



## LATARJET REHABILITATION PROTOCOL

### **General Notes:**

“As tolerated” should be understood to include with safety for the reconstruction/repair; a sudden increase in pain, swelling, or other undesirable factors are indicators that you are doing too much too soon. If any of these occur, decrease activity level and ice.

During rehabilitation, if there are any neurovascular findings, please call the office.

Ice should be applied to the shoulder for 15-20 minutes following each exercise, therapy, or training session. Return to sport is based on provider team (physician, physician assistant, athletic trainer, therapist) input and appropriate testing.

All times and exercises are to serve as guidelines, Progression through the protocol should be based upon criteria as opposed to dates listed and will vary depending on each individual patient. Progress should be agreed upon by the patient and his/her team of providers.

### **Post-Operative Phase I (Day 1-Week 3)**

#### **Goals:**

- Minimize shoulder pain and inflammatory response
- Protect the integrity of the surgical repair: NO shoulder or elbow active range of motion (AROM) until week 3
- Gradually restore pain free passive range of motion (PROM)
- Enhance/ensure adequate scapular function

#### **Sling:**

- To be worn at all times except when bathing or performing therapy

#### **PROM:**

- Glenohumeral (GH) flexion to 90 degrees
- Abduction in the plane of the scapula to 90 degrees
- Internal rotation (IR) to 45 degrees at 30 degrees of abduction
- External rotation (ER) to 25 degrees at 30-40 degrees of abduction; respect anterior capsule tissue integrity with ER ROM.

#### **Therapeutic Exercises:**

- Pendulum exercises
- Scapular stabilization exercises
- Ball squeezes
- Active assisted and active range of motion (AAROM/AROM: wrist, fingers, and supination/pronation with arm in sling (at 90 degrees of elbow flexion)
- Passive elbow flexion/extension
- At week 3: Initiate Submaximal GH isometrics: flexion, extension, abduction, IR, ER



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### Modalities/Education:

- Frequent cryotherapy for pain and inflammation
- Pre-modulated electrical stimulation to shoulder for pain reduction
- Patient education regarding posture, joint protection, positioning, hygiene, etc.

### Manual:

- Scar and soft tissue mobilization as needed
- GH, Sternoclavicular (SC), scapulothoracic (ST), and thoracic joint mobilizations: Grade I-II

### Post-Operative Phase II (Week 4-6)

#### Goals:

- Minimize shoulder pain and inflammatory response
- Protect the integrity of the surgical repair
- Progress PROM
- Begin light waist level activities

#### Sling:

- Discontinue use of pillow as directed by physician/therapist after week 4.
- Begin to wean from sling between weeks 5-6.
- Discontinue sling as directed by physician/therapist after week 6

#### ROM:

- Progress shoulder PROM (do not force any painful motion)
  - Forward flexion to 160 degrees
  - Abduction in the plan of the scapula to 120 degrees
  - IR to 60 degrees at multiple angles of abduction
  - ER to 35 degrees at 0-40 degrees of abduction then progress to multiple angles of abduction
  - Initiate extension to 40 degrees at 6 weeks

#### Therapeutic Exercises:

- Posterior capsular stretching as needed
- Progress to AAROM/AROM exercises of the shoulder with proper GH rhythm
  - Full active elevation in the scapular plane should be achieved before beginning active elevation in other planes
- Continue AROM of elbow, wrist, and hand
- Progress scapular stabilization exercises

#### Modalities:

- Continue cryotherapy for pain and inflammation
- Pre-modulated electrical stimulation to shoulder for pain reduction



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### Manual:

- Scar and soft tissue mobilization as needed
- GH, AC, SC, thoracic and ST joint mobilizations : Grade I-IV as needed

### Post-Operative Phase III (Week 7-9)

#### Goals:

- Achieve normal GH and scapular rhythm
- Achieve PROM WNL
- Progress to AROM WNL
- Remain pain free for all exercises

#### ROM/Therapeutic Exercises:

- Progress as tolerated, concentric and eccentric exercises
- Achieve full PROM/AROM in a given plane before strengthening in that plane
- Initiate:
  - Closed chain activities
  - UBE: no resistance
  - Light pec stretch to tolerance
  - ER/IR strengthening
    - Side lying ER with towel roll
    - Manual resistance to ER in supine in scapular plane
    - ER/IR with exercise tubing at 0 degrees of abduction (towel roll)
  - Prone rowing at 30/45/90 degrees of abduction to neutral arm position
  - Begin rhythmic stabilization drills
    - ER/IR in the scapular plane
    - Flexion/extension and adduction/abduction at various angles of elevation
- Progress AROM to isotonic: flexion, scaption, abduction

#### Manual:

- Scar and soft tissue mobilizations as needed
- GH, AC, SC, thoracic and ST joint mobilizations: Grades I-IV

#### Cardio:

- Stationary bike, elliptical with light upper body, stair climber

#### Modalities:

- Continue cyotherapy for pain and inflammation
- Pre-modulated electrical stimulation to shoulder for pain reduction
- Continued patient education: posture, joint protection, positioning, hygiene, etc.



## LATARJET REHABILITATION PROTOCOL

### Post-Operative Phase IV (Week 10-15)

#### Goals:

- Normalize strength, endurance, neuromuscular control; All UE MMT grades 5/5
- Return to shoulder height functional activities
- Gradual and planned buildup of stress to anterior joint capsule

#### Precautions:

- Do not overstress the anterior capsule with aggressive overhead activities/strengthening
- Avoid contact sports/activities
- Patient education regarding a gradual increase to shoulder activities

#### Activity:

- Continue A/PROM as needed
- Initiate biceps, pectoralis major/minor, and serratus anterior strengthening
- Progress subscapularis strengthening to focus on both upper and lower segments:
  - PNF patterns
  - IR resistive band at 45, 90 degrees of abduction
- Increase resistance for UBE
- Progress isotonic strengthening if patient demonstrates no compensatory strategies, is not painful, and has no residual soreness

#### Manual:

- As needed

### Post-Operative Phase V (Week 15 – 24/Return to Sport)

#### Goals:

- Maintain full non-painful P/AROM
- Return to full strenuous work, throwing, and overhead activities

#### Precautions:

- Avoid excessive anterior capsule stress
  - DO NOT PERFORM: tricep dips, wide grip bench press, military press or lat pulls behind the head.
  - Do not flex elbows past 90 degrees in weight bearing positions
  - Be sure to “always see your elbows”
- Do not begin plyometrics, throwing, or overhead athletic moves until 4 months post-op and cleared by MD.

#### Therapeutic Exercise:

- Continue to advance scapula and upper extremity strengthening as tolerated in all planes
  - Include: diagonal/functional patterns, 90/90 strengthening, and CKC exercises



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### **Cardio:**

- Stationary bike, jogging/running/sprinting on treadmill, elliptical, rowing, kick board in swimming pool, stair climber

### **Milestones for return to sport activities and clearance:**

- Completion and passing of shoulder functional test at MD PT clinic
- No complaints of pain or instability
- Adequate ROM for task completion bilaterally
- Full strength and endurance of rotator cuff and scapular musculature for task completion bilaterally
- Regular completion of home exercise program