



Duke Sports Medicine

Posterior Capsulorrhaphy and/or Arthroscopic Reverse Bankart Repair Protocol

Jonathan Dickens, MD
3475 Erwin Rd, Durham NC 27705
P: 919-684-0493
F: 919-681-6357
Professor of Orthopedic Surgery
Sports Medicine: Knee, Shoulder, Hip

PHASE I/Immediate Post-Operative Phase (Proliferation): Generally 0 - 5 Weeks Post-Op

GOALS:	<ol style="list-style-type: none"> 1. Control Pain and Swelling 2. Protection of surgical repair 3. Avoid "stiff" shoulder
PRECAUTIONS:	<p>NO Active use of arm</p> <p>Avoid increasing shoulder ROM too rapidly so that labral repair is not compromised</p> <p>No PROM or pulleys unless specified by provider</p> <p>Tabletop activities such as writing, dining, and using the computer are permitted</p>
SLING	<p>Wear sling with custom ER brace x6 weeks post-op</p> <p>*get the name of the custom</p>
ROM	<p>AAROM as tolerated with wand in supine with scapular depression and progress to pulley 0-6</p>

	<p>*No PROM/AROM for posterior capsular repair or pulleys unless specified by provider during this phase 0-4 weeks</p>
<p>Wound Care</p>	<p>Post-op dressing remains intact until post-op day #5 (~48 hours after surgery)</p> <p>May begin showering after post-op day #5 (no need to cover incision sites)</p> <p>Do NOT submerge shoulder in tub or pool for 4 weeks</p> <p>Suture/staple removal @ 10-14 days post-op, per Ortho/PT</p> <p>Begin scar massage after incision site sloughs/scar is formed</p>
<p>CRYOTHERAPY:</p>	<p>Cold with compression (e.g. CryoCuff, ice with compression wrap)</p> <ul style="list-style-type: none"> • every hour for 15 minutes for first 24 hours, until acute inflammation is controlled • After acute inflammation is controlled: 3x per day for 15 minutes or longer as tolerated
<p>REHABILITATION:</p>	<p>Frequent use of CryoCuff and/or ice</p> <p>Exercise prescription is dependent upon the tissue healing process and <i>individual</i> functional readiness in <i>all</i> stages. If any concerns or complications arise regarding the progress for any patient, physical therapy will contact the orthopedic surgeon.</p>
<p>~1-2 weeks</p>	<p>Hand squeezing exercises</p> <p>Elbow and wrist active motion (AROM) with shoulder in neutral position at side</p> <p>Modified pendulums 0-5 days, progress to full pendulum exercises</p> <p>Scapular retraction without resistance, scapular depression into ball on table with shoulder in sling</p>
<p>~2-4 weeks</p>	<p>Full pendulum exercises</p> <p>Resisted elbow/wrist exercises (light dumbbell)</p>

	1-2 Finger shoulder isometrics Cardiovascular training: stationary bike with sling
~4-6 weeks	Submaximal isometrics x 6 (pain-free) Cardiovascular Training: walking progression program on TM LE strength training: Hip 4way, Leg press, calf raises, HS curls
FOLLOW-UP:	Supervised rehab: 1-2x per week Physical Therapist Re-evaluation: weekly or bimonthly Ortho Re-evaluation: ~2 & 6 weeks post-op
CRITERIA FOR PROGRESSION:	Minimal pain Near full passive ROM

PHASE II (Remodeling): Generally 6-12 Weeks Post-Op

GOALS:	<ol style="list-style-type: none"> 1. Full shoulder flexion and external rotation, ~90% full IR 2. Pain-free ADLs 3. Start isotonic exercises
PRECAUTIONS:	<p>*NO pushups, heavy lifting, or other sports participation*</p> <p>*NO repetitive overhead use of shoulder*</p> <p>*Behind the back IR: starts after 8th week after surgery (mass general)</p> <p>*Horizontal adduction stretch: starts after 8th week after surgery (mass general)</p>
SLING	d/c sling

