Sports Medicine.* 2008; 36(9): 1789-1798.

4. Uhl TL, Muir TA, et al. Electromyographical assessment of passive, active assistive, and active shoulder rehabilitation exercises. *PMR.* 2010; 2: 132-141.

5. The Moon shoulder group – Anterior stabilization therapy protocol