

# **Altru Advanced Orthopedics Arthroscopic Superior Labral (SLAP) Repair Protocol**

The intent of this protocol is to provide the therapist with a guideline for the post-op rehab of a patient who has had an arthroscopic superior labral (SLAP) repair. It is not intended to be a substitute for appropriate clinical decision making regarding the progression of a patient's rehab. The actual therapy plan of care must be based on the mechanism of injury, surgical approach, physical exam and findings, individual progress, any post-op complications, and/or co-morbidities. If a therapist needs assistance or has questions regarding the progression of a patient post surgically they should consult the referring surgeon.

## **PHASE I: Weeks 0-6**

Precautions:

- No lifting of objects, no functional use of affected hand, no driving
- Minimal computer work, 15-20 minutes and no more than 2 hours total (affected arm must be in a sling)
- No extension or horizontal abduction beyond body for 4 weeks
- Protection of the biceps for 6-8 weeks (avoiding shoulder flex with elbow fully extended, no resisted supination or elbow flex)
- Limit ER to 40° in neutral for 4 weeks, avoid abduction with ER for 6 weeks
- No closed chain positions

Goals:

- Maintain integrity of the reconstruction
- Re-establish nonpainful ROM
- Decrease pain and inflammation
- Activate stabilizing muscles

Immobilization:

- Sling with pillow for 4-6 weeks
  - Sling may be removed for exercises as instructed and bathing/hygiene

Therapeutic Exercise:

### **0-2 Weeks:**

1. AAROM-AROM elbow, wrist, and hand
2. Hand-grip exercises
3. PROM
  - Flex, scaption, abduction, IR, and ER within limits
  - Pendulum exercises
4. AAROM
  - Flex and scaption to 60-75° by week 2
  - ER/IR in scapular plane, ER to 10-15°, IR to 45°

5. Strengthening
  - Submaximal painfree, shoulder isometrics
    - Neutral position ER, IR, abduction, flexion, extension, adduction
  - Scapular exercises
    - Scapular retraction, protraction, depression
6. No isolated biceps contraction
7. No active ER, extension, or elevation

#### 3-4 Weeks:

1. PROM/AAROM- with wand/cane or assist of opposite UE
  - Progression as tolerated by patient:
    - Flexion and scaption to 90°
    - Abduction to 75-85°
    - ER in scapular plane to 25-30°
    - IR in scapular plane to 55-60°
2. Strengthening
  - Rhythmic stabilization within limits above
3. No active ER, extension, or elevation

#### 5-6 Weeks:

\*D/C sling at 6 weeks post-op, use sling in crowds or at night as needed after 6 weeks.

1. PROM/AAROM
  - Flexion to 150°
  - ER at 45° of abduction to 45-50°
    - Progress to light ROM at 90° of abduction
  - IR at 45° of abduction to 55-60°
    - Progress to light ROM at 90° of abduction
2. Begin AROM of shoulder, all planes, with good mechanics
  - Short arc flex and abduction 0-45°
  - Extension 0-45°
  - Elbow extension, elbow flex at 6 weeks (no biceps strengthening)
3. Begin gentle stretching exercises as needed
4. Strengthening:
  - PNF with manual resistance
  - Prone periscapular exercises (Y, T, W, I)
  - Band/tubing for ER/IR at 0° of abduction
  - Closed chain rhythmic stabilization, weight shifts, balance, progressing elevation as tolerated.
5. Walking/stationary bike with sling on
6. No swimming or running

#### Modalities:

- Cryotherapy as needed
- Electrical Stimulation as needed

Manual Therapy:

- Joint, capsule, soft tissue mobilization as needed

**Goals to Achieve for ROM by 5-6 weeks post-op:**

Flexion/scaption	0-150°
Abduction	0-85°
ER at 0° to 45° ABD	0-50°
IR at 0° to 45° ABD	0-60°

**PHASE II: Weeks 7-12**

Precautions:

- No heavy lifting of objects
- No supporting of body weight by hands and arms
- No sudden jerking motions
- Gradual initiation of biceps strengthening 7-8 weeks
- No PROM for combined abduction with ER or extension

Goals:

- Full nonpainful AROM with good scapulohumeral rhythm
- Full rotator cuff strength in neutral
- Improve neuromuscular control and proprioception
- Return to ADL activities

Therapeutic Exercise:

7-9 Weeks:

