

LATARJET REPAIR

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This protocol is intended to guide clinicians through the post-operative course for a Latarjet repair. It is **both time based** (dependent on tissue healing) **and criterion based**. Specific interventions should be based on the needs of the individual patient and should take exam findings and clinical decision making into account. The timeframes below may vary based on surgeon preference, additional procedures performed and complications. The interventions listed are **not** an inclusive list of exercises; they should be modified based on the progress of the patient and at the discretion of the treating clinician. **If assistance is needed progressing a post-operative patient, consult the referring surgeon.**

BACKGROUND

Where significant bony deficiency is present — **greater than 20% of the glenoid surface area** — addressing only the soft tissue (such as a Bankart repair) may lead to recurrent instability. Bony deficiency can result from congenital deformity, trauma or recurrent dislocation. When bony lesions reach critical dimensions, reconstruction of the deficit using autograft bone yields the best surgical results; the Latarjet procedure, which **transfers the distal coracoid into the bony defect**, is the most popular and highly effective of these.

POST-OPERATIVE CONSIDERATIONS

- Choice of surgical technique and the need for concomitant procedures may affect initial ROM restrictions and the timeframes for rehabilitation
- Collaborate closely with the referring physician** regarding specific ROM restrictions, duration of sling use and the timeframe for initiating strengthening
- Complications to consider include non-union (~3%) and long-term pain requiring screw extraction
- The primary functional limitation following this procedure is a **significant reduction in glenohumeral external rotation**; ER is progressed gradually
- This is an anterior stabilizing procedure and primarily a bony one — consider the soft tissue structures involved early in rehabilitation, **particularly if the subscapularis was taken down**

CALL THE OFFICE

Patients should call if they develop a **fever, excessive drainage from the incision, severe heat or redness along the incision, uncontrolled pain**, or any other symptom that concerns them. Vanderbilt Orthopaedics — **615-936-7846**.

PHASE 1

WEEKS 0-6

Immediate post-op

PHASE 2

WEEKS 7-8

Intermediate

PHASE 3

WEEKS 9-12

Late post-op

PHASE 4

WEEKS 13-20

Strengthening

PHASE 5

WEEKS 21-28

Early return to sport

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IMMEDIATE POST-OP · WEEKS 0-6

GOALS Protect the repair · prevent the negative effects of immobilization · initiate early protected and restricted ROM · diminish pain and inflammation

PRECAUTIONS

MAY VARY PER SURGEON

- No PROM external rotation past neutral** until week 5
- No shoulder AROM in any plane** until week 5
- No lifting of objects
- No supporting body weight with the hands

SLING

PHASE 1

- Use at night while sleeping
- Discharge at **week 6**, or as directed by the surgeon

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RANGE OF MOTION GUIDELINES — PHASE 1

TIMEFRAME	FLEXION	INTERNAL ROTATION	EXTERNAL ROTATION
Weeks 0-2	Gentle PROM in the scapular plane	Not addressed	PROM to neutral
Weeks 3-4 PROM	To 120°	To 45° in 0-30° of abduction (scapular plane)	To neutral
Weeks 5-6 AROM / PROM	To tolerance	To 50° at 30° of abduction (scapular plane)	To 45° at the side and at 30° of abduction

PROM guidelines will vary per surgeon and with any additional procedures performed.

WEEKS 0-2

PROTECT

- ♦ **ROM / mobility:** elbow and hand AROM; gentle shoulder PROM into flexion and elevation in the scapular plane, and ER to neutral; pendulums
- ♦ **Strengthening:** hand gripping exercises
- ♦ **Swelling and pain:** cryotherapy and modalities as indicated

WEEKS 3-4

BEGIN AAROM

- ♦ **ROM / mobility:** towel counter slide, pulley flexion, pulley scaption, cane flexion, cane scaption, beach chair progression. **The patient should not force motion** and should avoid compensatory strategies
- ♦ **Strengthening:** scapular retraction; begin submaximal, pain-free shoulder isometrics with the arm at the side in neutral rotation — flexion, abduction, extension, ER and IR
- ♦ **Manual therapy:** initiate scar mobilization once the incision is healed

WEEKS 5-6

BEGIN AROM

- ♦ Begin AROM with minimal pain, avoiding substitution patterns
- ♦ Continue shoulder isometrics

CRITERIA TO PROGRESS TO PHASE 2

CHECKPOINT

- ♦ Improved PROM and AROM within the established parameters
- ♦ Minimal pain or tenderness

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INTERMEDIATE POST-OP · WEEKS 7-8

GOALS Continued improvement in PROM and AROM · preserve the integrity of the surgical repair · good tolerance with the addition of isotonic strengthening

