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REHABILITATION GUIDELINES FOR

MASSIVE ROTATOR CUFF REPAIR

PHASE I (0-6 WEEKS)

Appointments	Physical therapy 2 x per week
Rehabilitation Goals	 Maintain integrity of repair Diminish pain and inflammation Prevent muscular inhibition Independent with ADL's with modifications to protect repair.
Precautions	 Keep wound clean and dry Maintain arm in sling per MD orders Control pain and inflammation Avoid lifting objects No active overhead motions No supporting of body weight with hands. Avoid sudden movements or excessive stretching Ice frequently or as dictated by pain and/or swelling
Suggested Therapeutic Exercises	 ROM: Gentle mobilizations as needed to improve ROM No shoulder AROM for 6 weeks PROM to tolerance for flexion and ABD in scapular plane Limit ER/IR in neutral to 30 degrees PROM to elbow wrist and hand Subscapularis repair: limit ER to 30 degrees, read op report, may differ Tenodesis: no active biceps for 6 weeks HEP: Codman's 3-4 x daily Passive table slides PROM to elbow if tenodesis, otherwise AROM With glenohumeral joint totally supported: elbow, wrist, and hand AROM (no elbow flexion if tenodesis performed)

Cardiovascular Exercises	• N/A
Progression Criteria	 PROM: Flexion to at least 100 degrees ER in scapular plane to at least 45 degrees (30 degrees if a subscapularis repair) IR in scapular plane to at least 45 degrees (30 degrees if infraspinatus or teres minor repair) Abduction to at least 90 degrees in the scapular plane

PHASE II (6-12 WEEKS)

Appointments	Physical therapy 2 x per week
Rehabilitation Goals	 Educate on safety when out of sling Do NOT overstress healing tissues Once out of the sling, may begin to use arm for gentle ADL's at waist level
Precautions	 No lifting heavier than a cup of water Supporting of body weight Reaching behind the back
Suggested Therapeutic Exercises	 ROM: Work toward full pain-free PROM by the end of 12 weeks May begin active biceps if tenodesis performed May begin active IR if subscapularis repair Continue with PROM: flexion and abduction in scapular plane to tolerance ER and IR at 60–90 degrees of abduction Slow progression to full ER/IR ROM by the end of 12 weeks Strength: With glenohumeral joint completely supported: AROM 4 way wrist exercises AROM bicep curls Scapular squeezes (careful not to fire cuff from 6-10 weeks) 8 weeks: Submaximal isometrics: elbow bent shoulder flexion/extension, IR/ER, elbow flexors/extensors Begin pulleys at 8-10 weeks Start table slides and progress to wall slides toward the end of 12 weeks

(Phase II continued) Suggested Therapeutic Exercises	 Initiate gentle rhythmic stabilization for ER/IR in 45 degrees abduction Sidelying scapular rhythmic stabilization (not PNF) careful not to fire cuff musculature Can begin aquatic ROM exercises if desired HEP: PROM to tolerance for the following: Codmans Table slides 6-12 weeks: Begin AAROM: pulleys, wall walks and rhythmic stabilization 10 weeks: supine flexion and sidelying ABD
Cardiovascular Exercises	Recumbent bike (no supporting of body weight)
Progression Criteria	Full PROMAAROM without compensation

PHASE III (12-16 WEEKS)

Appointments	Physical therapy 2 x per week
Rehabilitation Goals	 Full PROM by 12 weeks Emphasis on low resistance/high repetitions (30 reps), using no weight initially Strength phase
Precautions	 Patient must demonstrate good glenohumeral and scapular mechanics prior to beginning isotonic strengthening.
Suggested Therapeutic Exercises	 AAROM: UBE minimal to no resistance low arms (standing) Active scapular protraction/retraction Sidelying easy resisted scapular protraction/retraction Supine ER/IR with tubing in neutral abduction with a towel roll, progress to standing theraband, then sidelying Gentle PNF patterns Light weight bicep and tricep curls Prone rows at 30 degrees abduction Prone extension (elbows bent to 90 degrees)

(Phase III continued) Suggested Therapeutic Exercises	 Prone horizontal abduction (elbow bent to 90 degrees or straight arm to 45 degrees) Sub-maximal rhythmic stabilizations for flexion at 45 degrees, 90 degrees, 120 degrees (nearing 16 weeks) Rhythmic stabilizations for ER/IR Palm on hip lift to 90 degree and end with palm up) Aquatic exercises for light AROM HEP: Codmans as needed Progress scapular exercises as determined safe
Cardiovascular Exercises	UBE, stationary bike
Progression Criteria	 Full PROM Full AROM without compensation

PHASE IV (16-22 WEEKS)

Appointments	Physical therapy 1-2 x per week
Rehabilitation Goals	 Negative impingement signs No compensatory movements present Continue with total body conditioning Rehab geared toward return to sport or work
Precautions	• None
Suggested Therapeutic Exercises	ROM: • Goal is full AROM without compensation Strength: • Begin WB wall, semi- prone, prone exercises • Progress diagonals • Progress functional reach Week 20 onward: • Plyomentric chest tosses • Resisted ER/IR at 90°/90° • Oscillation work (body blade) • Begin weight training: • Bench press, flys, lat pull-downs, PNF with pulley

Cardiovascular Exercises	As tolerated
Progression Criteria	 Negative impingement signs Full AROM without compensation Return of UE strength and overhead strength
Return to Activity Phase (weeks 22-26)	 Gradual return to strenuous work activities Gradual return to recreational activities Gradual return to sport activities Continue strengthening and stretching Continue stretching, if motion is tight May initiate interval sport program (i.e. golf, etc.), if appropriate

References:

PT name and date: Rachel Georgeson, MPT 2015 / new template March 2017 MD name and date: Timothy Crall, MD 2015 / Brian Gilmer, MD 2017

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