Simple/Small Rotator Cuff Repair Reconstruction Protocol

Exceptions per Additional Procedure

BICEPS TENODESIS
No resisted shoulder flexion, elbow flexion or forearm supination for 8 weeks.

BANKART OR LABRAL REPAIR
Defer to Bankart or labral repair protocol.

LARGE/MASSIVE ROTATOR CUFF REPAIR
Maintain immobilization in sling for 8 weeks (or per MD discretion). Refer to Large/Massive Tear RTC Protocol.

PHASE I:
Week 0-6

Physical therapy sessions: 1-2 sessions/week

Schedule follow-up appointment with MD/PA at 1-4 weeks, per physician discretion.

PRECAUTIONS	• Immobilization: + abduction pillow for 6 weeks. - May be removed cautiously for bathing and rehabilitation exercises • ROM restrictions: no AROM • Lifting restrictions: no lifting	• Weight bearing restrictions: No supporting body weight through hands • Other: No aquatic therapy until sutures removed
THERAPEUTIC APPROACH	**SUGGESTED EXERCISES** *If pain level is not dissipating, decrease intensity and volume of exercises.* **WEEK 1** **RANGE OF MOTION** • Elbow/wrist/hand AROM (depending on biceps surgical involvement) • Supported pendulums as tolerated	• Assure normal neurovascular status. • No AAROM or AROM until 6 weeks. • No pulley until 6 weeks. • Cervical spine AROM

THERAPEUTIC APPROACH	• Gentle PROM of shoulder: 10 repetitions 2x/day
	  - Supine passive forward elevation in the plane of the scapula
	  - Supine passive ER to tolerance with dowel rod @ 0-20 deg flex and 20 deg abduction
	
	STRENGTHENING
	• Scapula elevation
	• Scapula retraction (*avoid if teres minor or subscapularis repair until 7-8 weeks)
	• Grip exercises: Ball, towel, PowerWeb, Digiflex
	
	WEEK 2
	RANGE OF MOTION/STRETCHING
	• Standing table/counter forward bow
	• Table slide: Flexion
	• Standing ER ROM
	• Supine hands-clasped flexion stretch
	• Mobilization: Inferior glide may be introduced
	
	STRENGTHENING
	• Prone scapula retraction
	
	WEEK 3
	• Supine towel press-up
	• Standing IR isometric @ 90 deg elbow flex, 0 deg shoulder abduction
	
	Return to work: May resume light computer work.
	
	Aquatic PROM (after sutures removed)
		• Table slides: Scaption and abduction 10x/2x day
		
		CARDIOVASCULAR TRAINING
		• Lower extremity cardio: walking, stationary bike, treadmill walking
		
		NEUROMUSCULAR RE-EDUCATION
		• Contralateral strengthening exercises: ER, IR, rows, shoulder extension with resistance bands
		• Postural education
		• Sidelying: scapular ROM, PNF patterns, manually resisted training
		
		WEEK 4
		• Swiss ball prone row
		• Prone shoulder extension
		• Cane/dowel rod: flexion
		• Sidelying AAROM shoulder flexion to 90 deg with physioball
		
		Modalities: Ice, TENS

GOALS	• Minimize pain and inflammatory response • Achieve ROM goals	• Establish stable scapula • Maintain elbow, wrist, hand ROM

MILESTONES FOR PROGRESSION	• PROM - ER >30 deg @ 20 deg abduction by week 5 - Flexion as tolerated (90 deg) - IR 0 deg in the scapular plane	Pain: <4/10 No complications with Phase 1

POSTOPERATIVE PHASE II:
Weeks 6-12

Physical therapy sessions: 2 sessions/week

Schedule follow-up appointment with MD/PA at 6-12 weeks.

PRECAUTIONS	• Immobilization: discharge sling at 6 weeks • Lifting restrictions: no lifting, no sudden/excessive movements • Weight bearing restrictions: No supporting body weight with hands	• Other - No RTC strengthening until 12 weeks - No functional hand behind back until week 8 - No horizontal adduction until week 8.
THERAPEUTIC APPROACH	**SUGGESTED EXERCISES** Continue with Phase I interventions with appropriate progressions. **WEEKS 6-8** **RANGE OF MOTION** • AAROM flexion progression to AROM flexion • Posterior capsule stretching • Pulley: flexion, scaption and abduction **STRENGTHENING** • Sub-maximal pain-free isometrics with 90 deg elbow flexion: flexion, extension, IR, and adduction ONLY • Scapula retraction with resistance band • Prone row • Shoulder extension with resistance band • Supine punch • Salutes • Wall crawl • Seated bilateral ER AROM • Biceps and triceps with resistance band	**NEUROMUSCULAR RE-EDUCATION:** • Rhythmic stabilization training • Ball on wall proprioception training **FUNCTIONAL TRAINING:** • Forward reach • ADL training

<table>
<tr><td>THERAPEUTIC APPROACH</td><td>

WEEK 9

RANGE OF MOTION

- Supine flex with resistance band to 90 deg
- ER/IR isometrics
- AROM scaption and flexion to 90 deg
- Push-up plus on knees
- Forward punch with resistance band
- Quadruped shoulder flexion
- Bird dogs
- Standing ER walk-out @ 0 deg abduction

Aquatic therapy as tolerated

WEEK 11

- ER stretch @ 90 deg abduction
- Supine butterfly stretch
- IR stretch with towel
- Sidelying horizontal adduction
- Sleeper stretch
- Triceps stretch
- Lat stretch
- Pec stretch @ door/corner

