Austin Crow MD

Altoona Office	Chippewa Falls Office
1200 OakLeaf Way, Suite A Altoona, WI 54720 **Tel:** (715) 832-1400 (800) 322-1747 **Fax:** (715) 832-4187	757 Lakeland Drive Suite B Chippewa Falls, WI 54729 **Tel:** (715) 723-8514 (800) 322-1748 **Fax:** (715) 723-5989

Post-operative Rehabilitation Protocol
Shoulder Latarjet (Coracoid Transfer) Procedure

PHASE I (weeks 1-3) - Immediate post-op phase

Goals:

- Minimize/control shoulder inflammation and pain
- Protection of surgical repair
- Gradual restoration of shoulder PROM
- Adequate scapular mobility and function

Patient education/precautions:

- NO AROM of the operative shoulder
- No excessive shoulder external rotation ROM/stretching. STOP at first felt end feel.
- WEAR SLING AT ALL TIMES. Remove only for showering with arm at side.
- No lifting of objects with operative shoulder/arm. Limit use of operative upper extremity.
- Sleep with sling supporting operative shoulder (towel placed under elbow to prevent shoulder extension)
- Education regarding posture, joint protection, positioning, etc.

Activity

- PROM/AAROM/AROM of elbow, wrist, and hand.
- Begin shoulder PROM (PT directed/administered)
  - Forward flexion/elevation to tolerance
  - Abduction in scapular plane to tolerance
  - IR to 45 degrees at 30 degrees abduction
  - ER in scapular plane from 0-25 degrees; begin at 30-45 degrees abduction.
  - **DO NOT FORCE ANY PAINFUL MOTION. RESPECT ANTERIOR CAPSULE INTEGRITY WITH ER.**
- Scapular clock and isometric exercises.

- Ball squeezes
- Frequent ice/cryotherapy for pain and inflammation

Criteria to progress to Phase II

- Patient adherence to precautions and immobilization guidelines
- 100 degrees of passive forward elevation and 30 degrees of passive ER at 20 degrees abduction.
- Completion of phase I activities with minimal to no pain or difficulty.

Phase II (approximately weeks 4-9) - Intermediate Phase

Goals for phase II

- Minimize/control pain and inflammatory response
- Protection of surgical repair/integrity
- Achieve restoration of AROM gradually
- Wean from sling in weeks 6-7.
- Initiate LIGHT waist level activities.

Patient education/Precautions

- No active shoulder movement until adequate PROM with good mechanics
- No lifting with operative shoulder/upper extremity
- No excessive ER ROM/stretching. Respect anterior capsule integrity
- No activities/exercises that place excessive load on anterior shoulder (push-ups, pectoralis flys, etc.)
- Avoid exercises that involve "empty can" /IR position in scaption due to risk of impingement.

Activity

Early Phase II (approx. week 4)

- Progress shoulder PROM (do not force any painful motion)
- Forward flexion/elevation to tolerance
- Abduction in scapular plane to tolerance
- IR to 45 degrees at 30 degrees of abduction
- ER to 0-45 degrees at 30-40 degrees abduction
- Glenohumeral joint mobilizations as indicated when ROM significantly less than expected. Mobilization done in direction of limitation and discontinue once adequate ROM achieved
- Address scapulothoracic and trunk mobility limitations. Mobilizations done in direction of limitation anddiscontinued when ROM achieved
- Introduce posterior capsule stretching as indicated
- Continue ice/cyrotherapy for pain and inflammation

Late Phase II (approx. week 6)

- Progress shoulder PROM (do not force any painful motion)
- Forward flexion/elevation/abduction in scapular plane to tolerance
- IR as tolerated at multiple angles of abduction

- ER to tolerance at multiple angles of abduction ONCE ACHIEVE 35 DEGREES ER AT 0-40 DEGREES OF ABDUCTION.
- Glenohumeral and scapulothoracic joint mobilizations as indicated
- Progress to AAROM/AROM activities of shoulder as tolerated with good mechanics (minimal to no scapulothoracic substitution with up to 90-110 degrees of elevation)
- Begin rhythmic stabilization drills (IR/ER in scapular plane, flexion/extension and abduction/adduction at varying angles of shoulder elevation)
- Continue AROM elbow, wrist, and hand
- Strengthen scapular retractors and upward rotators
- Initiate balanced AROM/strengthening program
- Low dynamic positions initially
- Muscular endurance with high repetition (30-50), low resistance (1-3 lbs)
- Exercises should be progressive in terms of muscle demand/intensity, shoulder elevation, and stress on anterior
joint capsule
- Achieve full elevation in scapular plane before beginning elevation in other planes
- All activities should be pain free and without substitution patterns
- Exercises both open and closed-chain
- No heavy lifting or plyometrics at this time
- Initiate "full can" scapular plane to 90 degrees elevation with good mechanics
- Initiate IR/ER strengthening with tubing at 0 degrees of abduction
- Sidelying ER with towel roll
- Manual resistance ER in scapular plane in supine position
- Prone scapular exercise (30/45/90 degrees abduction) in neutral arm position

Criteria to progress to phase III

- Forward elevation PROM at least 155 degrees and AROM 145 degrees with good mechanics
- ER PROM within 8-10 degrees of contralateral side at 20 degrees abduction
- ER PROM at least 75 degrees at 90 degrees abduction
- Appropriate scapular posture at rest and dynamic scapular control with ROM and functional activities.
- Completion of phase II activities with minimal to no pain or difficulty.

PHASE III (approximately weeks 10-15)

Goals

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

Precautions

- No aggressive overhead activities/strengthening that overstress anterior joint capsule
- Avoid contact sports/activities

- No strengthening or functional activities in any plane until near full ROM and strength in that plane of movement
- Patient education regarding gradual increase of shoulder activities

Activities

- Continue AROM and PROM as needed/indicated
- Initiate biceps strengthening with light resistance, progress as tolerated
- Gradual progression of pectoralis major/minor (avoid positions of excessive stress to anterior joint capsule)
- Subscapularis strength progression (push-up plus, cross body diagonals, forward punch, IR resistance band at 0/45/90 degrees abduction, etc)

Criteria to progress to phase IV

- PROM forward elevation within normal limits
- PROM ER at all angle at all angles of shoulder abduction within normal limits
- AROM forward elevation within normal limits with good mechanics
- Good rotator cuff and scapular muscular performance for chest level activities
- Completion of phase III activities with minimal to no pain or difficulty

Phase IV (approx. weeks 16-20) Overhead activities/return to activities phase

Goals

- Stretching and PROM as needed/indicated
- Maintain full non-painful AROM
- Return to full work activities
- Return to full recreational activities

Precautions

- Excessive anterior joint capsule stress
- Avoidance of "triceps dips, wide grip bench press, military press, or lat pulls behind head. Always "see your elbows" when weight lifting.
- No throwing or overhead athletic moves until 4 months post-op or cleared by MD.

Activity

- Continue all exercises from phase III
- Overhead strengthening if ROM and strength below 90 degrees elevation is good
- Shoulder stretching/strengthening at least 4 x a week
- Return to upper extremity weight lifting program with emphasis on larger, primary upper extremity muscles (deltoids, latissimus dorsi, pectoralis major)
- Push-ups with elbows not flexing past 90 degrees
- Plyometrics/interval sports program if appropriate/cleared by PT and MD
    - May initiate pre injury level activities/vigorous sports if appropriate/cleared by MD