

REHABILITATION PROTOCOL FOLLOWING SLAP I OR III DEBRIDEMENT

GENERAL GUIDELINES / PRINCIPLES

- Have patient wear sling at all times except showering and while doing exercises / physical therapy for 2 weeks or per physician's discretion.
- No exercises specifically for the shoulder while a pain pump is present.
- Be sure the patient does not lift heavy objects, support their body weight with their arm, reach excessively behind the back, or perform sudden, jerking motions for at least 6 weeks.
- This protocol, as well as most others, is a general guideline. Patients should not be progressed to the next phase until they demonstrate proper form with all activities and all criteria are met in the current phase.
- When clinically appropriate, properly assess the whole body and incorporate treatment for loss of mobility and stability. Not doing so can prevent optimal outcomes and increase risks of future injuries.

PRE-OPERATIVE PHASE

- **Goals:**
 - Diminish inflammation, swelling, and pain
 - Maximize normal range of motion within patient tolerance
 - Restore normal scapulohumeral rhythm and control
 - Provide patient education and expectations of post-operative care
 - Protect the shoulder from further injury
- **Exercises / Treatment**
 - Scapular setting/retraction/ Shoulder isometrics
 - Avoid biceps contraction
 - AAROM/PROM (T-bar, Pulleys)
 - Pain-free resistive exercises as needed (ER/IR, Rows)
 - Ice/compression as needed.

MAXIMUM PROTECTION PHASE (Weeks 0-2)

- **Goals:**
 - Protect repair and promote healing.
 - Diminish pain and inflammation.
 - Gradually increase passive ROM
 - Minimize muscle atrophy
- **Precautions**
 - No resisted lifting, pulling, or pushing motions
 - Avoid excessive stretching or sudden movements
 - Keep incisions dry and clean
- **Treatment (Days 1-14)**
 - Pendulum exercises (4-6 x daily)

- Elbow / hand ROM and gripping exercises
- Active scapular control exercises in sling
- Upper trap stretch
- Levator scapula stretch
- Shoulder submaximal isometrics- No biceps isometrics for 5-7 days
- Gentle, pain free ROM
 - Passive flexion to 110 degrees.
 - Passive ER / IR at 45 degrees to 45 degrees
- Gentle AAROM
 - T-bar ER / IR with elbow supported in scapular plane
- Rhythmic stabilization drills
 - ER / IR in scapular plane
 - All directions at 100 deg flexion
- Keep incision site dry and clean- change dressing 1-2 days as needed.
- Cryotherapy (daily prn), modalities as indicated.
- Remove sutures day 10-14 (MD dependent)

INTERMEDIATE PHASE (Weeks 3-4 weeks)

- **Goals:**
 - Gradually restore pain-free PROM
 - Improve muscular strength
 - Protect surgical repair
 - Restore scapular stability and neuromuscular timing.
 - Improve RC activation/strength
- **Criteria to Progress to Phase II:**
 - Steadily progressing PROM
 - Minimal pain
 - Normal scapulohumeral rhythm in gravity lessened positions
- **Treatment Weeks (Days 15-28)**
 - Pulleys in scapular plane
 - AAROM to tolerance with T-bar
 - Flexion
 - ER / IR
 - Initiate tubing exercises
 - Initiate isotonic
 - Prone row
 - Prone shoulder extension
 - Sidelying ER
 - Supine lower trap
 - Progress rhythmic stabilization drills
 - Continue use of cryotherapy
 - Discontinue use of sling (MD dependent)

MODERATE PROTECTION PHASE (Weeks 5-8)

- **Goals:**
 - Increase Strength/Endurance
 - Improve neuromuscular control/scapulohumeral rhythm
 - Preparation for sport specific movements (progress to overhead)
 - Improve RC activation/strength

- **Criteria to Progress to Phase III:**
 - Full pain free PROM
 - No pain or tenderness
 - Normal scapulohumeral rhythm in gravity lessened positions
- **Treatment (Weeks 5-6)**
 - Emphasize strengthening in functional movements
 - Begin mobility/stability of appropriate spinal segments
 - PNF/perturbation training- incorporate diagonal patterns actively
 - Initiate plyometric training (2 hand to 1 hand drills)
 - Incorporate cardiovascular training (UBE, Stationary bike)
 - Resistance exercises progressing to 90 degrees shoulder abduction (ER/IR)
 - Progress proprioceptive exercises (below shoulder to above shoulder)
 - Capsular stretching program (active/passive)
- **Treatment (Weeks 7-8)**
 - Initiate CKC exercises
 - Incorporate sport specific drills (towel drills, dry throws, wind up)
 - Restore normal OKC/CKC combined joint functional movement patterns
 - Squats, diagonal lifts
 - Continue to progress mobility/stability of appropriate spinal segments (thoracic)

MINIMAL PROTECTION PHASE (Weeks 9 and Beyond)

- **Goals:**
 - Complete interval sport programs pain free
 - Pass return to sport/functional testing measures
 - No pain with Full AROM
- **Treatment (Week 9 to Discharge)**
 - Initiate interval sport program-
 - Initiate linear throwing program (2 weeks rainbow tosses prior to linear throwing)
 - Progress body weight resistance upper extremity exercises
 - Progress dynamic warm-up and mobility exercises
 - Continue core stability in functional sport/activity demand positions
 - Muscular strength 70-75% involved side (ER: IR 66-75%)

DISCHARGE TESTING / PLANNING (usually performed after 12 weeks post-op)

- Based on a patient's age, sex, specific sport / activity, and level (i.e. recreational, amateur, professional) that they are returning to, a decision is made to endorse their return to sport or to ask that the patient refrain from doing so. Currently we strive for the following criteria before fully endorsing going back to rigorous activities:
 - Demonstrate quality and symmetrical movement throughout the body evaluated with comprehensive movement screen or assessment process
 - Symmetrical and acceptable comprehensive scores on CKC UE testing
- Biomechanical assessment of their performance helps safe return to sport / higher level activity. Patient's may be videoed and analyzed doing activities such as throwing or hitting to see if sound body mechanics are being utilized.
- Not all patients who have undergone repair for SLAP I / III are candidates for functional testing. Those undergoing these tests should be chosen with proper consideration given to what they plan to return to and their general fitness level.
- No matter how well a patient is doing with return to sport testing it is prudent to remember how important time is to full healing and safe return to sport / activity.
- Patients often schedule periodically during this phase to assess their progress and properly change their program until they are deemed safe to return to all activities.