<p>REHABILITATION:</p>	<p>Continue phase I exercises as needed</p> <p>Progress to the following exercises and increase intensity gradually when patient is ready (i.e., no increase in shoulder pain or stiffness since the previous exercise session)</p> <p>*Note: all strengthening should be done, starting with low weights, high repetitions, and in a painless ROM*</p>
<p><i>~6-9 weeks</i></p>	<p>Shoulder AROM and AAROM exercises: Wand, pulley, towel stretch, sleeper's stretch, etc.</p> <p>Exercises:</p> <p>Progressive Strengthening:</p> <ol style="list-style-type: none"> 1. RTC strengthening with light TB: <ul style="list-style-type: none"> -ER and IR with arm at side or pillow under arm -Abduction to 60 deg -Flexion to 60 deg -Scaption to 60 deg -Extension to 30 deg 2. Prone scapular retraction with weight 3. Standing Rows with TB 4. Ball on wall 5. UBE- forwards/backwards at low resistance 6. Push-up plus against wall (no elbow flexion >90 deg) –mixed evidence (arthroscopic) <p>Cardiovascular Training</p> <p>Aerobic Conditioning: Bike, elliptical, stairmaster as desired</p>

	<p>Aquatic Therapy</p> <p>Pool walking/running- NO UE resistive exercises</p>
<p><i>~9-12 weeks</i></p>	<p>Goals</p> <ul style="list-style-type: none"> -Normal RTC strength -30 table push-ups <p>Shoulder PROM/mobilization as needed to regain full ROM</p> <p>Exercises</p> <ul style="list-style-type: none"> -con't appropriate exercises with increased resistance as tolerated -Prone Scapular retraction exercises with light weight -ER/IR with shoulder in 30 deg elevation -Shoulder strengthening with TB: 111-130 deg of flexion/scaption/abduction -BAPS on hands -Ball toss with arm at side -Push-up progression- Wall to Table (no elbow flexion >90 deg) <p>Cardiovascular Training:</p> <p>Treadmill-Running progression program</p>
<p><i>~7-12 weeks</i></p>	<p>Beginning Level Exercises</p> <p>Body Blade</p> <p>Flexion/Extension</p> <p>IR/ER</p> <p>Superior/Inferior (arm at side)</p>

	<p>Ball Toss</p> <p>Chest pass- 2 handed, IR (arm at side)</p> <p>Prone stabilization</p> <p>All fours stabilization on stable surface</p> <p>Supine stabilization</p> <p>Supine Shoulder Stabilization @ 90 deg</p> <p>Push-ups</p> <p>Wall push-ups with no elbow flexion >90 deg</p> <p>Misc Activities for sports training</p> <p>Basketball: dribbling, chest pass, and bound pass</p> <p>Golf: putting</p> <p>Volleyball: bumping</p> <p>Pool: jogging, treading, wall ball drawing</p>
FOLLOW-UP:	<p>Supervised rehab: 2-3x per week</p> <p>Physical Therapist Re-evaluation: monthly</p> <p>Ortho Re-evaluation: ~12 weeks post-op</p>
TESTING:	<p><i>Timed Functional Arm and Shoulder Test –once full IR/ ER ROM</i> <i>(JOSPT)</i></p>

PHASE III (Maturation): Generally 4-6 months post-op

GOALS:	1. Push-ups at own pace without pain 2) $\geq 90\%$ internal/external rotation strength return
PRECAUTIONS:	* NO participation in contact/collision sports or military schools until ~9 months post-op*
REHABILITATION:	Continue Phase II exercises as needed -Progress to the following exercises and increase intensity gradually when patient is ready (i.e., no increase in shoulder pain or stiffness since the previous exercise session) -Note: all strengthening should be done, starting with low weights, high repetitions, and in a painless ROM*
<i>~Months 3-4</i>	Continue appropriate previous exercises Shoulder strengthening with TB: 13-15- deg of flexion/Scaption/abduction RTC strengthening in 60-90 deg shoulder elevated Fitter on Hands Ball toss overhead Push-up progression- table to chair (no elbow flexion >90 deg) Weight training with light resistance -No elbow flexion >90 deg with bench, dips, etc Manual: PNF manual resistance with therapist
<i>~Months 4-6</i>	Goals Resume all activities Pass alternate APFT at 12 months post-op Precautions: No contact sports until 9-12 months post-op

