



Rehabilitation Protocol for Bankart Repair

This protocol is intended to guide clinicians and patients through the post-operative course of a Bankart repair. Specific interventions should be based on the needs of the individual and should consider exam findings and clinical decision making. If you have questions, contact the referring physician.

Considerations for the Post-operative Bankart Repair Rehabilitation Program

Many different factors influence the post-operative Bankart repair rehabilitation outcome, including severity of the damage to the labral and capsular structures and individual patient factors including co-morbidities.

Post-operative Complications

If you develop a fever, unresolving numbness/tingling, excessive drainage from the incision, uncontrolled pain or any other symptoms you have concerns about you should contact the referring physician.

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

Rehabilitation Goals	<ul style="list-style-type: none"> • Protect surgical repair • Reduce swelling, minimize pain • Maintain UE ROM in elbow, hand and wrist • Gradually increase shoulder PROM • Minimize substitution patterns with AAROM • Minimize muscle inhibition • Patient education
Sling	<ul style="list-style-type: none"> • Neutral rotation • Use of abduction pillow in 30-45 degrees abduction • Use at night while sleeping
Precautions	<ul style="list-style-type: none"> • No shoulder AROM • No lifting of objects • No supporting of body weight with hands
Intervention	<p><i>Swelling Management</i></p> <ul style="list-style-type: none"> • Ice, compression <p><i>Range of motion/Mobility</i></p> <ul style="list-style-type: none"> • PROM: ER<20 scapular plane, Forward elevation <90, pendulums, seated GH flexion table slide • AROM: elbow, hand, wrist • AAROM: Active assistive shoulder flexion, shoulder flexion with cane, cane external rotation stretch <p><i>Strengthening (Week 2)</i></p> <ul style="list-style-type: none"> • Periscapular: scap retraction, prone scapular retraction, standing scapular setting, supported scapular setting, inferior glide, low row • Ball squeeze
Criteria to Progress	<ul style="list-style-type: none"> • 90 degrees shoulder PROM forward elevation • 20 degrees of shoulder PROM ER and IR in the scapular plane • Palpable muscle contraction felt in scapular and shoulder musculature • No complications with Phase I

PHASE II: INTERMEDIATE POST-OP (4-6 WEEKS AFTER SURGERY)

Rehabilitation Goals	<ul style="list-style-type: none"> • Continue to protect surgical repair • Reduce swelling, minimize pain • Gradually increase shoulder PROM • Minimize substitution patterns with AAROM/AROM • Patient education
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Sling	<ul style="list-style-type: none"> Start to wean out of sling
Precautions	<ul style="list-style-type: none"> No lifting of objects No supporting of body weight with hands
Intervention <i>*Continue with Phase I interventions</i>	<p><i>Range of motion/Mobility</i></p> <ul style="list-style-type: none"> PROM: ER<50 scapular plane, ER @ 90 ABD <45, Forward elevation <135, horizontal table slide AAROM: washcloth press up, seated table slides, seated shoulder elevation with cane, wall climbs AROM: elevation < 115, supine flexion, salutes, supine punch, seated shoulder elevation with cane and active lowering <p><i>Strengthening</i></p> <ul style="list-style-type: none"> Rotator cuff: internal external rotation isometrics Periscapular: Row on physioball, shoulder extension on physioball_rowing, lawn mowers, robbery, serratus punches
Criteria to Progress	<ul style="list-style-type: none"> 135 degrees shoulder PROM forward elevation 50 degrees shoulder PROM ER and IR in scapular plane 45 degrees shoulder PROM ER in 90 degrees ABD 115 degrees shoulder AROM forward elevation Minimal substitution patterns with AAROM/AROM Pain < 2/10 No complications with Phase II

PHASE III: INTERMEDIATE POST-OP CONTD (7-8 WEEKS AFTER SURGERY)

Rehabilitation Goals	<ul style="list-style-type: none"> Do not overstress healing tissue Reduce swelling, minimize pain Gradually increase shoulder PROM/AROM Initiate rotator cuff strengthening Progress periscapular strength Improve dynamic shoulder stability Gradually return to full functional activities Patient education
Sling	<ul style="list-style-type: none"> Discontinue
Precautions	<ul style="list-style-type: none"> No lifting of heavy objects (>10 lbs)
Intervention <i>*Continue with Phase I-II interventions</i>	<p><i>Range of motion/Mobility</i></p> <ul style="list-style-type: none"> PROM: ER<65 scapular plane, ER @ 90 <75, Forward elevation <155 AAROM: Pulleys AROM: Elevation <145, supine forward elevation with elastic resistance to 90 degrees <p><i>Strengthening</i></p> <ul style="list-style-type: none"> Rotator cuff: side-lying external rotation, standing external rotation w/ resistance band, standing internal rotation w/ resistance band, internal rotation, external rotation Periscapular: Resistance band shoulder extension, resistance band seated rows, push-up plus on knees, tripod, pointer, prone shoulder extension Is, resistance band forward punch, forward punch <p><i>Motor Control</i></p> <ul style="list-style-type: none"> Internal and external rotation in scaption and Flex 90-125 (rhythmic stabilization) IR/ER and Flex 90-125 (rhythmic stabilization) Quadruped alternating isometrics and ball stabilization on wall
Criteria to Progress	<ul style="list-style-type: none"> 155 degrees shoulder PROM forward elevation 65 degrees shoulder PROM ER and IR in scapular plane 75 degrees shoulder PROM ER in 90 degrees ABD 145 degrees shoulder AROM forward elevation Pain < 2/10

