SHOULDER SUPERIOR LABRUM ANTERIOR TO POSTERIOR (SLAP) TYPE II REPAIR POST-OPERATIVE GUIDELINES

The following post-operative shoulder SLAP stabilization guidelines were developed by HSS Rehabilitation and are categorized into five phases with the ultimate goal for returning the athlete to full competition. They can be used for patients undergoing superior labral procedures with attention given to exact location and size of repair as well as any concomitant procedures. It is important that full range of motion is restored while respecting soft tissue healing. Classification and progression are both criteria-based and time based due to the healing constraints of the human body. The first phase is focused on soft tissue healing and maintenance of pain-free range of motion (ROM). Phases two and three are focused on building foundational strength and stability which will allow the athlete to progress to phase four which includes plyometric exercises. With the completion of phase four the athlete will be able to start the final phase which includes interval sports programs. Cardiovascular endurance, hip and core strengthening should be addressed through the rehabilitation process. The clinician should use their skilled judgement and decision making as the athlete advances as all progression may not be linear.

FOLLOW SURGEON MODIFICATIONS AS PRESCRIBED

SHOULDER SUPERIOR LABRUM ANTERIOR TO POSTERIOR (SLAP) TYPE II REPAIR POST-OPERATIVE GUIDELINES

Phase 1: 0-1 Week

PRECAUTIONS

- Sling for 3 weeks (as per surgeon guidelines)
- No biceps strengthening for 6 weeks
- If combined with biceps tenodesis, no biceps strengthening for 8 weeks
- No forced passive range of motion (PROM)
- Avoid painful activities

ASSESSMENT

- Quick Disabilities of Arm, Shoulder & Hand (Quick DASH)
- Numeric Pain Rating Scale (NPRS)
- Assessment of incision
- Cervical mobility
- Shoulder
- Distal upper extremity mobility
- Palpation
- Static scapular assessment (Kibler Grading)
- Posture assessment

TREATMENT RECOMMENDATIONS

- Patient education
- Gripping and hand active range of motion (AROM)
- Postural awareness
- Scapular retraction
- Elbow AROM
- Wrist AROM: flexion/extension/pronation/supination
- ROM
    - Week 1: PROM: external rotation (ER) to neutral, elevation in scapular plane to 60°

CRITERIA FOR ADVANCEMENT

- Decreasing discomfort at rest

EMPHASIZE

- Protection of repair
- Reduction of tissue irritability
- Prevention of muscle atrophy

SHOULDER SUPERIOR LABRUM ANTERIOR TO POSTERIOR (SLAP) TYPE II REPAIR POST-OPERATIVE GUIDELINES

Phase 2: Weeks 2-5

PRECAUTIONS

- Sling for 3 weeks (as per surgeon guidelines)
- Monitor for shoulder stiffness
- No biceps strengthening for 6 weeks
- If combined with biceps tenodesis, no biceps strengthening for 8 weeks
- No forced PROM
- No painful activities

ASSESSMENT

- Quick DASH
- NPRS
- Assessment of incision
- Cervical mobility
- Thoracic mobility
- Shoulder PROM
- Palpation
- Static/dynamic scapular assessment (Kibler grading)

TREAMENT RECOMMENDATIONS

PROM Goals – Do not force ROM but do assess for stiffness

- Week 2-3
    - Elevation in scapular plane: 90°
    - ER in scapular plane: 5°-10°
    - Internal rotation (IR) in scapular plane: 30°-45°
- Week 4
    - Elevation in scapular plane: 90°-100°
    - ER in scapular plane: 25°-30°
    - IR in scapular plane: 50°-60°
- Week 5-6
    - Elevation in scapular plane: 120°-145°
    - ER in scapular plane: 40°-60°
    - IR in scapular plane: 50°-60°
- Abduction
    - 0°-90° first 6 weeks (gentle motion)

Therapeutic Exercises

- Week 2
  - Scapular Isometrics
  - Elbow AROM
  - Shoulder active assisted ROM (AAROM)
- Week 3
  - Rotator cuff (RC) isometrics
  - Rhythmic stabilization ER/IR with physical therapist
- Week 4
  - Continue RC isometrics
  - Resistance band row, resistance band extension
- Weeks 5-6
  - RC isotonics if arthroscopic; if open start week 6
  - Scapular strengthening
    - Prone row, prone extension, supine serratus punch

CRITERIA FOR ADVANCEMENT

- No pain at rest
- PROM: 120° shoulder elevation; 45° ER in scapular plane
- Tolerance of scapular and RC exercises without discomfort

