



Latarjet

Phase I – Immediate Post-Surgical (Week 1-2)

Goals:

- Minimize shoulder pain and inflammatory response
- Protect the integrity of the surgical repair
- Achieve gradual restoration of passive range of motion (PROM)
- Enhance/ensure adequate scapular function

Precautions:

- No excessive external rotation range of motion of the shoulder (ROM)
- Remain in sling, only remove for showering. Shower with arm held at the side
- Sleep with sling supporting operative shoulder, place a towel under the elbow to prevent shoulder hyperextension
- No supporting body weight with operative shoulder

Criteria for progression to Phase II:

- Achieve at least 100 degrees of passive elevation and 25 degrees of passive external rotation at 20 degrees of abduction
- Completion of Phase I activities without pain or difficulty

Week 1-2

- Patient education regarding limited use of upper extremity despite tolerable pain
- Patient education regarding posture, joint protection, positioning, hygiene
- Arm in sling, except for shower and rehab
- Being restoring AROM of elbow/wrist/hand
- Being shoulder PROM Do not force any painful motion
 - 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;
Respect anterior capsular tissue integrity with ER range of motion
- Scapular clock exercises with progression to scapular isometrics

Phase II – Protection (Week 3-9)

Goals:

- Protect the integrity of the surgical repair
- Achieve full restoration of active range of motion of the elbow, wrist and hand
- Being weaning from sling beginning Week 3
- Begin light waist level exercises

Precautions

- No active movement of shoulder until adequate PROM with good mechanics
- No lifting with affected extremity
- No excessive ER range of motion stretching



- No strengthening exercises that place excessive load on the anterior capsule of the shoulder (i.e. push-ups, pec flies, ect.)
- No scaption with IR (empty can) during any stage of rehabilitation due to possibility of impingement

Criteria for progression to Phase III

- Passive external rotation within 10 degrees of contralateral side (at 20 degrees of abduction)
- Passive external rotation at least 75 degrees at 90 degrees of abduction
- Passive forward elevation at least 155 degrees
- Active forward elevation at least 145 degrees
- Appropriate scapular posture at rest and dynamic scapular control with ROM and functional activities
- Completion of Phase II activities without pain or difficulty

Week 3-5

- Progress shoulder PROM (do not force painful motion)
 - Forward flexion and elevation to tolerance
 - Abduction in the plane of the scapula to tolerance
 - IR to 45 degrees at 30 degrees of abduction
 - ER in the plane of the scapula from 0-45 degrees
- Active assisted range of motion (AAROM)
 - Follow PROM guidelines
 - Progress AAROM exercises from supine, to lawn chair to standing
- Glenohumeral joint mobilization as indicated
 - Perform when ROM is significantly less than expected
 - Mobilization should be done in direction of limited motion until adequate ROM is gained
- Scapulothoracic joint mobilizations as indicated
 - Perform when ROM is significantly less than expected
 - Mobilization should be done in direction of limited motion until adequate ROM is gained
- Begin incorporating posterior capsular stretching as indicated
 - Cross body adduction stretch
 - Sleeper stretch: side lying internal rotation stretch

Week 6-9

- Progress shoulder PROM (do not force painful motion)
 - Forward flexion and elevation to tolerance
 - Abduction in the plane of the scapula to tolerance
 - IR in all angles of abduction to tolerance
 - ER in all angles of abduction to tolerance
- Progress from AAROM to AROM as tolerated with good shoulder mechanics (i.e. minimal scapulothoracic substitution with 90 degrees of elevation)
- Initiate balanced AROM and strengthening program



- Continue to respect anterior capsule tissue integrity
- Achieve near full active elevation in the scapular plane prior to beginning elevation in other planes
- All activities should be pain free and without substitution patterns
- Exercises should consist of both open and closed chain activities
- Gain muscular endurance with high repetition (30-50 reps) at low resistance (1-3 lbs)
- No heavy lifting or plyometrics
- Strengthen scapular retractors and upward rotators
- Initiate full can scapular plane raises to 90 degrees
- Initiate ER/IR strengthening at 0 degrees of abduction
- Initiate prone rowing at 30/45/90 degrees of abduction to neutral arm position
- Being rhythmic stabilization drills
 - ER/IR in scapular plane
 - Flexion/extension and abduction/adduction at various angles of elevation
- Glenohumeral and scapulothoracic joint mobilizations as indicated

Phase III – Strengthening Phase (Week 10-15)

Goals:

- Normalize strength, endurance, neuromuscular control
- Return to chest level full functional activities
- Gradual and planned build-up of stress to anterior joint capsule

Precautions

- Do not overstress the anterior capsule with aggressive overhead activities / strengthening
- Do not perform competitive/combat level strengthening or functional activities until the patient achieves near full ROM and functional strength
- Patient education regarding a gradual increase to shoulder activities

Criteria for progression to Phase IV

- Passive range of motion in all directions and all planes to normal limits
- Full active forward elevation with good mechanics
- Appropriate rotator cuff and scapular muscle performance for chest level activities
- Completion of Phase III activities without pain or difficulty

Week 10-15

- Continue AROM/PROM as needed
- Initiate biceps curls with light resistance, progress at tolerated
- Initiate gradually progressed strengthening for pectoralis major and minor; avoid positions that excessively stress the anterior capsule
- Progress subscapularis strengthening to focus on both upper and lower segments
 - Push-up plus (wall, counter, knees, floor)
 - Cross body diagonals with resistive tubing
 - IR resistive band at 0/45/90 degrees of abduction
 - Forward punch



Phase IV – Advanced Strengthening (Week 16-20)

Goals:

- Continue stretching and PROM as indicated
- Maintain full non-painful AROM

Precautions

- Avoid excessive anterior capsule stress
- Avoid triceps dips, wide-grip bench press, military press (overhead press) or latissimus pull-downs behind the head
- Do not begin throwing over overhead athletic moves until cleared by surgeon

Criteria for progression to Phase V

- No complaints of pain or instability
- Full strength and endurance of rotator cuff and scapular musculature to task completion

Week 16-20

- Continue all exercises listed above
 - Progress isotonic strengthening if patient demonstrates no compensatory strategies, is not painful, and has no residual soreness
- Continue shoulder stretching and strengthening at least four times per week
- May do pushups as long as the elbows do not flex past 90 degrees
- Can begin generalized upper extremity weight lifting with low weight, and high repetitions, being sure to follow weight lifting precautions
- Progressive return to upper extremity weight lifting program emphasizing the larger, primary upper extremity muscles (deltoid, latissimus dorsi, pectoralis major)
- Start with relatively light weight and high repetitions (15-25)
- If ROM and strength below 90 degree elevation is adequate, begin strengthening overhead
- May initiate plyometrics/interval sports program if appropriate

Phase V – Return to Full Activity

Goals:

- Gradual return to strenuous work activities
- Gradual return to recreational activities
- Gradual return to sport activities

Week 21

- May initiate pre-injury level activities/vigorous sports if appropriate/cleared by MD
- May initiate interval sports program (if applicable)

Criteria to Return to Sport

- Surgeon clearance
- Pain free shoulder function
- No complaints of instability
- Full strength and endurance of rotator cuff and scapular musculature to task completion



- Adequate active and passive range of motion necessary for required sport/activity
- Greater than 90% strength as compared to the non-operative shoulder