ADDITIONAL INTERVENTIONS

CONTINUE PHASE 1 AS INDICATED

- ♦ **ROM / mobility:** continue to progress AAROM, AROM and PROM as indicated. **ER ROM should remain gentle.**
- ♦ **Strengthening:** initiate beginner-level isotonic strengthening as AROM improves, progressing as tolerated in all planes
 - Scaption to 90°
 - Sidelying external rotation, within any established limitations
 - Scapular protraction / retraction supine
 - Scapular protraction / retraction against a wall
 - Prone rows at 30°, 45° and 90° of abduction to neutral
- ♦ **Stretching:** cross-body adduction stretch; sleeper stretch

PRECAUTIONS

PHASE 2

- ♦ **Avoid excessive ER ROM stretching** — consult the surgeon about any continued ER limitations in this phase
- ♦ Avoid activities or exercises that place excessive load on the **anterior capsule or subscapularis**

CRITERIA TO PROGRESS TO PHASE 3

CHECKPOINT

- ♦ Shoulder AROM and PROM are progressing
- ♦ Demonstrates good scapular control within the range of motion available
- ♦ Able to complete Phase 1 activities without pain

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LATE POST-OP · WEEKS 9–12

GOALS Gradually restore full shoulder AROM and PROM · preserve the integrity of the repair · restore muscular strength and balance · enhance neuromuscular control, proprioception and kinesthesia

STRENGTHENING

CONTINUE PHASES 1–2 AS INDICATED

- ◆ Continue to progress the isotonic strengthening program by adding resistance
- ◆ Biceps curls
- ◆ IR at 0° abduction, progressing as able to IR at 90° abduction
- ◆ ER progression: ER at 0° abduction → bilateral shoulder “Ws” → ER at 90° abduction
- ◆ Scapular protraction / retraction in quadruped, progressing to the plank position
- ◆ Standing row progression: low rows at the side → rows at 45° abduction → rows at 90° abduction
- ◆ Push-up progression: standing / wall → incline → on knees → full on the floor
- ◆ Prone horizontal abduction
- ◆ Wall “Ys”, progressing as able to prone “Ys”
- ◆ Progress PNF patterns to resistance bands as tolerated

MANUAL THERAPY

PHASE 3

- ◆ PNF patterns with light manual resistance, progressing as tolerated
- ◆ Rhythmic stabilization
- ◆ Shoulder joint mobilizations as indicated

PRECAUTIONS

PHASE 3

- ◆ **Limit overstrengthening the anterior capsule** with aggressive overhead strengthening

CRITERIA TO PROGRESS TO PHASE 4

- 1 Full non-painful ROM except for ER, which may still be limited in some cases
- 2 Satisfactory stability and no apprehension
- 3 Muscular strength progressing — >60% LSI
- 4 Good tolerance with the strengthening progression

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STRENGTHENING · WEEKS 13–20

GOALS Maintain full ROM with continued stretching · improve muscular strength, power and endurance · gradually initiate sport-specific movement patterns

ROM & MOBILITY

CONTINUE PHASES 2–3

- ◆ Capsular stretches if indicated
- ◆ Horizontal adduction stretching
- ◆ Shoulder ER stretching at 90° abduction
- ◆ Shoulder IR stretch behind the back

STRENGTHENING

PHASE 4

- ◆ PNF with resistance, progressing to higher speeds as able
- ◆ Endurance training
- ◆ Plyometrics: wall plyometric push-ups, high-kneeling plyometric push-ups, half-kneeling med ball catch and throw with both hands

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SPORT-SPECIFIC

PHASE 4

- ◆ Light sports activities — for example light swimming, half golf swings
- ◆ Initiate an interval return-to-sport program at **16–18 weeks**

CRITERIA TO PROGRESS TO PHASE 5

- ◆ Full, pain-free functional ROM
- ◆ No complaint of glenohumeral instability
- ◆ **≥80%** strength of ER and IR compared with the contralateral shoulder on dynamometry
- ◆ **≥80%** performance with field testing
- ◆ Clearance from the surgeon and **all** milestone criteria met

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EARLY RETURN TO SPORT · WEEKS 21–28

GOALS Enhance muscular strength, power and endurance · progress toward unrestricted activity

INTERVENTIONS

CONTINUE PHASES 2–4

- ◆ **ROM / mobility:** soft tissue mobilization and stretching as needed to maintain ROM
- ◆ **Strengthening:** modified bench press with a block; narrow-grip barbell snatch
- ◆ **Plyometrics:** unilateral med ball catch and throw in half kneeling, rebounder throws, overhead ball dribbles, deceleration catches, standing ball drops, prone 90/90 ball drops

CRITERIA FOR UNRESTRICTED ACTIVITY

- ◆ **≥90%** strength of ER and IR compared with the contralateral shoulder on dynamometry
- ◆ **≥90%** performance with field testing
- ◆ **≥90%** on reported outcome measures (DASH, Penn Shoulder Score, SPADI)

REFERENCES

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Adapted from the *Rehabilitation Protocol for Latarjet Repair*, Mass General Brigham Sports Medicine (revised 12/2021). Questions about a specific patient's progression should be directed to the referring surgeon at Vanderbilt Orthopaedics, 615-936-7846.

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