	<p>Initiate push up progression</p> <p>Continue appropriate previous exercises</p> <p>Push-ups, regular-Limit elbow flexion >90 deg</p> <p>Sit-ups</p> <p>Swimming</p> <p>Running progression to track</p> <p>Progressive weight training-limit elbow flexion >90 deg</p> <p>Transition to home/gym program</p>
<p><i>~Months 4-5 post-op</i></p>	<p>Intermediate Level Exercises</p> <p>Body Blade</p> <p>FF range to 90 deg</p> <p>Scaption to 90 deg</p> <p>IR/ER through ROM</p> <p>Horiz abd/add at 90 deg</p> <p>Ball Toss</p> <p>Overhead toss – (2 handed)</p> <p>Prone stabilization</p> <p>All fours stabilization on foam or theraball</p> <p>Tripod on stable surface</p> <p>Supine stabilization</p> <p>Supine Shoulder Stabilization from 60-120 deg</p> <p>Push-ups</p> <p>Wall push-ups-progressing to inclined push-ups</p>

	<p>Misc Activities for sports training</p> <p>Basketball: shooting within the key only</p> <p>Golf: chipping, short irons</p> <p>Volleyball: setting</p> <p>Pool: no overhead strokes</p> <p>Catching drills: below 90 deg</p> <p>Tossing: Frisbee</p>
<p><i>~ Months 5-6 post-op</i></p>	<p>Advance Level Exercises</p> <p>Body Blade</p> <p>FF range to 150 deg</p> <p>Scaption to 150 deg</p> <p>IR/ER through ROM</p> <p>Diagonal motions</p> <p>Ball Toss</p> <p>Overhead diagonal toss- (2 handed)</p> <p>Regular throwing toss</p> <p>Prone stabilization</p> <p>Tripod stabilization on unstable surface</p> <p>Supine stabilization</p> <p>Supine Shoulder Stabilization (Available ROM)</p> <p>Push-ups</p> <p>Knee Pushups-progressing to modified regular puhs-ups</p> <p>Misc Activities for sports training</p>

	<p>Basketball: noncontact drills only</p> <p>Golf: gradual return</p> <p>Volleyball: gradual return ~6 mo</p> <p>Pool: gradual return</p> <p>Forehand, backhand racquet sports (no overhead)</p>
FOLLOW-UP:	<p>Supervised rehab: 1-2x per week</p> <p>Physical Therapist Re-evaluation: monthly</p> <p>Ortho Re-evaluation:~6 months post-op</p>
TESTING:	<p><i>Y-balance test UE</i></p> <p><i>Timed Functional Arm and Shoulder Test</i></p> <p><i>CKCUE Strength Test – once able to sustain a tall plank position without increase pain</i></p> <p><i>2- minute Timed Push-up</i></p> <p><i>1 minute plank hold</i></p>
MISCELLANEOUS:	<p>After 6-9 months post-op: Exercises in phase III are continued, gradually increasing intensity & duration as tolerated. (depending on tissue healing time/ Hendawi)</p> <p>The recommendation is to wait until 9-12 months post-op to return to contact/collision sports or aggressive military training (i.e., airborne school). This time period may be adjusted slightly by the surgeon and therapist according to patient progress.</p>

References:

1. Hendawi T, Milchtein C, Ostrander R. Bankart Repair Using Modern Arthroscopic Technique. *Arthroscopy Techniques*. 2017;6(3). doi:10.1016/j.eats.2017.02.019.
2. Cohen BH, Thome AP, Tabaddor RR, Owens BD. Open Surgical Stabilization of Glenohumeral Dislocations. *JBJS Essential Surgical Techniques*. 2018;8(2). doi:10.2106/jbjs.st.17.00052.
3. Shah KM, Baker T, Dingle A, et al. Early Development and Reliability of the Timed Functional Arm and Shoulder Test. *Journal of Orthopaedic & Sports Physical Therapy*. 2017;47(6):420-431. doi:10.2519/jospt.2017.7136.