

This protocol has been adopted from Brotzman & Wilk, which has been published in Brotzman SB, Wilk KE, *Clinical Orthopedic Rehabilitation*. Philadelphia, PA: Mosby Inc; 2003. The Department of Rehabilitation Services at Brigham & Women's Hospital has accepted a slight modification of this protocol (time frames) as our standard protocol for the management of patient's s/p arthroscopic debridement of type I and III SLAP lesions.

## **Arthroscopic Debridement of SLAP Tear Type I or III Protocol**

### **Charles Metzger, M.D.**

*Instructions to patient: Take this written protocol to your therapist. If you do not have therapy scheduled to start within 1 week of seeing Dr. Metzger, please call Dr. Metzger's office so that any problems or conflicts can be resolved and therapy begun. Dr. Metzger thinks that therapy is very important to your good recovery, and that your outcome will not be as good if you do not have the therapy as prescribed.*

*Instructions to therapist: Below are specific guidelines which are just that-guidelines. Every patient is different and there is room for adjusting protocol depending on progress. There should NEVER be ANY pain during ANY part of the rehabilitation. Pain causes inflammation which causes scar and stiffness and guarding and worsens the long-term prognosis.*

The intent of this protocol is to provide the clinician with a guideline of the post-operative rehabilitation course of a patient that has undergone an arthroscopic debridement of a type I or III SLAP lesion. It is no means intended to be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam/findings, individual progress, and/or the presence of post-operative complications. If a clinician requires assistance in the progression of a post-operative patient they should consult with Dr. Metzger.

**Type I SLAP lesions** have degenerative fraying of the superior labrum but the biceps attachment to the labrum is intact. The biceps anchor is intact.

**Type III SLAP lesions** involve a bucket-handle tear of the superior labrum with an intact biceps anchor.

Generally, patients with Type I and Type III SLAP lesions typically require simple arthroscopic debridement of the labrum and do not require anatomic repair. This generally means that rehabilitation is more accelerated for these repairs. There, however, are cases in which the patient has other pathology, such as rotator cuff pathology, which may change the rehabilitation plan.

**Progression to the next phase based on Clinical Criteria and/or Time Frames as Appropriate.**

**Phase I – Motion Phase (Day 1-14):**

**Goals:**

- Re-establish nonpainful range of motion (ROM)
- Minimize muscular atrophy
- Decrease pain/inflammation

**Sling**

- Patient will be in a sling for 5-7 days postoperatively for comfort.

**Passive range of motion/active assisted range of motion (PROM/AAROM)**

- Pendulums/circumductions
- Pulleys (begin when patient has adequate glenohumeral elevation: 90-110°)
- Cane exercises
- flexion/extension
- abduction/adduction
- External rotation/internal rotation (ER/IR) (begin at 0° abduction, progress to 45°, then 90°)
- Self-stretches (capsular stretches)

**Strengthening**

- Isometrics
- **No biceps isometrics for five to seven days postoperative**
- May initiate band exercises for ER/IR at 0° abduction late phase (seven to 10 days postoperative)

**Decrease pain and inflammation**

- Ice, medication, modalities

**Criteria to progress to phase II**

- Full PROM
- Minimal pain and tenderness

**Phase II – intermediate phase (weeks 2-4)**

**Goals**

- Enhance muscular strength
- Normalize arthrokinematics
- Improve neuromuscular control of shoulder complex

**Week 2:**

- Begin AROM all directions to tolerance

### **Week 3:**

#### **Exercises**

- Initiate isotonic program for shoulder and scapulothoracic musculature with dumbbells as appropriate
  - resisted ER/IR at 0° abduction
  - sidelying ER, abduction, horizontal abduction and adduction
  - prone rowing
  - PNF manual resistance with dynamic stabilization

#### **Normalize arthrokinematics of shoulder complex**

- Joint mobilization
- Continue stretching of shoulder (ER/IR at 90° of abduction)
- Initiate neuromuscular control exercises
- Initiate proprioception training
- Initiate trunk exercises
- Initiate UE endurance exercises

#### **Decrease pain/inflammation**

- Continue use of modalities prn

### **Week 4:**

#### **Exercises**

- Begin Thrower's ten program (see protocol)
- Emphasis on rotator cuff and scapular strengthening
- Dynamic stabilization drills

#### **Criteria to enter phase III**

- Full nonpainful AROM and PROM
- No pain or tenderness
- 4+/5 strength in deltoid and rotator cuff

### **Phase III dynamic strengthening phase, advanced strengthening phase (week 5-7)**

#### **Goals**

- Enhance strength, power, and endurance
- Enhance neuromuscular control
- Begin gentle sport specific preparation activities

#### **Exercises**

- Continue thrower's ten program (see thrower's ten protocol)
- Continue dumbbell strengthening (rotator cuff, deltoid)
- Initiate strengthening exercises in the 90°/90° for ER/IR (slow/fast sets)
- Strengthening of scapulothoracic musculature
- Biceps strengthening
- Initiate plyometrics (two hand drills progress to one hand drills)

- Diagonal patterns (PNF)
- May initiate isokinetic strengthening
- Continue endurance exercises: neuromuscular control exercises
- Continue proprioception exercises

#### **Criteria for progression to phase IV**

- Full ROM
- No pain or tenderness
- Satisfactory clinical examination

#### **Phase IV: Return to Activity Phase (Week 8 and Beyond)**

##### **Goal**

- Progressively increase activities to prepare patient for full functional return

##### **Exercises**

- Initiate intervals sport program (e.g., throwing, tennis)
- Continue all exercises as in phase 3 (throw and train on same day), (lower extremity and UE on opposite days).
- Progress interval program

Wilk K, et al. Current Concepts in the Recognition and Treatment of Superior Labral (SLAP) Lesions. JOSPT 2005;35:273-291.