EMPHASIZE

- Reduction of tissue irritability
- Activation of RC and scapular stabilizers

SHOULDER SUPERIOR LABRUM ANTERIOR TO POSTERIOR (SLAP) TYPE II REPAIR POST-OPERATIVE GUIDELINES

Phase 3: Weeks 6-15

PRECAUTIONS

- No forced PROM
- Avoid undue stress to anterior shoulder joint
- No painful activities

ASSESSMENT

- Quick DASH
- NPRS
- Cervical mobility
- Thoracic mobility
- Shoulder PROM/AROM
- Palpation
- Static/dynamic scapular assessment (Kibler grading)
- Grip strength (Dynamometer)

TREATMENT RECOMMENDATIONS

ROM Goals

- Week 6-7
    - Initiate light and pain-free ER at 90° shoulder abduction
        - Progress to 30°
- Week 7-9
    - Shoulder flexion 160°-180°
    - ER at 90° shoulder abduction: 75°-90°
    - IR at 90° shoulder abduction: 70°-75°
- Week 9-12
    - Shoulder flexion 180°
    - ER at 90° shoulder abduction: 100°-115°

Flexibility

- Shoulder: posterior capsule stretch at physical therapist's discretion

Therapeutic Exercises

- Progress exercises from previous phases
- Throwers Ten
- Advanced Throwers Ten
- Scapular stabilization
    - Closed chain quadruped double arm protraction
    - Prone “T, I” and progress to “Y” and “W” as ROM allows
- End range stabilization using exercise blade/perturbations
- Shoulder endurance exercise
- UE ergometry (if ROM allows)
- Core strength/kinetic linking
- Weeks 10-16
    - ER/IR strengthening at 90 degrees of shoulder abduction

CRITERIA FOR ADVANCEMENT

- Full shoulder AROM
- Shoulder MMT: 4/5 below shoulder height

EMPHASIZE

- Full shoulder PROM and AROM
- Restoration of scapular and RC muscle balance and endurance

SHOULDER SUPERIOR LABRUM ANTERIOR TO POSTERIOR (SLAP) TYPE II REPAIR POST-OPERATIVE GUIDELINES

Phase 4: Weeks 16-19 (Plyometric Progression)

PRECAUTIONS

- No painful activities
- Full ROM

ASSESSMENT

- Quick DASH
- NPRS
- Cervical mobility
- Thoracic mobility
- Shoulder PROM/AROM
- Palpation
- Static/dynamic scapular assessment (Kibler grading)
- Shoulder manual muscle testing (MMT)
- Grip strength (Dynamometer)

TREATMENT RECOMMENDATIONS

- Continue shoulder RC and scapular stabilization exercises
- Continue and progress all Advanced Thrower's Ten exercises
- Initiate plyometrics as tolerated
    - Plyometric progression (over a 4-week period)
        - Double hand chest pass
        - Double hand overhead soccer pass
        - Double hand chops
        - Single hand IR at 0° shoulder abduction
        - Eccentric catch
        - Single hand 90/90 IR
    - Endurance progression
        - Double hand overhead wall taps
        - Single arm 90/90 wall taps
        - Single arm 12 o'clock to 3 o'clock wall taps
        - Exercise blade at multiple angles

CRITERIA FOR ADVANCEMENT

- Full shoulder AROM
- Shoulder MMT: 5/5 below shoulder height
- Symptom free progression through plyometrics and endurance program

EMPHASIZE

- Shoulder flexibility, strength and endurance
- Pain free plyometrics
- Kinetic linking

SHOULDER SUPERIOR LABRUM ANTERIOR TO POSTERIOR (SLAP) TYPE II REPAIR POST-OPERATIVE GUIDELINES

Phase 5: Weeks 16+ (Return to Sport)

PRECAUTIONS

- All progressions should be pain-free
- Monitor for loss of strength and flexibility

ASSESSMENT

- Quick DASH
- NPRS
- Cervical mobility
- Thoracic mobility
- Shoulder PROM/AROM
- Palpation
- Static/dynamic scapular assessment (Kibler grading)
- Shoulder MMT
- Grip Strength (Dynamometer)

TREATMENT RECOMMENDATIONS

- Initiate interval sports programs at 5 months
- Continue with all upper and lower extremity flexibility exercises
- Continue with advanced shoulder and scapular strengthening exercises
- Gradually progress sports activities
- Monitor workload
- Collaborate with ATC, performance coach/strength and conditioning coach, skills coach and/or personal trainer to monitor load and volume with return to sport participation

CRITERIA FOR RETURN TO SPORTS PARTICIPATION

- Symptom free progression through interval sports program
- Independent with all maintenance exercises
- Assess need for HSS Throwing Analysis

EMPHASIZE

- Return to sports participation
- Collaboration with Sports Performance experts

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Created: 8/2020
Reviewed: 3/2021; 4/2023