



PHYSICAL THERAPY PROTOCOL AFTER LATARJET PROCEDURE:

The intent of this protocol is to provide the clinician with a guideline of the postoperative rehabilitation course of a patient that has undergone an open Latarjet procedure. It is no means intended to be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam/findings, individual progress, and/or the presence of postoperative complications. If a clinician requires assistance in the progression of a postoperative patient, they should consult with the referring Surgeon.

Depending on the intraoperatively determined bone quality of the bone block, the surgeon defines in the operative report when pendulum exercises, passive range of motion (PROM), active range of motion (AROM) may be started. Accordingly, the postoperative protocol is defined individually for each patient by the surgeon and recorded in the operation report.





<u>Phase I – Immediate Post-Surgical Phase (Week 1-4):</u>

Goals:

- Protect the integrity of the surgical repair
- Achieve gradual restoration of passive range of motion (PROM)
- Enhance/ensure adequate scapular function

Precautions:

- No active range of motion (AROM) of Shoulder
- Maintain arm in sling, remove only for exercise for elbow, wrist and fingers, only removing for showering. Shower with arm held at side
- No lifting of objects
- No shoulder motion behind back
- No excessive stretching or sudden movements
- No supporting of body weight by hands
- Keep incision clean and dry
- Patient education regarding limited use of upper extremity despite the potential lack of or minimal pain or other symptoms

DAY 1 TO 6:

- Abduction brace or pillow / sling except when performing distal upper extremity exercises. Begin restoring AROM of elbow/wrist/hand of operative extremity
- Sleep in brace or pillow / sling
- Scapular clock exercises progressed to scapular isometric exercises
- Ball squeezes
- Cryotherapy for pain and inflammation -Day 1-2: as much as possible -Day 3-6: post activity, or for pain, or for comfort (IMPORTANT: USE TOWEL TO PROTECT SKIN AND PAUSE CRYOTHERAPY AT LEAST FOR 20 MIN/HOUR TO PREVENT FROSTBITES)





DAY 7 TO 28:

- Continue use of brace/ pillow / sling
- Continue Elbow, wrist, and finger AROM / resisted
- Begin shoulder PROM (do not force any painful motion) in first two weeks or as directed by surgeon
- Forward flexion and elevation to tolerance
- Abduction in the plane of the scapula to tolerance
- Internal rotation (IR) to 45 degrees at 30 degrees of abduction
- External rotation (ER) in the plane of the scapula from 0-25 degrees or as directed by surgeon; begin at 30-40 degrees of abduction; respect anterior capsule tissue integrity with ER range of motion; seek guidance from intraoperative measurements of external rotation ROM
- Active and manual scapula strengthening exercises:

Exercises:

shoulder shrug and roll

• Pendulum Exercises: (<u>start of pendulum exercises is defined by the surgeon in the OR report.</u>

<u>Do not start pendulum exercises if the operation report states that pendulum exercises should be started from the 6th or 8th postoperative week.).</u>

pendulum exercises

• Start passive ROM (PROM): The PROM exercises should be supervised by the physiotherapist during the first session. In addition, the PROM home exercises should be trained by the physiotherapist. (start of passive ROM is defined by the surgeon in the OR report. Do not start PROM exercises if the operation report states that PROM exercises should be started from the 6th or 8th postoperative week).





<u>Phase II – Intermediate Phase (Week 5-8):</u>

Goals:

- Do not overstress healing tissue
- Discontinue brace / sling at end of week 6
- Gradually start active range of motion
- Initiate active assisted range of motion (AAROM) under guidance of physical therapy:
- Begin light waist level activities

Precautions:

- No active movement of shoulder till adequate PROM with good mechanics
- No lifting with affected upper extremity
- No excessive external rotation ROM / stretching. seek guidance from intraoperative measurements of external rotation ROM)
- Do not perform activities or strengthening exercises that place an excessive load on the anterior capsule of the shoulder joint (i.e. no pushups, pec fly, etc..)
- Do not perform scaption with internal rotation (empty can) during any stage of rehabilitation due to the possibility of impingement
- Continued patient education: posture, joint protection, positioning, hygiene, etc.

Exercises:

- 1. flexion in supine position
- 2. sitting assisted forward reach (elevation)
- 3. standing wall-assisted forward flexion
- 4. Cane-Assisted External Rotation at 20 degrees, 45 degrees abduction
- 5. Doorway Standing External Rotation
- 6. Scapular plane Abduction to Tolerance
- 7. Active Range of Motion Forward Flexion in the Scapular Plane
- 8. Active Range Of Motion External Rotation in Multiple Positions: <u>Side-Lying</u> or <u>Sitting</u>





Phase III – strengthening phase (week 9-12):

Goal:

- Maintain Full AROM and Maintain Full PROM
- Gradual restoration of shoulder strength, power, and endurance (Elastic bands)
- •Gradual return to functional activities

Precautions:

- No heavy lifting of objects (no heavier than 5 lbs.)
- No sudden lifting or pushing activities
- No sudden jerking motions
- No heavy lifting of objects (no heavier than 5 lbs.)
- No sudden lifting or pushing activities
- No sudden jerking motions

Start of strengthening with elastic bands and light weights is defined by the surgeon in the OR report. Do not start strengthening if the operation report states that strengthening should be started later. In patients with poor bone quality, strengthening is occasionally started later.

Exercises:

- 1. Active Range of Motion External Rotation with Band Strengthening
- 2. Active Range of Motion Internal Rotation with Band Strengthening
- 3. Row with Resistance Band
- 4. Towel/Hand-assisted Internal Rotation Stretch
- 5. Side lying Internal Rotation Stretch at 70 and 90 Degrees
- 6. Cross-Body Stretch
- 7. Water (pool) therapy Standing in water with float under arm, lower body into water to help stretch into flexion
- 8. Standing in water with float under arm, lower body to side to help with external rotation





Phase IV Advanced strengthening phase (week 13-22):

About 12 weeks postoperatively, a CT scan is performed to determine whether the bone block has healed. Depending on the findings, the surgeon will decide whether to move on to phase IV.

Goals:

- Maintain full non-painful active ROM
- Advance conditioning exercises for Enhanced functional use of UE
- Improve muscular strength, power, and endurance (light weights)
- Gradual return to full functional activities
- Continue to perform ROM stretching, if motion is not complete

Exercises:

- Side-lying External Rotation with Towel
- Full Can in the Scapular Plane
- Prone Scaption
- Diagonal
- Dynamic Hug
- Internal Rotation at 90 Degrees Abduction
- Forward Band Punch
- Sitting Supported External Rotation at 90 Degrees
- Standing Unsupported External Rotation at 90 Degrees
- Biceps Curl

Phase V – Return to activity phase (week 23):

Goals:

- Gradual return to strenuous work activities
- Gradual return to recreational activities
- Gradual return to sport activities
- Continue strengthening and stretching
- Continue stretching, if motion is tight
- May initiate interval sport program