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

Rehabilitation Goals	<ul style="list-style-type: none"> • Do not overstress healing tissue • Gradually increase shoulder PROM/AROM • Progress rotator cuff strengthening • Progress periscapular strength • Improve dynamic shoulder stability
Precautions	<ul style="list-style-type: none"> • No lifting of heavy objects (> 10 lbs)
Intervention <i>*Continue with Phase II-III interventions</i>	<p><i>Range of motion/mobility</i></p> <ul style="list-style-type: none"> • PROM: Full • AROM: Full <p><i>Strengthening</i></p> <ul style="list-style-type: none"> • Rotator cuff: sidelying ABD → standing ABD, scaption and shoulder flexion to 90 degrees elevation • Periscapular: T and Y, “T” exercise, push-up plus knees extended, prone external rotation at 90 degrees, wall push up, “W” exercise, resistance band Ws, dynamic hug, resistance band dynamic hug • Elbow: Biceps curl, resistance band bicep curls and triceps <p><i>Stretching</i></p> <ul style="list-style-type: none"> • IR behind back with towel, sidelying horizontal ADD, sleeper stretch, triceps and lats, doorjam series <p><i>Motor Control</i></p> <ul style="list-style-type: none"> • PNF – D1 diagonal lifts, PNF – D2 diagonal lifts • Field goals
Criteria to Progress	<ul style="list-style-type: none"> • Full pain-free PROM and AROM • Minimal to no substitution patterns with shoulder AROM • Performs all exercises demonstrating symmetric scapular mechanics • Pain < 2/10

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

Rehabilitation Goals	<ul style="list-style-type: none"> • Maintain pain-free ROM • Enhance functional use of upper extremity
Intervention <i>*Continue with Phase II-V interventions</i>	<p><i>Strengthening</i></p> <ul style="list-style-type: none"> • Rotator cuff: External rotation at 90 degrees, internal rotation at 90 degrees, resistance band standing external rotation at 90 degrees, resistance band standing internal rotation at 90 degrees <p><i>Motor control</i></p> <ul style="list-style-type: none"> • Resistance band PNF pattern, PNF – D1 diagonal lifts w/ resistance, diagonal-up, diagonal-down • Wall slides w/ resistance band <p><i>Stretching</i></p> <ul style="list-style-type: none"> • External rotation (90 degrees abduction), hands behind head
Criteria to Progress	<ul style="list-style-type: none"> • Clearance from MD and ALL milestone criteria below have been met • QuickDASH • PENN • <u>Upper Extremity Functional Assessment</u> <ul style="list-style-type: none"> ○ Full pain-free PROM and AROM ○ Joint position sense ≤ 5 degree margin of error ○ Strength ≥ 85% of the uninvolved arm ○ ER/IR ratio ≥ 64% ○ Scapula Dyskinesis Test symmetrical ○ Functional Performance and Shoulder Endurance Tests ≥ 85% of the uninvolved arm ○ Males ≥ 21 taps; females ≥ 23 taps on CKQUEST • Return-to-sport testing can be performed at MGH Sports Physical Therapy, if necessary • Negative impingement and instability signs • Performs all exercises demonstrating symmetric scapular mechanics

PHASE VII: EARLY RETURN-TO-SPORT (4-6 MONTHS AFTER SURGERY)

Rehabilitation Goals	<ul style="list-style-type: none"> • Maintain pain-free ROM • Continue strengthening and motor control exercises • Enhance functional use of upper extremity • Gradual return to strenuous work/sport activity
Intervention <i>*Continue with Phase II-VI interventions</i>	<ul style="list-style-type: none"> • See specific return-to-sport/throwing program (coordinate with physician)
Criteria to Progress	<ul style="list-style-type: none"> • Last stage-no additional criteria
Return-to-Sport	<ul style="list-style-type: none"> • For the recreational or competitive athlete, return-to-sport decision making should be individualized and based upon factors including level of demand on the upper extremity, contact vs non-contact sport, frequency of participation, etc. We encourage close discussion with the referring surgeon prior to advancing to a return-to-sport rehabilitation program.

Contact	
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References

- DeFroda SF, Mehta N, Owens BD. Physical therapy protocols for arthroscopic Bankart repair. *Sports Health*. 2018. May/June: 250-258.
- Gaunt BW, McCluskey GM, Uhl TL. An electromyographic evaluation of subdividing active-assistive shoulder elevation exercises. *Sports Health*. 2010. 2 (5): 424-432.
- Gaunt BW, Shaffer MA, et al. The American Society of Shoulder and Elbow Therapists' consensus rehabilitation guideline for arthroscopic anterior capsulolabral repair of the shoulder. *JOSPT*. 2010. 40 (3): 155-168.
- Kibler, W.B., Sciascia, A. D., Uhl, T. L., 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): p. 1789-1798.
- Uhl TL, Muir TA, et al. Electromyographical assessment of passive, active assistive, and active shoulder rehabilitation exercises. *PM R*. 2010. 2: 132-141.