



Phase I- Immediate Post Surgical Phase "protected motion" (Day 1-week 6)

Goals:

- Protect the anatomic repair
- Prevent/minimize the side effects of immobilization
- Promote dynamic stability
- Diminish pain and inflammation

Post op day # 1 to Week 2

- Sling for 4 weeks
- Sleep in sling for 4 weeks
- Wrist/ Hand active range of motion (AROM)/ Active Assisted Range of Motion (AAROM)
- Hand-gripping exercises
- PROM/AAROM:
 - Flexion and elevation in the plane of the scapula to 60° (week 2, flexion to 75°)
 - External rotation(ER)/internal rotation (IR) with arm in scapular plane
 - ER to 10°-15°
 - IR to 45°
- No AROM ER, extension, or abduction
- Submaximal isometrics for all rotator cuff, periscapular, and shoulder musculature
- **No isolated biceps contractions (i. e. no active elbow flexion)**
- Cryotherapy, modalities as indicated

Weeks 3-4

- Discontinue use of sling at 4 weeks
- Continue gentle PROM/AAROM exercises (**Rate of progression based on patient's tolerance**)
 - Flexion and elevation in the plane of the scapula to 90°
 - Abduction to 75-85°
 - ER in scapular plane to 25-30°
 - IR in scapular plane to 55-60°
- No AROM ER, extension, or elevation
- Initiate rhythmic stabilization drills within above ROM
- Initiate proprioceptive training within above ROM
- Progress isometrics as above
- Continue use of cryotherapy, modalities as indicated

Weeks 5-6

- Begin AROM of shoulder (all planes, gravity eliminated positions then gravity resisted position once adequate mechanics):
- Gradually improve PROM and AROM
 - Flexion and elevation in the plane of the scapula to 145°
 - Abduction to 90°
 - External rotation 45-50° at 45° abduction



- Internal rotation 55-60° at 45° abduction
- Extension to tolerance
- May initiate gentle stretching exercises
- Gentle Proprioceptive Neuromuscular Facilitation (PNF) manual resistance
- Initiate prone exercise program for periscapular musculature
- Begin AROM elbow flexion and extension
- **NO biceps strengthening**

Phase II: Intermediate Phase-Moderate Protection Phase (Weeks 7-14)

Goals

- Gradually restore full AROM and PROM (week 10)
- Preserve the integrity of the surgical repair
- Restore muscular strength and balance

Weeks 7-9

- Gradually progress P/AROM
 - Flexion and elevation in the plane of the scapula to 180°
 - Abduction to 90° until 8 weeks then gradually increase to full
 - External rotation 90-95° at 90° abduction
 - Internal rotation 70-75° at 90° abduction
 - Extension to tolerance
- Begin isotonic rotator cuff, periscapular, and shoulder strengthening program
- Continue PNF strengthening
- Type II repairs: begin sub maximal pain free biceps isometrics
- Type IV, and complex repairs: continue AROM elbow flexion and extension, no biceps isometric or isotonic strengthening

Weeks 10-12

- Progress ER P/AROM to thrower's motion
 - ER 110-115 at 90° abduction in throwers (weeks 10-12)
- Progress shoulder isotonic strengthening exercises as above
- Continue all stretching exercises as need to maintain ROM.
- Progress ROM to functional demands (i.e., overhead athlete)
- Type II repairs: begin gentle resisted biceps isotonic strengthening @ week 12
- Type IV, and complex repairs: begin gentle sub maximal pain free biceps isometrics

Criteria for Progression to Phase III

- Full non painful ROM
- Good stability
- Muscular strength 4/5 or better
- No pain or tenderness

Phase III: Minimal Protection Phase (weeks 14-20)

Goals

- Establish and maintain full ROM
- Improve muscular strength, power, and endurance
- Gradually initiate functional exercises

Weeks 14-16

- Continue all stretching exercises (capsular stretches)
- Maintain thrower's motion (especially ER)
- Continue rotator cuff, periscapular, and shoulder strengthening exercises
- Type II repairs: progress isotonic biceps strengthening as appropriate

- Type IV, and complex repairs: progress to isotonic biceps strengthening as appropriate
- PNF manual resistance
- Endurance training
- Initiate light plyometric program
- Restricted sports activities (light swimming, half golf swings)

Weeks 16-20

- Continue all exercises listed above
- Continue all stretching
- Continue plyometric program
- Initiate interval sport program (e.g. throwing).

Criteria for Progression to Phase 4

- Full non painful ROM
- Satisfactory static stability
- Muscular strength 75-80% of contralateral side
- No pain or tenderness

Phase IV: Advanced Strengthening Phase (Weeks 20-26)

Goals

- Enhanced muscular strength, power, and endurance
- Progress functional activities
- Maintained shoulder stability

Weeks 20-26

- Continue flexibility exercises
- Continue isotonic strengthening program
- PNF manual resistance patterns
- Plyometric strengthening
- Progress interval sports programs

Phase V: Return to Activity Phase (Months 6-9)

Goals

- Gradually progress sport activities to unrestrictive participation Continue stretching and strengthening program