Rehabilitation Protocol:
SLAP
Superior Labral Lesion Anterior to Posterior

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Overview

The shoulder labrum is a fibrocartilaginous rim attached to the margin of the glenoid cavity. It deepens the cavity by approximately 50%. Approximately 40% of the long head of biceps tendon (LHBT) attaches to the labrum. A superior labrum anterior and posterior (SLAP) tear involves a tear in the 10 o’clock to 2 o’clock positions on the glenoid and frequently involves the LHBT.

A SLAP tear can be caused by an acute injury such as a fall onto an outstretched arm, a shoulder dislocation or a motor vehicle accident or it may be due to repetitive overhead activities. Labral fraying is also part of the normal aging process.

Surgical intervention may involve debridement or repair depending on the size of the tear, the mechanism of injury and the age of the patient. The LHBT may be reattached, or may have undergone a tenodesis or tenotomy.

It is important for the therapist to work closely with the surgeon to understand the surgical intervention, which will guide the rehabilitation process.¹

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Phase I Protective Phase
0–4 Weeks

Goals
- Protect anatomic repair
- Allow healing of repaired labrum
- Initiate early protected and restricted range of motion
- Minimize muscular atrophy
- Decrease pain/inflammation
- Promote dynamic stability

Precautions
- Sling for 4 weeks during day and at night
- NO active ER, extension or elevation
- NO isolated activation of biceps
- NO jogging, running, jumping
- NO long head bicep tension for 6 weeks to protect repaired tissues - avoid long lever arm with shoulder flexion
- NO resisted supination or resisted elbow flexion
- NO early pendulums

Weeks 0–2
- Cryotherapy
- AROM C-spine, wrist and hand
- PROM elbow flexion, supination and pronation as tolerated

Weeks 3–4
- Continue cryotherapy
- PROM/AAROM:
  - Flexion as tolerated
  - Abduction to 80°
  - ER in neutral as tolerated
  - ER/IR in scapular plane:
    - ER: 30°
    - IR: 60°
- D/C sling at 4 weeks unless advised by surgeon

Therapeutic Exercise
PROM: As indicated above
Active:
Scapular retraction
C-spine, wrist and hand
Ball squeezes
Scapular Rhythmic stabilization (RS)
Walking, stationary bike wearing sling
3 Weeks:
Sub-maximal isometric exercise at 0° abduction:
  - Flexion
  - Abduction
  - IR/ER
Overhead pulley/Wand AAROM 4 weeks
Phase II – Intermediate Phase
5-7 weeks after surgery

Goals

- Gradual increase in ROM
- Improve strength
- Decrease pain/inflammation
- Promote dynamic stability

Precautions

- Gentle mid-range ER in scapular plane, gradually progress to ER in abduction
- Avoid resisted supination during ER to protect biceps
- Progress active motion only when patient demonstrates scapulohumeral rhythm
- No biceps strengthening until 6 weeks

Weeks 5–7
D/C Sling at 4 weeks unless advised by surgeon

PROM → AROM → AROM (with scapulohumeral rhythm)

- Continue AAROM overhead pulleys/wand
- Shoulder flexion as tolerated (initiate in supine)
- Abduction/Scaption as tolerated (initiate in sidelying)
- ER at 0° abduction as tolerated
- ER/IR in scapular plane:
  - ER: 50°
  - IR: 60°
- Gentle IR behind back
- At 6 weeks begin light and gradual ER at 90° abduction progressing to 45° ER
  - Initiate AROM elbow

Therapeutic Exercise
Active-assisted progressing to active forward flexion and scaption with scapulohumeral rhythm
Sidelying ER

Prone: 6 weeks
  - Prone row
  - Prone extension
  - Prone T

6 weeks
Theraband IR/ER
Lattissimus strengthening below 90° elevation (never behind head)

7 weeks
Deloaded Scapular Stabilization
≤ Phase III Early Strengthening
8–12 Weeks after surgery

Goals
- Protect repair
- Gradually restore full range of motion
- Increase strength
- Improve neuromuscular control
  Enhance proprioception and kinesthesia

Precautions
- Gentle mid-range ER in scapular plane, gradually progress to ER in abduction
- Continue to protect biceps
- Progress only when patient demonstrates scapulohumeral rhythm
- Gentle biceps strengthening only

Weeks 8-12
Week 8-9:
- Gradually progress to Full ROM:
  - G/H mobilization as needed
    - Flexion to 180°
    - ER to 90° at 90° abduction
    - IR full at 90° abduction

Therapeutic Exercise
  Sleeper stretch if posterior capsule tightness
  ER in scapular plane gradually progress to ER in abduction
  Wall slide
  IR behind back
  Horizontal adduction
  Sidelying IR at 90° flexion
  PNF patterns with tubing

Week 9:
  Hands behind head starts
  Theraband exercises:
    Scapular Stab, ER, IR forward, punch, shrug, dynamic hug, “W”’s Theraband exercises

