

# Post-Operative Rehabilitation Plan for Latarjet Repair

These guidelines aim to assist clinicians in managing the recovery process following Latarjet Repair surgery. The protocol is both time-based, depending on tissue healing, and criterion-based. Treatment should be individualized, taking into account examination findings and clinical judgment. Expected outcomes may vary based on the surgeon's preferences, additional procedures performed, and any complications. Clinicians should consult with the referring surgeon if there are any uncertainties about patient progression.

The interventions listed in this protocol are not exhaustive. Therapeutic strategies should be adapted based on the patient's progress and the clinician's discretion.

#### Latarjet Repair Overview

In cases where there is significant bone loss (over 20% of the glenoid surface area), addressing only the soft tissue issues during surgery (such as with a Bankart repair) may lead to a recurrence of instability. Bone deficiency can result from congenital deformity, trauma, or recurrent dislocations. When bony lesions reach critical dimensions, using autograft bone for reconstruction provides the best surgical outcomes. The Latarjet procedure, which transfers the distal coracoid into the bony defect, is the most popular and effective method.

### Considerations for Post-Operative Latarjet Repair Rehabilitation

Several factors influence the rehabilitation outcomes after an Open Latarjet Repair. The choice of surgical technique and the need for additional procedures can affect initial ROM restrictions and the timeframes for rehabilitation. It is essential for clinicians to work closely with the referring physician to tailor ROM restrictions, sling usage duration, and the timeframe for initiating strengthening exercises. Potential complications include nonunion (3%) and long-term pain that might require screw removal. Functionally, the primary limitation noted post-procedure is a significant reduction in glenohumeral external rotation. Since this is an anterior stabilizing and primarily bony procedure, it is important to consider the involved soft tissue structures early in rehabilitation, especially if the subscapularis was affected. External rotation should be progressed gradually.

#### **Post-Operative Complications**

If you experience any of the following symptoms; fever, unresolving numbness/tingling, excessive drainage from the incision, uncontrolled pain, or any other symptoms please contact your referring physician.

# PHASE I: IMMEDIATE POST-OP

(WEEKS 0-6 AFTER SURGERY)

| Rehabilitation Goals             | <ul> <li>Protect the repair</li> <li>Prevent negative effects of immobilization</li> <li>Initiate early protected and restricted range of motion (ROM)</li> <li>Diminish pain and inflammation</li> </ul>   |
|----------------------------------|---|
| Weight Bearing                   | <ul> <li>Use at night while sleeping</li> <li>Discharge at week 6 (or as directed by MD)</li> </ul>   |
| Precautions -<br>may vary per MD | <ul> <li>No passive range of motion (PROM) external rotation (ER) past neutral until week 5</li> <li>No shoulder active range of motion (AROM) in any plane until week 5</li> <li>No lifting of objects</li> <li>No supporting of body weight with hands</li> </ul> |



# PHASE I: IMMEDIATE POST-OP

(WEEKS 0-6 AFTER SURGERY) CONTINUED

| ntervention | Weeks: 0-2  |
|-------------|---|
|             | Range of Motion/Mobility  |
|             | • Elbow/Hand AROM   |
|             | Gentle shoulder PROM flexion, elevation in the scapular plane and ER to neutral   |
|             | • Pendulums   |
|             | Strengthening   |
|             | Hand gripping exercises   |
|             | Swelling/Pain Management  |
|             | Cryotherapy, modalities as indicated  |
|             | Weeks: 3-4  |
|             | Range of Motion/Mobility  |
|             | Begin AAROM: towel counter slide, pulley flexion, pulley scaption, cane flexion, cane scaptio   |
|             | beach chair progression. Patient should not force motion. Avoid using compensatory  |
|             | strategies.   |
|             | <ul> <li>PROM guidelines (will vary per surgeon and if additional procedures performed):</li> </ul>   |
|             | o Flexion to 120 degrees  |
|             | o Internal rotation (IR) to 45 degrees in O-30 degrees of ABD (scapular plane) o ER to neutral  |
|             | Strengthening   |
|             | Scapular Retraction   |
|             | <ul> <li>Begin submaximal, pain-free, shoulder isometrics with arm at side in neutral rotation:</li> <li>o Flexion, abduction, extension, external rotation, internal rotation</li> </ul> |
|             | Manual Therapy  |
|             | Initiate scar mobilization once incision is healed  |
|             | <u>Weeks: 5-6</u>   |
|             | Range of Motion/Mobility  |
|             | Begin AROM with minimal pain and avoiding substitution patterns   |
|             | AROM/PROM guidelines:   |
|             | o Flexion to tolerance  |
|             | o IR to 50 degrees at 30 deg ABD (scapular plane) o ER to 45 degrees at side and at 30 deg of ABD (scapular plane)  |
|             | Strengthening   |
|             | Continue shoulder isometrics  |
| Criteria to | Improved PROM/AROM within established parameters  |
| Progress    | Minimal pain or tenderness  |

# PHASE II: INTERMEDIATE POST-OP

(WEEKS 7-8 AFTER SURGERY)

| Rehabilitation Goals | <ul> <li>Continued improvement with PROM/AROM</li> <li>Preserve the integrity of the surgical repair</li> <li>Good tolerance with addition of isotonic strengthening</li> </ul>  |
|----------------------|--|
| Precautions          | <ul> <li>Avoid excessive ER ROM stretching - consult with surgeon for any continued ER ROM limitations in this phase.</li> <li>Avoid activities or exercises that place excessive load on the anterior capsule or subscapularis</li> </ul> |



