Total Shoulder Replacement Guidelines

NORTHWESTERN MEDICAL CENTER	Document Classification	🗆 Policy 🗆 Procedure 🛛 Guideline 🗆 Protocol
	Document Type:	🗆 Administrative 🛛 🖾 Clinical
	Applicability:	□ Organization Hospital ⊠ NMG □ Department Only

Purpose: Define the process to be followed for all patients referred from Northwestern Orthopedics after a primary or reverse total shoulder replacement has been performed.

Target Users: Treatment will follow the defined guidelines below and be carried out by Physical Therapist, Occupational Therapist, Athletic Trainer and/or Physical Therapy Assistants.

Definitions:

- AROM=Active Range of Motion
- AAROM= Active Assisted Range of Motion
- PROM= Passive Range of Motion
- ER= External Rotation
- IR= Internal Rotation
- PT= Physical Therapist

Guidelines:

Home day of surgery

Not seen by physical therapist unless ordered by provider, will be seen by nursing staff

Goals: Edema and pain control education Safe bed mobility, transfers & ambulation for discharge

IMMEDIATE MOTION PHASE

Goals: Allow early healing of capsule Increase passive range of motion Decrease shoulder pain Minimize muscular atrophy

Post op Week 0-2

First outpatient PT visit post-op day 2-5

Dressing change:

Aquacel AG removed and the wound is cleansed with chloroprep. Then the dressing is re-applied at post op day 7-10 using good sterile technique. Leave in place an additional 7-10 days, remove, and then leave open to air. If the incision is still draining re-apply Aquacel AG and notify Orthopedic office. Patients may shower but patients should not soak in bathtub, hot tub or pool

until incision is healed, at least 4 weeks after surgery. If the therapist or patient notes any wound problems such as progressive redness, pain, swelling, heat, and in particular drainage or fever, call the orthopedic office at (802) 524-8915.

Immobilizer: Can remove to bathe and perform rehab exercises.

Encourage use of arm for eating and writing with immobilizer.

Avoid: Actively raising the arm, reaching behind back (getting wallet position) Edema Control:

Ice/cryocuff Kinesiotape if indicated Estim if indicated

Key* protect the subscapularis repair for 12 weeks

Avoid:

- ER stretching
- IR strengthening
- Combined abduction and ER
- Educate patient to avoid "reaching behind back and using operative arm to "push up" from chair when transferring.

Suggested Exercises:

- Passive shoulder pendulum
- Hand, wrist, elbow passive and active range of motion
- Cervical AROM
- PROM ER with cane (elbow at side) to 20 degrees only x 12 weeks
- PROM IR to 30 degrees at 30 degrees abduction
- PROM shoulder flexion (with slight IR)
- PROM shoulder abduction (not stretching)
- Isometrics for shoulder abduction, ER, elbow flexion in neutral
- Active scapular retraction with depression

Post op Weeks 2-4

Immobilizer: Remove bolster from immobilizer and wear as a sling at:

- 2 weeks: if subscapularis repair only
- 4 weeks: with additional rotator cuff repair
- Begin to wean from sling starting at 4 weeks

Variance: Variation in use of immobilizer is possible based on intraoperative assessment and patient specific factors. Surgeon will communicate changes to timeframes for immobilizer use to the therapist.

Key^{*} protect the subscapularis repair for 12 weeks

Avoid:

- ER stretching
- IR strengthening
- Combined abduction and ER
- Educate patient to avoid "reaching behind back and using operative arm to "push

up" from chair when transferring.

Edema Control:

Ice/cryocuff Kinesiotape if indicated Estim if indicated

Suggested Exercises:

- Passive shoulder pendulum
- PROM ER with cane (elbow at side) to 20 degrees only x 12 weeks
- PROM IR to side at 45 degrees abduction
- PROM shoulder flexion (with slight IR)
- PROM shoulder abduction
- *PROM but no stretching
- Shoulder isometrics: abd/adduction, ER, flexion and extension
- Elbow isometrics: flexion and extension
- Scapular AROM and isometrics
- Supine AAROM elevation in scapular plane
- Supine ER/IR with straight cane (ER to 20 degrees only) self-passive ROM.
- Passive shoulder pulleys flexion with slight IR
- Buoyancy assisted ROM in the pool within above restrictions.

ACTIVE MOTION PHASE

Goals: Improve shoulder Range of Motion

Improve shoulder strength and dynamic stabilization Decrease pain/inflammation Increase Functional Activities

Post op Weeks 4-12

Edema Control:

Ice/cryocuff

Kinesiotape if indicated

Estim if indicated

Key* protect the subscapularis repair for 12 weeks

Avoid:

- ER stretching
- IR strengthening
- Combined abduction and ER
- Educate patient to avoid "reaching behind back and using operative arm to "push up" from chair when transferring.

Suggested Exercises:

- Continue exercises in previous phase as needed
- Continue to Progress shoulder PROM limiting ER to 20 degrees

- Shoulder AAROM with pulleys
- Shoulder flexion passive flexion counter slide/ bowing
- Shoulder wall slide/walk
- AAROM exercises with straight cane all motions to tolerance

Flexion ER/IR limit ER to 20 (x 12 weeks)

Abduction with palm down to limit ER

- Shoulder AROM progressing from gravity assisted/reduced to gravity resisted
- Strengthening Exercises (progressive resistance) once able to perform AROM with good form and range and with no increase in pain.
- Theraband

Rhythmic stabilization Shoulder isometrics in multi-angles Progressive resistance with hand weights Scapular strengthening exercises Biceps/Triceps

Post op Weeks 12-18

Suggested Exercises:

- Continue exercises in previous phase as needed
- Progress shoulder and scapular strengthening
- Continue to emphasize AROM and strength
- Pool Exercises and swimming as tolerated
- Progress ER PROM and AROM as tolerated
- Initiate shoulder IR strengthening & progress as tolerated
- Eccentric shoulder strengthening

ACTIVITY PHASE

Goals: Improve strength of shoulder musculature Neuromuscular control of shoulder complex Improve functional activities Criteria to initiate Activity Phase:

Criteria to initiate Activity Phase:

- PROM Flexion 0-160 degrees
- ER 75 degrees
- IR 60 degrees
- Strength 4/5 for ER/IR/Abd

Post op Weeks 18-26

Suggested Exercises:

- Shoulder stretching in all directions as needed
- AROM progressing to resisted ER/IR at 90 degrees abduction

Total Shoulder Replacement Guideline

- Progress shoulder theraband strengthening
- Full can exercise
- Scapular strengthening
- Progress shoulder strengthening at various points in the ROM
- Customize strengthening to meet needs of patients work/function

Responsibilities:

Variances will be communicated by the surgeon directly to the rehabilitation staff.

References:

Clinical Orthopedic Rehabilitation a Team Approach Fourth Edition Giangarra, Charles, Manske, Robert, Brotzman S. Brent copyright 2018