

Shoulder Anterior Stabilization (Labral Repair / Bankart) Rehabilitation Protocol

PHASE I: Generally post-operative weeks 1-6	
PRECAUTIONS:	*Wear immobilizer at all times for 6 weeks, except during rehabilitation* * NO running*
ROM/IMMOBILIZER:	Limit shoulder flexion to 90° and ER to 10° for the first week post-op. There are no strict ROM limitations after the first week post-op; however, NO forceful stretching is allowed. Ideally, ROM should increase by ~10° flexion and 5° ER per week. If ROM is less than 110° flexion and/or 20° ER after 4 weeks, consider discontinuing the immobilizer. Otherwise, continue using until 6 weeks post-op per ortho/PT
WOUND:	Post-op dressing remains intact until post-op day #3 (~72 hours after surgery) May begin showering after post-op day #2(no need to cover incision site) * Do NOT submerge shoulder in tub or pool for 4 weeks* Suture/staple removal @ 10-14 days at followup with Dr. Zacchilli.
REHABILITATION:	Frequent use of ice in a semi-reclined position is encouraged Exercises should be done as part of a home exercise program 3-4 x per day All ROM exercises should be preceded with a scapular muscle set
~Weeks 1	Scapular stabilizer muscle sets Elbow, Wrist, & Hand: ROM exercises, gripping, squeezing, etc. Supported pendulum Supine active assisted shoulder flexion (limited to 90°) Gentle (“Two Finger”) isometrics (pain free)
~Weeks 2-4	Bilateral shoulder ER AROM, only to the point of first resistance Bilateral shoulder FF and scaption AROM using good form (without shoulder hiking) Scapular clock – including retraction & protraction Scapular retraction with thoracic extension and rotation Aerobic conditioning on recumbent bike (optional)
~Weeks 5-6	Shoulder AAROM exercises: wand, pulley, gentle towel stretch, etc. – as needed Gentle weight-bearing shifts: quadruped → tripod, (include tripod thoracic rotation) Upper body ergometer (light resistance) Scapular exercises: rows, shrugs, and “pushouts” using light resistance Lower extremity weight lifting (optional)
FOLLOW-UP:	Ortho: ~4-6 weeks post-op; Supervised rehabilitation: 2-3 x per week as needed
DOCUMENTATION:	Precautions, pain level, medications and modalities Observation: (incision sites) - Signs/symptoms of infection? Site healing well? Neurovascular status: Distal pulses, motor and sensation intact?

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PHASE I GOALS:	<p>Shoulder ROM (forward flexion, ER with shoulder at side)</p> <p>Protect the surgical repair & avoid a “stiff” shoulder</p> <p>Shoulder ROM to approximately 140-150° flexion and 30-40° external rotation (If goals are not met, consider remaining on phase I for 2 additional weeks)</p>
PHASE II: Generally post-operative weeks 7-13	
PRECAUTIONS:	<p>*NO pushups, heavy lifting, or other sports participation*</p> <p>*NO repetitive overhead use of shoulder*</p>
IMMOBILIZER:	<p>Wean from wearing immobilizer per ortho/PT guidance</p>
REHABILITATION:	<p>Continue phase I exercises as needed</p> <p>Strengthening exercises are only performed if pain free. Exercise progression occurs only when there has been no increase in shoulder pain or stiffness since the previous session</p>
~Weeks 7-9	<p>Upper body ergometer: forward, reverse, and clockwise & counterclockwise standing at side</p> <p>Shoulder ROM exercises: wand, pulley, towel stretch, sleeper’s stretch, etc. – as needed</p> <p>Supine flexion on bolster (progress to using light weight)</p> <p>Kneeling thoracic reaches</p> <p>Progressive strengthening: ER & IR (arm at side), FF & scaption to 60-90°, prone rows (X,Y,T) (first set: 20 repetitions, then 1 additional set at the same weight to muscle failure)</p> <p>Neuromuscular/functional training exercises - variety of beginning level exercises that do not require > 90° shoulder elevation or 20° ER (see appendix)</p> <p>Aerobic Conditioning: Bike, elliptical, stairmaster as desired.</p>
~Weeks 10-13	<p>Progressive strengthening: ER/IR (shoulder in 30° elevation), FF/scaption to 90-110°, Scapular retraction strengthening (seated or standing): X,Y,T,90-90 row, etc. (first set: 15 reps, then 2 additional sets at the same weight to muscle failure)</p> <p>Progressive neuromuscular/functional training exercises (see appendix)</p> <p>Lunges holding plyoball overhead</p> <p>May begin jogging (start with 5 minutes and progress gradually as tolerated)</p>
FOLLOW-UP:	<p>Ortho: ~3 months post-op; Supervised rehabilitation: 2-3 x per week as needed</p>
DOCUMENTATION:	<p>Pain level, medications, shoulder ROM & strength</p>
PHASE II GOALS:	<p>Full shoulder ROM with exception of ~90% full ROM for external rotation</p> <p>Full strength based on manual muscle testing</p> <p>Pain free activities of daily living (If goals are not met, consider remaining on phase II for 2-4 additional weeks)</p>