Week 11:
  Seated row
  Dynamic exercises
  Continue phase II exercises
  Progressive Resistive Exercises 1-3 lb. as tolerated
  Prone Y
  Continue rhythmic stab
  Continue proprioception drills
  Scapulohumeral rhythm exercises
Phase IV
12-16 Weeks after surgery

Goals

- Full ROM
- Improve: strength, power and endurance
- Improve neuromuscular control
- Improve dynamic stability

Precautions

- NOT ready for return to sports
- Weight training precautions: Never drop elbows below plane of body “Always see elbows”
- No lat pulls behind head
- Continue to avoid excessive or forceful extension and ER

Weeks 12-16

- Full ROM
- Continue previous stretches

Therapeutic Exercise

Continue phase III exercises
Progress bicep curls
Plyometric exercises:
Rebounder throws arm at side
Wall dribbles overhead
### Phase V
16-20 Weeks after surgery

<table>
<thead>
<tr>
<th>Goals</th>
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<td>• Progressively increase activities to prepare patient for unrestricted functional return</td>
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### Weeks 16-20

- Full ROM

**Therapeutic Exercise**

Continue above

**Plyometric Exercise:**

- Add rebounder throws with decelerations
- Wall dribbles at 90°
- Wall dribble circles

**Interval sports programs can begin per MD**

AAROM = active-assisted range of motion, ADL = activity of daily living, AROM = active range of motion, PROM = passive range of motion, ER = external rotation, IR = internal rotation, ROM = Range of Motion G/H = glenohumeral
### Rehabilitation Protocol for Superior Labral Lesion Anterior to Posterior: Summary Table

<table>
<thead>
<tr>
<th>Post-op Phase/Goals</th>
<th>Range of Motion</th>
<th>Therapeutic Exercise</th>
<th>Precautions</th>
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<td><strong>Weeks 0-2</strong></td>
<td>Cryotherapy&lt;br&gt;AROM C-spine, wrist and hand&lt;br&gt;PROM elbow flexion, supination and pronation as tolerated</td>
<td>Sling for 4 weeks during day and at night&lt;br&gt;NO active ER, extension or elevation</td>
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<td>Goals: Protect anatomic repair</td>
<td><strong>Weeks 3-4</strong>&lt;br&gt;PROM/AAROM&lt;br&gt;Flexion as tolerated&lt;br&gt;Abduction to 80°&lt;br&gt;ER in neutral as tolerated&lt;br&gt;ER/IR in scapular plane:&lt;br&gt;ER: 30°&lt;br&gt;IR: 60°</td>
<td>-Passive and Active-assisted ROM:&lt;br&gt;Active:&lt;br&gt;-Scapular retraction&lt;br&gt;-C-spine, wrist and hand AROM&lt;br&gt;-Ball squeezes&lt;br&gt;-Scapular Rhythmic stabilization (RS)&lt;br&gt;-Walking, Stationary Bike wearing sling&lt;br&gt;<strong>3 weeks:</strong>&lt;br&gt;-Sub maximal isometric exercise at 0° of abduction: flexion, abd, IR &amp; ER&lt;br&gt;<strong>4 weeks</strong>&lt;br&gt;Overhead pulley/Wand AAROM</td>
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5 to 7 weeks after surgery |
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| Flexion as tolerated  
(initiate in supine) |
| Scaption as tol  
(initiate in sidelying) |
| Abduction as tol.  
(initiate in sidelying) |
| ER in neutral as tol.  
ER/IR in scapular plane |
| ER: 50°  
IR: 60° |

*At 6 weeks begin light and gradual ER at 90° abduction progressing to 45° ER*

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Sidelying ER |
| Continue AAROM overhead pulleys/wand  
Shoulder flexion as tolerated (initiate in supine) |
| Abduction/Scaption as tolerated (initiate in sidelying)  
ER at 0° abduction as tolerated |
| Gentle IR behind back |

**6 weeks**

**Prone:** row, extension, “T”

| Theraband IR/ER  
Lattissimus strengthening below 90° elevation (never behind head) |
| Begin light and gradual ER at 90° abduction progressing to 45° ER |
| Initiate AROM elbow |

**7 weeks**

| Deloaded Scapular Stabilization |

<p>| Gentle mid-range ER in scapular plane, gradually progress to ER in abduction |
| Do not allow pt to supinate during ER to protect biceps |
| Progress only when patient demonstrates scapulohumeral rhythm |
| NO biceps strengthening until 6 weeks |</p>
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- Plyometric exercise:  
- Add rebounder throws with  
- Decelerations  
- Wall dribbles at 90º,  
- Wall dribble circles | Weight training precautions |
|---|---|---|
| **16-20 weeks after surgery**  
**Goals:**  
Progressively increase activities to prepare patient for unrestricted functional return | **Interval sports programs can begin per MD**  
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