# PHASE II: INTERMEDIATE POST-OP

(WEEKS 7-8 AFTER SURGERY) CONTINUED

| Additional   | Range of Motion/Mobility  |
|--|---|
| Intervention *Continue with Phase I interventionsd | Continue to progress AAROM/AROM/PROM as indicated. ER ROM should remain gentle.                           |
|  | Strengthening   |
|  | • Initiate beginner level isotonic strengthening as AROM improves and progress as tolerated in all planes |
|  | o Scaption to 90 degrees  |
|  | o Sidelying external rotation (within established limitations if any remain)                              |
|  | o Scapular protraction/retraction supine  |
|  | o Scapular protraction/retraction against wall  |
|  | o Prone rows: 30-degrees abduction, 45-degrees abduction, 90-degrees abduction to neutral                 |
|  | Stretching  |
|  | Cross body adduction stretch  |
|  | Sleeper stretch   |
| Criteria to  | Shoulder AROM/PROM is progressing   |
| Progress   | Demonstrates good scapular control within range of motion available.                                      |
|  | Able to complete phase I activities without pain.   |

### PHASE III: LATE POST-OP

(9-12 WEEKS AFTER SURGERY)

| Rehabilitation Goals      | Continue to gradually restore full shoulder AROM/PROM   |
|---------------------------|---|
|                           | Preserve the integrity of the surgical repair   |
|                           | Restore muscular strength and balance   |
|                           | Enhance neuromuscular control, proprioception, and kinesthesia  |
| Precautions               | Limit overstressing the anterior capsule with aggressive overhead strengthening   |
| Additional                | Range of Motion/Mobility  |
| Interventions             | Continue ROM exercises as needed  |
| *Continue with Phase I-II | Strengthening   |
| Interventions             | Continue to progress isotonic strengthening program by adding resistance.   |
|                           | Bicep curls IR at 0-degrees abduction, progress as able to IR at 90-degrees abduction   |
|                           | • ER progression: ER at 0-degrees abduction, bilateral shoulder "Ws", ER at 90-degrees abduc-   |
|                           | tion  |
|                           | <ul> <li>Scapular protraction/retraction in quadruped progressing to scapular protraction/retraction in<br/>plank position</li> </ul> |
|                           | • Standing rows progression: low rows at side, rows at 45-degrees abduction, rows at 90-degrees abduction                             |
|                           | • Pushup progression: standing/wall pushups, incline pushups, floor on knees pushups, full on floor pushups                           |
|                           | Prone horizontal abduction  |
|                           | Wall "Ys", progress as able to prone "Ys"   |
|                           | Progress PNF patterns to resistance bands as tolerated  |
|                           | Manual  |
|                           | <ul> <li>PNF patterns with light manual resistance and progress as tolerated</li> <li>Rhythmic stabilization</li> </ul>               |
|                           | Shoulder joint mobilizations as indicated   |
|                           |   |
| Criteria to<br>Progress   | Full non-painful ROM except for ER (may still be limited in some instances)   |
|                           | Satisfactory stability and no apprehension  |
|                           | Muscular strength progressing (> 60% LSI)   |
|                           | Good tolerance with strengthening progression   |



# PHASE IV: STRENGTHENING

(WEEKS 13-20 AFTER SURGERY)

| Rehabilitation<br>Goals  | <ul> <li>Maintain full ROM with continued stretching</li> <li>Improve muscular strength, power, and endurance</li> <li>Gradually initiate sports specific movement patterns</li> </ul>  |
|--|---|
| Additional Intervention *Continue with Phase II-III interventionsd | <ul> <li>ROM/Mobility</li> <li>Capsular stretches (if indicated)</li> <li>Horizontal adduction stretching</li> <li>Shoulder ER @ 90 deg abduction stretching</li> <li>Shoulder IR stretch behind back</li> <li>Strengthening</li> <li>PNF resisted - progressing to higher speeds as able</li> <li>Endurance training</li> <li>Plyometrics: wall plyometric push-ups, high kneeling plyometric push-ups, 1/2 kneeling med ball catch/throw with both hands</li> <li>Sports Specific</li> <li>Light sports activities (ex: light swimming, half golf swings)</li> <li>Initiate interval return to sport program (16–18 weeks)</li> </ul> |
| Criteria to<br>Progress  | <ul> <li>Full, pain-free functional ROM</li> <li>No complaint of glenohumeral instability</li> <li>80% or &gt; strength of ER and IR compared to contralateral shoulder with dynamometry testing</li> <li>80% or &gt; performance with field testing</li> <li>Clearance from MD and ALL milestone criteria have been met</li> </ul>   |

# PHASE V: EARLY RETURN TO SPORT

(21-28 WEEKS AFTER SURGERY)

| Rehabilitation Goals   | <ul><li>Enhance muscular strength, power, and endurance</li><li>Unrestricted activities</li></ul>   |
|--|---|
| Additional<br>Interventions<br>*Continue with Phase II-IV<br>Interventions | ROM/Mobility  • Soft tissue mobilization and stretching as needed to maintain ROM  Strengthening  • Modified Bench Press with block  • Narrow grip barbell snatch  • Plyometrics: unilateral med ball catch/throw in half kneeling, rebounder throws, overhead ball dribbles, deceleration catches, standing ball drops, prone 90/90 ball drops |
| Criteria to<br>Progress  | <ul> <li>90% or &gt; strength of ER and IR compared to contralateral shoulder with dynamometry testing</li> <li>90% or &gt; performance with field testing</li> <li>90% or &gt; on reported outcome measures (DASH, Penn Shoulder Score, SPADI)</li> </ul>  |

For further assistance or to schedule an appointment, please contact iOrtho - The Orthopedic Institute at 833-464-6784 or visit our website at iorthomd.com to text/email us. Our team is dedicated to providing personalized care and guidance throughout your rehabilitation journey.