



ORTHOPEDIC
ASSOCIATES
of HARTFORD

Superior Labrum Anterior Posterior (SLAP) Repair (Type I & III) Return to Sport Protocol

General Rehabilitation Guidelines:

- A specific Rehabilitation program is dependent on the severity of the pathology/injury and should specifically manage the healing and requirement of the procedure the patient underwent (Debridement vs. Repair), in addition to other concomitant injuries/procedures performed
- The emphasis of the SLAP protocol should be on restoration and enhancement of the dynamic stability of the glenohumeral and scapulo-thoracic joints while protecting the healing tissues from adverse stress
- Hypersensitivity in the axillary nerve distribution is a common occurrence
- For patients who sustained a SLAP lesion secondary to a fall/compression (MVA, Fall on out-stretched arm), weight-bearing exercises should be avoided to minimize compression and sheer on the superior labrum
- Patients who sustained a traction-type injury should avoid heavy resistance or excessive eccentric biceps contractions
- Patients with peel-back lesions (typically overhead athletes), should avoid excessive amounts of shoulder ER while the SLAP lesion is healing
- **SLAP Classifications:** (basic 4, recently additional classifications added):
 - **Type I:** Isolated Fraying of the superior labrum, with a firm attachment of the superior labrum to the glenoid (typically degenerative in nature).
 - **Type II:** (Most common, especially with overhead athletes): A detachment of the superior labrum and the origin of the long head of the biceps brachii tendon from the glenoid creating instability of the biceps-labral anchor.
 - **Type III:** A bucket-handle tear of the superior labrum with an intact biceps insertion.
 - **Type IV:** (The least common of the 4 main types): A bucket-handle tear of the superior labrum that extends into the biceps tendon. This type will also have instability at the bicep-labrum anchor.
 - **Type V:** SLAP lesions with the presence of a Bankart lesion of the anterior capsule extending into the anterior superior labrum.
 - **Type VI:** A disruption or separation of the biceps anchor with an anterior posterior superior labral unstable flap tear.
 - **Type VII:** Lesions that extended anteriorly to involve the area inferior to the middle glenoid ligament.
 - **Type VIII:** A type II SLAP tear with a posterior labral extension to the 6 o'clock position.
 - **Type IX:** Is a circumferential lesion involving the full 360° of labral attachment to the glenoid rim.
 - **Type X:** In involves a superior labral tear combined with a posteroinferior labral tear (a reverse Bankart lesion).
 - * It is common to have concomitant injuries with SLAP lesions, so these classifications can be beneficial for creating the most appropriate treatment plan*

Type I and Type III Repair (Debridement):

- This protocol can be aggressive at restoring motion secondary to the biceps-labral anchor being intact and stable.

Phase I Restoration of Motion Phase (approximately 1-10 days):

- Goals:
 - Achieve normal non-painful shoulder ROM
 - Prevent muscle atrophy
 - Decrease pain and inflammation
- Patient Education:
 - The sling is worn 3-4 days following surgery
- Treatment:
 - **Modalities:** PRN
 - Desensitization techniques for axillary nerve distribution, if present
 - PROM and AAROM may be begun immediately, with full PROM expected to be restored within 10-14 days post-op
 - **Strengthening:**
 - Sub-max Isometric strengthening (all planes)- pain-free during the first 7 days post-op.
No Biceps isometrics for 5-7 days post-op
 - Light tubing may be initiated for ER/IR at 0° abduction late in this phase (approximately 7-10 days post-op)
 - **Criteria to Progress to Phase II:**
 - Full PROM
 - Minimal pain and tenderness
 - 4/5 MMT of IR, ER, and Flexion

Phase II: Intermediate Phase: (approximately 10 days-4 weeks post-op):

- Goals:
 - To regain and improve muscular strength
 - Normal Joint arthrokinematics-
 - Improve neuromuscular control of the Shoulder, Scapula, Trunk, and Hips
- Treatment:
 - Assess core stability and dysfunction
 - Initiate neuromuscular control exercises for trunk/core, hips, and scapulothoracic areas
 - Initiate proprioceptive training exercises
 - Teach basic Dynamic Stretching Program (total body)
 - Light isotonic strengthening for shoulder and scapulothoracic musculature, (with the exception of the biceps for the first 2 weeks post op), with resistance tubing and dumbbells. Promoting dynamic Shoulder Stability
 - Thrower's Ten program may be begun approximately week 3-4 (**See Attached Sheets**)
 - Toward the end of this phase high emphasis is placed on rotator cuff and scapular strengthening
- Criteria to Progress to Phase III
 - Full non-painful PROM and AROM
 - No Pain or Tenderness with Exercises and ADL's
 - Comparative strength of 70% of the contralateral uninjured UE

Phase III- The Dynamic Strengthening Phase- (approximately 4-6 weeks post-op)

- Goals:

- Improve Strength, Power, and Endurance
- Improve neuromuscular control
- Begin preparation to initiate throwing activities/exercises with the patient
- Patient is evaluated with the Functional Movement Screen (FMS) and Y-Balance/ Star Excursion assessments for baseline values toward the end of Phase III

- Treatment:

- Continue Throws Ten Program- Progressing to the Advanced Thrower's Ten program (**See Attached Sheets**), when tolerated
- Continue Strength training with weights, with the addition of the supraspinatus and deltoid-
 - Patient should avoid excess shoulder extension with exercises such as bench press and seated rows to minimize stress on the shoulder
- Progress tubing exercises to 90° of flexion or abduction for IR and ER exercises- Sets should be performed at slow and fast paces
 - Begin tubing exercises for biceps strengthening
- Initiate UE Plyometric Phase I (Two-Handed) protocol at approximately 4-5 weeks post-op (* if criteria for phase III was met), then progress to UE Plyometric Phase II 1-2 weeks later (**See Attached Sheets**)

- Criteria for Progression to Phase IV

- Full PROM
- No pain or tenderness with exercises, ADL's, or advanced strengthening and plyometric activities
- Strength comparison of $\geq 80\%$ to the contralateral uninjured UE
- Score on the FMS of ≥ 14 , Demonstrate improvement in the Y-Balance/ Star Excursion Balance Test
- Subjective Evaluation Form score or minimal detectable change improvement

Phase IV- Return to Activity Phase (*approximately 7+ weeks post-op) ***Dependent on concomitant injuries/procedures**

- Goals:

- To progressively increase activities/exercises to assess and prepare patient for return to sport specific activities

- Treatment:

- Continue all exercises from Phase III that are still needed
- Continue/ Progress Core, Hip, And Scapular Stabilization Exercises
- Begin Phase III UE plyometric protocol (**See Attached Sheets**)
- Initiate and evaluate with LE Plyometric Protocol (**See Attached Sheets**)
- Teach Sport Specific Dynamic Stretching Program- (**See Specific Sport Dynamic Stretching Sheet**)
- Continue Advanced Thrower's Ten program
- Initiate the Interval Running Protocol- **See Interval Running Protocol**
- Patient may begin specific sport skill activities/ Initiate interval sport programs, between weeks 8-12, depending on concomitant injuries

See Return to Specific Sport Protocol For Criteria for Clearance for Return to Sport