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YOU DESERVE A COMEBACK STORY

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UTAH ORTHOPAEDIC SPECIALISTS

Rehabilitation Protocol for Rotator Cuff Repair - Small to Medium Tears

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

Rehabilitation Goals	• Protect surgical repair • Reduce swelling, minimize pain • Maintain UE ROM in elbow, hand and wrist • Gradually increase shoulder PROM • Minimize muscle inhibition • Patient education
Sling	• Neutral rotation • Use of abduction pillow in 30-45 degrees abduction • Use at night while sleeping
Precautions	• No shoulder AROM • No lifting of objects • No supporting of body weight with hands

Intervention	*Swelling Management*
	• Ice, compression
	
	Range of motion/Mobility
	• PROM: ER<20 scapular plane, Forward elevation <90, pendulums, seated GH flexion table slide
	• AROM: elbow*, hand, wrist
	  ○ If a biceps tenodesis is performed, avoid active flexion of biceps and eccentric loads on biceps for 6 weeks post-op
	• AAROM: Active assistive shoulder flexion, shoulder flexion with cane, cane external rotation stretch
	
	Strengthening (Week 2)
	• Periscapular: scap retraction*, prone scapular retraction*, standing scapular setting, supported scapular setting, inferior glide, low row
	  ○ *avoid with subscapularis repair and teres minor repair
	• Ball squeeze

Criteria to Progress	• 90 degrees shoulder PROM forward elevation • 20 degrees of shoulder PROM ER in the scapular plane • 0 degrees of shoulder PROM 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	• Continue to protect surgical repair • Reduce swelling, minimize pain • Maintain shoulder PROM • Minimize substitution patterns with AAROM • Patient education
Sling	• Neutral rotation • Use of abduction pillow in 30-45 degrees abduction • Use at night while sleeping
Precautions	• No lifting of objects • No supporting of body weight with hands
Intervention *-Continue with Phase I interventions*	*Range of motion/Mobility* • PROM: ER<20 scapular plane, Forward elevation <90 • AROM: elbow*, hand, wrist ○ If a biceps tenodesis is performed, avoid active flexion of biceps and eccentric loads on biceps for 6 weeks post-op • AAROM: Active assistive shoulder flexion, shoulder flexion with cane, cane external rotation stretch, washcloth press, side lying elevation to 90 degrees *Strengthening* • Periscapular: Row on physioball, shoulder extension on physioball
Criteria to Progress	• 90 degrees shoulder PROM forward elevation • 20 degrees of shoulder PROM ER in the scapular plane • 0 degrees of shoulder PROM IR in the scapular plane • Minimal substitution patterns with AAROM • Pain < 4/10 • No complications with Phase II

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

Rehabilitation Goals	• Do not overstress healing tissue • Reduce swelling, minimize pain • Gradually increase shoulder PROM/AAROM • Initiate shoulder AROM • Improve scapular muscle activation • Patient education
Sling	• Discontinue
Precautions	• No lifting of heavy objects (>10 lbs)
Intervention *-Continue with Phase I-II interventions*	*Range of motion/Mobility* • PROM: ER<30 scapular plane, Forward elevation <120 • AAROM: seated shoulder elevation with cane, seated incline table slides, ball roll on wall • AROM: elevation < 120, supine flexion, salutes, supine punch, wall climbs

	Strengthening ● Periscapular**: Resistance band shoulder extension, resistance band seated rows, rowing, lawn mowers, robbery, serratus punches ○ **Initiate scapular retraction/depression/protraction with subscapularis and teres minor repair ● Elbow*: Biceps curl, resistance band bicep curls, and triceps ○ *If a biceps tenodesis is performed, may begin active flexion of biceps, but no biceps strengthening until 12 weeks post-op
Criteria to Progress	● 120 degrees shoulder PROM forward elevation ● 30 degrees shoulder PROM ER and IR in scapular plane ● Minimal substitution patterns with AROM ● Pain < 4/10

