

## SLAP LESION TYPE II REPAIR

Phase I: 0-3 weeks	(Immediate post-op maximum protected motion phase)
<b>Goals</b>	<ul style="list-style-type: none"> <li>• Protect anatomic repair</li> <li>• Prevent negative effects of immobilization</li> <li>• Diminish pain and inflammation</li> <li>• Gently begin AAROM per tolerance</li> </ul>
<b>Sling</b>	<ul style="list-style-type: none"> <li>• 24 hours/day for 3-6 weeks.</li> <li>• D/C per MD approval</li> </ul>
<b>Precautions</b>	<ul style="list-style-type: none"> <li>• No behind the back movements (avoid combined ext/add/IR)</li> <li>• No lifting or carrying of objects</li> <li>• No AROM for shoulder flexion, abd, or scaption until 4 wks.</li> <li>• No AROM for IR/ER until sling removed</li> <li>• No isolated resisted biceps contraction (elbow flexion or supination) for 6 wks</li> <li>• Avoid CKC exercises for 8 wks to minimize compression/shear forces</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>• Remove sling 3x/day for AAROM</li> <li>• Ice 15 minutes 3-5x/day if needed</li> </ul>
<b>PROM / AAROM Goals</b>	<ul style="list-style-type: none"> <li>• Initiate AAROM at 1 wk post-op. Gradually progress based on tolerance with goals to be met by 3 wks including: <ul style="list-style-type: none"> <li>- 90° of scaption/flexion</li> <li>- 15° of ER and 45° of composite IR in scapular plane (initiate in seated position and progress to supine per pt comfort)</li> </ul> </li> </ul>
<b>Immediate post-op exercises</b>	<ul style="list-style-type: none"> <li>• AROM for cervical spine, elbow, wrist, hand</li> <li>• Gripping activities without lifting</li> </ul>
<b>Exercises to initiate at 1 wk post-op</b>	<ul style="list-style-type: none"> <li>• Patient will primarily be doing a HEP with sling removed 3x/day for AAROM.</li> <li>• Codman's without weight</li> <li>• AAROM (guidelines listed above)</li> <li>• Sub-max pain-free isometric shld flexion, abd, extension, and ER/IR in scapular plane</li> <li>• Active scapular retraction</li> </ul>
Phase II: 4-6 weeks	(Intermediate moderate protection phase)
<b>Goals</b>	<ul style="list-style-type: none"> <li>• Protect anatomic repair</li> <li>• Prevent negative effects of immobilization</li> <li>• Diminish pain and inflammation</li> <li>• Gently progress AAROM per tolerance. Initiate AROM for scap/flex/abd</li> </ul>
<b>Sling</b>	<ul style="list-style-type: none"> <li>• D/C per MD approval</li> </ul>
<b>Precautions</b>	<ul style="list-style-type: none"> <li>• No lifting or carrying objects</li> <li>• Avoid behind the back movements</li> <li>• No isolated resisted biceps contraction (elbow flexion or supination) for 6 wks</li> <li>• Avoid CKC to minimize compression/shear forces for 8 wks</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>• Treatment emphasis on restoring PROM/AAROM/AROM based on guidelines provided below.</li> <li>• Patient can perform ADL's below shoulder height</li> <li>• Core stability and low-impact CV conditioning per patient request and MD approval</li> </ul>
<b>ROM for flexion/scaption/abduction</b>	<ul style="list-style-type: none"> <li>• Continue with gentle PROM/AAROM</li> <li>• Initiate AROM at 4 wk post-op with limit of 90° until Phase III</li> <li>• Goals for PROM/AAROM are as follows: 4wks: 0-90°    5 wks: 0-120°    6 wks: 0-140°</li> </ul>

