

Marc J. Milia, M.D. CAQ

Board Certified Orthopedic Surgeon
SPORTS and Shoulder Surgeon



miliama@mosortho.com

Office 313.277.6700

Text 313-307-4983

TOTAL SHOULDER ARTHROPLASTY POSTOPERATIVE REHABILITATION

Note: This protocol is designed to serve as a guide to rehabilitation. Indications for progression should be based on the patient's complete evaluation, functional capacity and response to treatment.

Rehabilitation : Phase 1 - Protective Post-Operative Weeks 0-6

Goals: Decrease pain and inflammation, gradually increase PROM, prevention of muscular inhibition and associated disuse atrophy.

General Precautions:

- No active IR/extension
- No passive ER > 40°, 0 to 4 weeks, if subscapularis repair is performed
- Keep incision clean and dry
- Sling wear and no active shoulder elevation for 4 weeks

Range of Motion:

- Weeks 0 to 4: PROM, Supine AAROM no limits, as tolerated. Limit ER at side to 40 degrees for first 4 weeks.
- Weeks 4 to 6: Gently start AROM and transition out of sling. May initiate Grade II/III capsular mobilizations, in all ranges

Therapeutic Exercises:

- Hand gripping and dexterity exercises, pronation/supination, as tolerated
- Initiate PROM elbow flexion/extension, progressing to AROM exercises
- Introduction to AAROM pulleys/wand for flexion/extension, IR/ER
- Initiation of scapular retraction/depression exercises

Modalities:

- Moist heat pre-treatment, if incision is well-healed, to avoid erythema/swelling
- Cryotherapy post-treatment recommended 3 to 4 times daily at home
- Ultrasound, interferential electrical stimulation, HVGS to control pain and swelling
- FES for muscle re-education

Criteria for Progression: Non-painful PROM, within prescribed guidelines.

Rehabilitation: Phase 2 – Early Strengthening Post-Operative Weeks 6-12

Goals: Decrease pain and inflammation and avoid overuse injuries, normalize strength and AROM, increase function capacity for daily activities.

At 6 weeks, PROM should be equal to pre-op level.

Range of Motion:

- Expand PROM to 160+° elevation
- 60° ER in neutral abduction
- Total rotational mobility of 80° at 45° abduction
- 90° abduction with 40° each, IR/ER
 - o Considerations: Expand AROM with negative shrug sign
 - o Grade II-IV capsular mobs with emphasis on posteroinferior capsule

Therapeutic Exercises:

- Initiate AAROM, progress to AROM, all planes
- Initiate sub-maximal, pain free isometrics, weeks 4 to 6, from neutral
- Progress to isotonic strengthening, week 6+, for elbow/RC, with high volume and low intensity, to avoid overuse phenomena
 - o Considerations: Initiate at neutral position, progressions made only without pain
- Scapular stabilizer strengthening
 - o Initiate with CKC exercises
 - o Scapular retraction, protraction, depression, shoulder shrugs

Modalities: continue PRN to control pain and inflammation

Criteria for Progression: non-painful AROM, within prescribed guidelines

Rehabilitation : Phase 3 Post-Operative Weeks 12+

Goals: facilitate continued gradual return to functional activity, normalized shoulder strength and AROM, control localized pain and inflammation,

enhance neuromuscular control.

Therapeutic Exercise:

- Home Maintenance Program Goals:
 - o Improve strength, power, endurance, neuromuscular control and proprioception
- Prepare for gradual and appropriate return to functional activities, including implementation of interval training, for recreational/sport activities, if cleared by physician
- ROM 2x per day, with frequency of 3 to 4 times weekly
-

Discharge Criteria:

- Phase 3 progression criteria
- 4 to 4+/5 strength in all planes, involved shoulder
- Independence with understanding of precautions
- Evidence of independence/compliance with HEP

If shoulder is RC deficient, focus on increased stability and decreased mobility

Return to Functional Activity – use as a guide, as progress allows:

- Sedentary job: 3 weeks
- Stationary bike for exercise: 3 weeks
- Treadmill/walking aggressive: 6 weeks
- Driving: as early as 6 weeks
- Swimming: breaststroke 6 to 8 weeks, depending on progress
- Golf at 3 months

Dearborn/Brownstown/Southfield

www.DrMarcMilia.com

313.277.6700