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PHASE III: Generally post-operative months 4-6	
PRECAUTIONS:	<p>*NO participation in contact/collision sports until 9-12 months post-op or cleared by MD*</p> <p>*All weight training should be modified to avoid the “90/90” position*</p> <p>*Avoid jerking, quick, or sudden movements with shoulder*</p>
REHABILITATION:	<p>Continue phase II exercises as needed. Exercise progression only when there has been no increase in shoulder pain or stiffness since the previous rehabilitation session</p>
~Month 4	<p>Warm-up: 5-10 minutes on upper body ergometer or elliptical</p> <p>General upper quarter stretching: 5-10 minutes (shoulder, thoracolumbar spine)</p> <p>Progressive strengthening: ER/IR (shoulder in 45-90° elevation), FF/scaption to 110- 130°, (first set: 10 repetitions, then 2 additional sets at the same weight to muscle failure)</p> <p>May also begin general UE light intensity strengthening with shoulder in “safe” position (avoid heavy overhead lifting, avoid shoulders in the 90° elevation, 90° ER position)</p> <p>Continue progression for neuromuscular/functional training exercises -intermediate level</p>
~Months 5-6	<p>Warm-up: 5-10 minutes on upper body ergometer or elliptical</p> <p>General upper quarter stretching: 5-10 minutes (shoulder, thoracolumbar spine)</p> <p>Progressive strengthening: ER/IR (shoulder in 60-90° elevation), FF/scaption to 130- 150°, (first set: 6-8 repetitions, then 2 additional sets at the same weight to muscle failure)</p> <p>Continue progression for neuromuscular/functional training exercises –advanced level</p> <p>Progressive sports training: Begin at 25-50% intensity, progress gradually (see appendix)</p>
FOLLOW-UP:	<p>Supervised rehabilitation: 1-2 x per week as needed; Ortho: ~6 months post-op</p>
DOCUMENTATION:	<p>Pain level & medications; Shoulder ROM & strength</p>
PHASE III GOALS:	<p>Pushups at own pace without pain; Pain free throwing motion</p>
MISCELLANEOUS:	<p>After 6 months post-op: Exercises in phase III are continued, gradually increasing intensity & duration as tolerated.</p> <p>The recommendation is to wait until 9-12 months post-op to return to contact/collision or overhead sports or aggressive physical training (i.e. CrossFit, etc.). This time period may be adjusted slightly by the surgeon and therapist according to patient progress.</p>

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APPENDIX: GENERAL SHOULDER EXERCISE PROGRESSIONS

Note to clinician There are many potentially good neuromuscular/functional training exercises that can assist a post-op shoulder during rehabilitation. For all levels, exercises should be pain free. Rather than pick a one, our strategy is to provide guidelines and examples for several. The clinician should stay within the general guidelines to design an individualized, effective program for his/her patient.

Primary guidelines for beginning level neuromuscular/functional training exercises:

Light resistance, shoulder ROM not to exceed 90° of shoulder elevation or 20° ER, all weight-bearing exercises should be in the quadruped position with both UEs in contact with a stable surface

Primary guidelines for intermediate level neuromuscular/functional training exercises:

Should begin only after completing several weeks of beginning level exercises
Light to moderate resistance, shoulder ROM should generally not exceed 120° or 40° ER for single arm movements, avoid the full prone push-up position for weight-bearing exercises

Primary guidelines for advanced level neuromuscular/functional training exercises:

Should begin only after completing a month or two of intermediate level exercises
Moderate resistance, full ROM - but generally avoiding the 90° abducted, 90° externally rotated position

Exercise Type	Beginning Level ~weeks 7-12 post-op	Intermediate Level ~months 4-5 post-op	Advanced Level ~months 5-6 post-op
Body Blade	Flexion/Extension IR/ER Superior/Inferior (arm at side)	FF range to 90° Scaption to 90° IR/ER through ROM Horiz adb/add at 90°	FF range to 150° Scaption to 150° IR/ER through ROM Diagonal motions
Ball toss	Chest pass – 2 handed IR toss – (arm at side)	Overhead toss – (2 handed) Behind back toss	Overhead diagonal toss – (2 handed); Regular throwing
Prone stabilization	All fours stabilization on stable surface	All fours stabilization on foam or theraball Tripod on stable surface	Tripod stabilization on unstable surface
Supine stabilization	Supine Shoulder Stabilization @ 90°	Supine Shoulder Stabilization from 60-120°	Supine Shoulder Stabilization (Available ROM)
Pushups	none	Wall pushups – progressing to inclined pushups	Knee pushups – progressing to modified regular pushups
Misc activities for sports training	Basketball: dribbling, chest and bounce pass Golf: putting Volleyball: bumping Pool: jogging, treading Wall ball drawing	Basketball: shooting within the key only Golf: chipping, short irons Volleyball: setting Pool: No overhead strokes Tossing Frisbee Catching drills: below 90°	Basketball: noncontact drills only Golf: gradual return Vball: gradual return ~6 mo Pool: gradual return Forehand, backhand racquet sports (no overhead)