Modalities: Ice, TENS

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<tr><td>GOALS</td><td>

- Gradual ROM increase
- Increase functional use of UE
- Minimize substitution patterns

- DO NOT overstress healing tissue
- Improve dynamic stability of shoulder
- Progress periscapular strength

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<tr><td>MILESTONES FOR PROGRESSION</td><td>

RANGE OF MOTION GOALS

- AROM: 120 deg flex with minimal to no substitution patterns
- Full PROM
  - Full ER @ 20 deg and 90 deg abduction
  - 45 deg/60 deg by week 10)
  - Full flexion (160 PROM, 120 AROM by week 10)
  - Full IR (as tolerated by week 10)

STRENGTH

- Minimal substitution patterns with ARO
- Symmetrical scapular mechanics with all exercises (>90 degrees with flexion without scapula elevation compensation)

Pain: <2/10

No complications with Phase II

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POSTOPERATIVE PHASE III:
Weeks 12-20

Physical therapy sessions: 1-2 sessions/week, may be 6-8 sessions in this phase

Schedule follow-up appointment with MD/PA per physician cadence

PRECAUTIONS

- AROM and/or RTC strengthening with resistance bands should not be initiated until:
  - Overall pain level is low
  - Patient can maintain normal scapulohumeral rhythm during AAROM/AROM
- Strengthening focus is high repetitions with low resistance (max 2x/day)
- No lifting >10 lbs

THERAPEUTIC APPROACH

SUGGESTED EXERCISES
Continue with Phase II interventions with appropriate progressions.

WEEKS 12-15

RANGE OF MOTION/STRETCHING
- Progress AROM ex in all planes

STRENGTHENING
- CKC activities for dynamic stability (Scapula, deltoid, cuff)
- ER/IR with resistance band
- Progress SA strength (isolated, pain-free, elbow @ side)
- Isotonic dumbbell for deltoid and supraspinatus, > 3 lbs

NEUROMUSCULAR RE-EDUCATION
- Light PNF D1/D2 and manual resistance
- Rhythmic stabilization
-

FUNCTIONAL TRAINING
- ADLs
- Lifting to shoulder height
- Seat belt

WEEK 16

At this stage, begin to include prone isotonic strengthening, progress CKC dynamic stability activities, initiate impulse exercises and isokinetic strengthening

STRENGTHENING
- Sidelying ER
- Sidelying abduction progresses to standing abduction
- Quadruped alternating isometrics
- Wall ball stabilization
- Standing PNF D1/D2
- Prone T's, Y's, & W's
- Prone W's with resistance band
- Dynamic hug with resistance band
- Wall push-up
- Push-up plus
- Field goals
- Standing IR @ 90 deg abduction
- Biceps curls (with tenodesis)

	MONTH 4 • 90/90 ER and IR with resistance band • PNF D1/D2 with resistance band • Wall slides with resistance band on wrists Aquatic strengthening therapy as tolerated Modalities: at therapist discretion, PRN	
GOALS	• Achieve ROM goals • Eliminate shoulder pain • Increase functional use of UE	• Improve strength/endurance/power • Minimize substitution patterns • Improve dynamic stability of shoulder
MILESTONES FOR PROGRESSION	• AROM: Full in all planes or equal to uninvolved side • Strength - Symmetrical scapular control/mechanics with exercise - 5/5 MMT for RTC before introduction of plyometrics	Pain: <2/10 No complications with Phase III

POSTOPERATIVE PHASE IV:
Weeks 20-28

Physical therapy sessions: at therapist's discretion, total sessions 2-4

Schedule follow-up appointment with MD/PA per physician cadence

PRECAUTIONS	• Progress strength/endurance/power/stability exercises gradually • 5# max for isotonic strengthening of rotator cuff/deltoid/scapula	• The rehab team should also begin to consider return to sport, particularly contact sports AND/OR occupational demands
THERAPEUTIC APPROACH	**SUGGESTED EXERCISES** Continue with Phase III interventions with appropriate progressions. *In this phase, there should be decreasing external stabilization as the patient demonstrates progress. The therapist*	*should include movement drills that integrate functional patterns, kinesthetic awareness and increase the speed of movement. During this phase of recovery, the focus is endurance and therefore, the rest time between exercise sets should be minimized.*

THERAPEUTIC APPROACH	May begin tennis ground stroke/batting/return to golf AFTER completing strength progression. **MONTH 6** **PLYOMETRIC PROGRAM** • Beach ball/tennis ball progressing to weighted balls - 2 handed toss from waist to overhead to diagonal patterns • 1-handed stability drills • 1-handed tosses (vary abduction angle, UE support, and amount of protected ER) Throwing program may begin 3-6 weeks after plyometrics Modalities: at therapist discretion, PRN
GOALS	• Normalize strength/endurance/power • Return to full ADL's and recreational activities

MILESTONES FOR PROGRESSION	**DISCHARGE CRITERIA TO CLEAR FOR RETURN TO SPORT**
	• Clearance from MD
	• All previous milestones met
	• Negative impingement and instability special tests
	• ROM: Full pain-free PROM/AROM
	• Strength
	  - ER/IR >85% of uninvolved arm
	  - ER/IR Ratio > 60%
	  - Symmetrical scapular mechanics with exercises
	  - 5/5 MMT shoulder girdle and/or satisfactory isokinetic test
	  - Pass Closed Kinetic Chain Upper Extremity Test
	• Complete plyometric program (if applicable)
	• Complete interval RTS program (if applicable)
	
	No complications with Phase IV