1. Continue with exercises in phase I as needed
2. Progress PROM/AAROM/AROM all directions, as tolerated
  - Flexion, scaption, abduction to 180°
  - ER at 90° abduction to 90-95°
  - IR at 90° abduction to 70-75°
  - Extension to tolerance
3. Strengthening:
  - Initiate an isotonic rotator cuff, periscapular, and shoulder strengthening program
  - Continue PNF strengthening
  - Initiate Thrower's Ten Program
  - UBE at 7 weeks
  - Beginning level plyoball below shoulder height bilat-bilat progressing to single hand, wall dribble, Rebounder toss

### 10-12 Weeks:

1. Continue stretching exercises
  - Sleeper posterior capsule stretch for IR deficit
    - IR 85° in 90° of abduction
  - Progress ROM for functional demands (overhead athlete/worker)
    - ER at 90° of abduction: 110-115° for throwers (weeks 10-12)
2. Strengthening:
  - Continue all strengthening exercises
    - Progress isotonic strengthening
    - Progress ER to thrower's motion
  - Rhythmic Stabilization: closed chain with hand on a ball progressing to open chain in multiple planes of movement
  - Plyometrics: below shoulder height
    - Wall dribble- 2-1 hands, ER wall dribble, Rebounder
3. Jog at 12 weeks

### Modalities:

- Cryotherapy as needed
- NMES as needed

### Manual Therapy:

- Joint, capsule, soft tissue mobilization as needed

### **Criteria to enter PHASE III:**

- **Full nonpainful AROM**
- **Good stability**
- **Strength grade good or better**
- **No pain or tenderness**

### **PHASE III: Weeks 13-20**

### Precautions:

- Caution with butterfly strokes, and other stressful strokes when swimming
- No pec/dumbbell flys bringing arm past neutral extension at the shoulder
- No bench-press with bringing the bar down to your chest
- No lat pull downs bringing bar behind head

### Goals:

- Establish and maintain full PROM and AROM
- Improve muscle strength, power, and endurance
- Gradually initiate functional activities

### Therapeutic Exercise:

### 13-16 Weeks:

1. Continue stretching exercises
  - Capsular stretches
  - Maintain thrower's motion
2. Strengthening:
  - Initiate biceps and supination resisted exercises
  - Continue all strengthening exercises
    - Thrower's Ten or fundamental exercises
    - Endurance training
  - Progress plyometric program
  - Progress closed chain activities for proprioception, neuromuscular re-ed
3. Light swimming-half speed, half golf swings, throwing, racquet swings- ground strokes

#### 17-20 Weeks:

1. Continue all stretching exercises
2. Continue to progress all strengthening exercises
3. Continue Thrower's program
4. Continue plyometric program
5. May initiate interval sport program (throwing, racquet swings, golf swings, swimming etc) as well as work specific activities

#### Modalities:

- Cryotherapy as needed
- NMES as needed

#### Manual Therapy:

- Joint, capsule, soft tissue mobilization as needed

#### **Criteria to enter PHASE IV:**

- **Full nonpainful AROM**
- **Good stability**
- **Strength 75-80% of contralateral side**
- **No pain or tenderness**

#### **PHASE IV: Weeks 20-26**

#### Precautions:

- Caution with butterfly strokes, and other stressful strokes when swimming
- No pec/dumbbell flys bringing arm past neutral extension at the shoulder
- No bench-press with bringing the bar down to your chest
- No lat pull downs bringing bar behind head

#### Goals:

- Maintain shoulder mobility
- Enhance muscle strength, power, and endurance

- Progress functional activities

Therapeutic Exercise:

1. Continue flexibility exercises
2. Continue to progress isotonic strengthening program
  - Scapular and RTC core exercises
3. Progress plyometric strengthening
4. Progress interval sport/work programs

**Criteria to enter PHASE V:**

- **Full functional AROM**
- **Good shoulder stability**
- **Strength 75-80% or better of contralateral side**
- **No pain or tenderness**

**PHASE IV: Weeks 27-6 months**

Precautions:

- Caution with butterfly strokes, and other stressful strokes when swimming
- No pec/dumbbell flys bringing arm past neutral extension at the shoulder
- No bench-press with bringing the bar down to your chest
- No lat pull downs bringing bar behind head

Goals:

- Maintain shoulder mobility, stability, and strength
- Gradual return to sport and work activities

Therapeutic Exercise:

1. Gradually progress sport and work activities to unrestricted participation
  - Including contact and collision sports
2. Continue stretching and strengthening program