<b>ROM for IR/ER:</b>	<ul style="list-style-type: none"> <li>Continue with gentle PROM/AAROM/AROM. Progress to 45° of abduction at wk 4, to 60° of abduction at 5 wks, to 90° of abduction at 6 wks</li> <li>Goals for PROM/AAROM are as follows <ul style="list-style-type: none"> <li>4 wks: ER 0-30°, IR 0-60° in scapular plane</li> <li>6 wks: ER 0-50°, IR 0-60° at 60° of abduction</li> </ul> </li> </ul>
<b>Interventions for wk 4:</b>	<ul style="list-style-type: none"> <li>Active warm-up: Codman's, UBE at 5 wks</li> <li>Prolonged end-range stretch if necessary</li> <li>Mobilizations / PROM / AAROM / AROM based on guidelines</li> <li>Therapeutic exercises: <ul style="list-style-type: none"> <li>Active scapular retraction</li> <li>Shoulder isometrics</li> </ul> </li> <li>Proprioceptive / neuromuscular control activities: <ul style="list-style-type: none"> <li>Sub-max rhythmic stabilizations in supine scapular plane for ER/IR, flexion /extension to facilitate co-contraction</li> </ul> </li> <li>Ice 15 minutes 3-5x/day, electric stimulation (IFC or NMES) if necessary</li> </ul>
<b>Additional interventions starting at wk 5:</b>	<ul style="list-style-type: none"> <li>Continue to improve PROM, AAROM, AROM</li> <li>Biofeedback to inhibit compensatory shoulder shrug</li> <li>Scapulothoracic strengthening: Supine protraction, rows with avoidance of extension past neutral, prone horizontal abduction in neutral rotation</li> </ul>
<b>Phase III: 6-12 weeks</b>	<b>(Minimal protection phase)</b>
<b>Goals</b>	<ul style="list-style-type: none"> <li>Preserve the integrity of the surgical repair</li> <li>Restore full ROM</li> <li>Restore muscle strength and balance</li> <li>Initiate gentle biceps resistance</li> </ul>
<b>Precautions</b>	<ul style="list-style-type: none"> <li>Avoid CKC until 8 weeks to minimize compression/shear forces</li> <li>Gradual return to activity depending on function requirements and MD approval</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>Emphasis on return of full ROM and initiating gentle strengthening</li> <li>Assess posterior capsule for tightness</li> <li>Strengthen using uni-planar movement and progress to multi-planar</li> <li>Emphasize scapular stabilization and rotator cuff strengthening</li> <li>Continue with core stability and CV endurance</li> </ul>
<b>ROM Goals:</b>	<ul style="list-style-type: none"> <li>PROM/AAROM: full motion in all planes by 10 wks. Limit ER to &lt;90° in 90/90 position until wk 9</li> <li>AROM: full in all planes by 12 weeks including ER in 90/90 position</li> </ul>
<b>Interventions:</b>  (Examples of exercises but not an all-inclusive list)	<ul style="list-style-type: none"> <li>Active warm-up: UBE, rower (avoid extension beyond neutral until 8 wks)</li> <li>Prolonged end-range stretch and accessory mobilizations if necessary</li> <li>Scapulothoracic strengthening: supine protraction press or chest press (+), rows in full ROM, prone horizontal abduction in neutral rotation, scaption</li> <li>Glenohumeral strengthening: Sidelying ER, forward flexion, isotonic IR/ER in scapular plane, isokinetic IR/ER in scapular plane</li> <li>Total arm strengthening: Triceps extensions, biceps curls (light resistance with reps of 15 with gradual progression)</li> <li>Proprioceptive/Kinesthesia activities: rhythmic stabilizations, alternating isometrics, body blade</li> <li>Cryotherapy, electrical stimulation, and biofeedback, and if necessary</li> </ul>

<b>Additional interventions starting at wk 8:</b>	<ul style="list-style-type: none"> <li>• Start CKC exercises: quadruped (ie: euroglide, cuff link, wall push-ups, partial prone walk-outs)</li> <li>• Lateral pull downs to chest</li> <li>• Biceps curls moderate resistance with reps of 8-10</li> </ul>
<b>Additional interventions starting at wk 10-12</b>	<ul style="list-style-type: none"> <li>• Progress strengthening depending on functional demands (ex: athlete or overhead laborer)</li> <li>• Full prone walk-out</li> <li>• 2 handed plyometrics with &lt; full body weight</li> <li>• PNF patterns</li> </ul>
<b>Phase IV: 12 + weeks</b>	<b>(Advanced strengthening phase)</b>
<b>Goals</b>	<ul style="list-style-type: none"> <li>• Establish and maintain full ROM, mobility, and stability</li> <li>• Progress muscular strength, power, and endurance</li> <li>• Initiate higher level activities depending on functional demands and MD approval</li> </ul>
<b>Interventions</b>	<ul style="list-style-type: none"> <li>• Continue and progress program initiated in Phase III</li> <li>• Initiate single arm plyometrics if needed</li> <li>• Progress to 90/90 strengthening for IR/ER</li> </ul>
<b>Isokinetic IR/ER testing</b>	<ul style="list-style-type: none"> <li>• Wk 16-20 at 30/30/30 position or 90/90 (if appropriate)</li> </ul>
<b>Return to work/sport</b>	<ul style="list-style-type: none"> <li>• Based on MD approval, full ROM, minimal pain at rest or with activity, isokinetic strength and functional testing at 90 % compared to uninvolved side</li> <li>• 5-6 months: Return to interval throwing program per MD approval</li> </ul>