

## SHOULDER REMPLISSAGE PROCEDURE POST OPERATIVE PROTOCOL

	Time Frame (Weeks)	Guidelines	Goals
PHASE I	0 to 2	<b>SLING:</b> x 4-6 weeks <b>ROM:</b> No GHJ ROM x 2 weeks <b>EXERCISE PROGRESSION</b> <ul style="list-style-type: none"> <li>• Cervical ROM, basic deep neck flexor activation (chin tucks)</li> <li>• Active hand and wrist ROM</li> <li>• Passive elbow flexion/extension</li> <li>• Active shoulder retraction</li> <li>• Walks, low intensity cardio exercise to promote healing</li> </ul> <b>MANUAL INTERVENTION</b> <ul style="list-style-type: none"> <li>• UT, parascapular STM as needed. Effleurage massage to forearm and upper arm as needed.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce inflammation</li> <li>• Decrease pain</li> <li>• Postural education</li> </ul>
	2 to 4	<b>EXERCISE PROGRESSION</b> <ul style="list-style-type: none"> <li>• Supine flexion using contralateral arm for ROM 3x/day.</li> <li>• Supine ER using T-bar.</li> <li>• Shoulder Pendulums</li> <li>• DNF and proper postural positioning with shoulder retraction exercises.</li> <li>• Cervical ROM.</li> <li>• Low/moderate cardio work; Elliptical okay, no running.</li> </ul> <b>MANUAL INTERVENTION</b> <ul style="list-style-type: none"> <li>• STM – global shoulder and CT junction.</li> <li>• Scar tissue mobilization when incisions are healed.</li> <li>• Graded GH mobilizations.</li> <li>• ST mobilizations.</li> <li>• Gentle sub-maximal isometrics to achieve ROM goals.</li> </ul>	<ul style="list-style-type: none"> <li>• Postural education with cervical spine; neutral scapular positioning</li> <li>• Shoulder flexion to 120° by week 4</li> <li>• Shoulder external rotation 30°-45° @ 45° abduction by week 4</li> </ul>
PHASE II	4 to 6	<b>EXERCISE PROGRESSION</b> <ul style="list-style-type: none"> <li>• Serratus activation; Ceiling punch (weight of arm) many initially need assistance.</li> <li>• Manual perturbations supine, arm in 90° flexion &amp; 0° ER/IR</li> <li>• Scapular strengthening – prone scapular series (rows and I's). Emphasize scapular strengthening under 90°.</li> <li>• External rotation on side (no resistance).</li> <li>• Cervical ROM as needed to maintain full mobility.</li> <li>• DNF proper postural positioning with all RC/SS exercises.</li> <li>• Low/moderate cardio work; Elliptical okay, but no running.</li> <li>• Continue with combined passive and active program to push full flexion and external rotation achieving ROM goals outlined above.</li> <li>• Stick off the back progressing to internal rotation with thumb up back and sleeper stretch</li> <li>• Sub-maximal 6 direction rotator cuff isometrics (no pain).</li> </ul> <b>MANUAL INTERVENTION</b> <ul style="list-style-type: none"> <li>• STM – global shoulder and CT junction.</li> <li>• Scar tissue mobilization.</li> <li>• Graded GH mobilizations.</li> <li>• ST mobilizations.</li> <li>• Gentle CR/RS to gain ROM while respecting repaired tissue.</li> </ul>	<ul style="list-style-type: none"> <li>• Discontinue sling as instructed; 4-6 weeks.</li> <li>• Shoulder flexion to 150° + by week 6.</li> <li>• Shoulder external rotation 45°-60° at 75° abduction. Patient should approach full ROM by week 10.</li> <li>• Internal rotation to belt line.</li> </ul>

	Time Frame (Weeks)	Guidelines	Goals
<b>PHASE III</b>	6 to 12	<p><b>EXERCISE PROGRESSION</b></p> <ul style="list-style-type: none"> <li>• Continue with combined passive and active program to push full flexion and external rotation.</li> <li>• Internal rotation with thumb up back and sleeper stretch</li> <li>• Continue with ceiling punch adding weight as tolerated.</li> <li>• Advance intensity of sub-maximal rotator cuff isometrics. May discontinue once isotonic RC/SS program is fully implemented.</li> <li>• Advance prone series to include T's and Y's adding resistance as tolerated.</li> <li>• Resisted ER in side-lying or with bands.</li> <li>• Gym: rows, front lat pulls, biceps and triceps.</li> <li>• Scaption; normalize ST arthrokinematics.</li> <li>• Supine progressing to standing PNF patterns, adding resistance as tolerated. Protect end range 90/90.</li> <li>• CKC progression – Quadruped, ball compression, counter weight shift, knee scapular push-ups, knee push-ups; all as tolerated. 1/2 to 3/4 ROM protecting the anterior shoulder capsule.</li> <li>• Therapist directed RS and perturbations in quadruped – bilateral progressing to unilateral-tri pod position.</li> </ul> <p><b>MANUAL INTERVENTION</b></p> <ul style="list-style-type: none"> <li>• STM and Joint mobilization to CT junction, GHJ and STJ as needed.</li> <li>• CR/RS to gain ROM while respecting repaired tissue.</li> <li>• Manual perturbations.</li> <li>• PNF patterns.</li> </ul>	<ul style="list-style-type: none"> <li>• Gradual progression to full P/AROM by week 10-12</li> <li>• Normalize GH/ST arthrokinematics.</li> <li>• Activate RC/SS with isometric and isotonic progression.</li> </ul>
<b>PHASE IV</b>	12 to 24	<p><b>EXERCISE PROGRESSION</b></p> <ul style="list-style-type: none"> <li>• Full range of motion all planes protecting end range 90/90.</li> <li>• Begin strengthening at or above 90° with prone or standing Y's, D2 flexion pattern and 90/90 as scapular control and ROM permit. Patient goals/objectives will determine if strengthening above 90° is appropriate.</li> <li>• Progress RC and scapular strengthening program.</li> <li>• Continue with closed chain quadruped perturbations; add open chain as strength permits.</li> <li>• Advance gym strengthening program maintaining anterior shoulder precautions with pressing and chest fly exercises.</li> <li>• Initiate plyometric and rebounder drills as appropriate.</li> <li>• RTS testing for interval programs (golf, tennis, etc.)</li> <li>• Follow-up examination with the physician (6 months) for release to full activity.</li> </ul> <p><b>MANUAL INTERVENTION</b></p> <ul style="list-style-type: none"> <li>• STM and Joint mobilization to CT junction, GHJ and STJ as needed.</li> <li>• CR/RS to gain ROM while respecting repaired tissue.</li> <li>• Manual perturbations.</li> <li>• PNF patterns.</li> </ul> <p><b>CRITERIA FOR RETURN TO PLAY</b></p> <ul style="list-style-type: none"> <li>• Full, pain-free ROM</li> <li>• Normal GH/ST arthrokinematics</li> <li>• &gt;90% MMT using handheld dynamometer</li> <li>• Full progression through interval program</li> <li>• Anticipated return to play for contact athlete is 4 months</li> <li>• Anticipated return to play for throwing athlete, swimmer and volleyball is 6-9 months.</li> </ul>	<ul style="list-style-type: none"> <li>• Gradual progression to full ROM with protection at end range 90/90</li> <li>• Normalize GH/ST arthrokinematics.</li> <li>• Advance gym strengthening program.</li> <li>• Begin RTS progression.</li> <li>• Evaluation with physician for clearance to full activity.</li> </ul>