PHASE IV: TRANSITIONAL POST-OP (9-10 WEEKS AFTER SURGERY)

Rehabilitation Goals	● Do not overstress healing tissue ● Gradually increase shoulder PROM/AAROM/AROM ● Improve dynamic shoulder stability ● Progress periscapular strength ● Gradually return to full functional activities
Precautions	● No lifting of heavy objects (>10 lbs)
Intervention *-Continue with Phase II-III interventions*	*Range of motion/Mobility* ● PROM: ER<45 scapular plane, Forward elevation <155, ER @ 90 ABD < 60 ● AROM: supine forward elevation with elastic resistance to 90 deg, scaption and shoulder flexion to 90 degrees elevation *Strengthening* ● Periscapular: Push-up plus on knees, prone shoulder extension Is, resistance band forward punch, forward punch, tripod, pointer
Criteria to Progress	● 155 degrees shoulder PROM forward elevation ● 45 degrees shoulder PROM ER and IR in scapular plane ● 60 degrees shoulder PROM ER @ 90 ABD ● 120 degrees shoulder AROM elevation ● Minimal to no substitution patterns with shoulder AROM ● Performs all exercises demonstrating symmetric scapular mechanics ● Pain < 2/10

PHASE V: TRANSITIONAL POST-OP CONTINUED (11-12 WEEKS AFTER SURGERY)

Rehabilitation Goals	● Restore full PROM and AROM ● Enhance functional use of upper extremity

Intervention *-Continue with Phase II-IV interventions*	*Range of motion/Mobility* ● PROM: Full ● AROM: Full *Stretching* ● External rotation (90 degrees abduction), Hands behind head, IR behind back with towel, side lying horizontal ADD, sleeper stretch, triceps and lats, door jam series
Criteria to Progress	● 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 VI: STRENGTHENING POST-OP (13-16 WEEKS AFTER SURGERY)

Rehabilitation Goals	● Maintain pain-free ROM ● Initiate RTC strengthening ● Initiate motor control exercise ● Enhance functional use of upper extremity
Intervention *-Continue with Phase II-V interventions*	*Strengthening* ● Rotator cuff: internal external rotation isometrics, side-lying external rotation, Standing external rotation w/ resistance band, standing internal rotation w/ resistance band, internal rotation, external rotation, sidelying ABD→standing ABD ● Periscapular: T and Y, “T” exercise, push-up plus knees extended, wall push up, “W” exercise, resistance band Ws, dynamic hug, resistance band dynamic hug ● Biceps curl (begin with concomitant biceps tenodesis/tenotomy) *Motor Control* ● 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 ● PNF – D1 diagonal lifts, PNF – D2 diagonal lifts ● Field goals
Criteria to Progress	● Clearance from MD and ALL milestone criteria below have been met ● Full pain-free PROM and AROM ● ER/IR strength minimum 85% of the uninvolved arm ● ER/IR ratio 60% or higher ● Negative impingement and instability signs ● Performs all exercises demonstrating symmetric scapular mechanics

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

Rehabilitation Goals	• Maintain pain-free ROM • Continue strengthening and motor control exercises • Enhance functional use of upper extremity • Gradual return to strenuous work/sport activity
Intervention *-Continue with Phase II-VI interventions*	*Strengthening* • 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 *Motor Control* • Resistance band PNF pattern, PNF – D1 diagonal lifts w/ resistance, diagonal-up, diagonal-down Wall slides w/ resistance band • Specific return-to-sport/throwing program
Return to Sport	• 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. Encourage close discussion with the referring surgeon prior to advancing to a return-to-sport rehabilitation program.

Protocol adapted from Mass General Sports Medicine Physical Therapy Rehabilitation Protocols. See https://www.massgeneral.org/orthopaedics/sports-medicine/physical-therapy/sports-rehab-protocols