Rehabilitation Protocol
Total Shoulder Arthroplasty

Frank B. Norberg, MD
Kayla Brown, PA-C
Georgia Muelken, PA-C
Office: 952-946-9777
Fax: (952)-946-9888

Post-op appointments: 1 WEEK, 5 WEEKS, 10 WEEKS, 16 WEEKS

PHASE I (WEEKS 0-6) JOINT PROTECTION

Immobilization:

- **1-4 WEEKS:** Sling should be worn continuously and should only be taken off for exercises and showering.
- **5 WEEKS:** Discontinue sling. The use of the sling may be extended for up to 6 weeks in some situations such as revisions.

Precautions:

- No submersion of incision x 2 weeks. May shower and get incision wet on post op day #3.
- No supporting body weight with involved shoulder until 6-8 weeks post op.
- Can use 1-2lbs in hand with elbow at side.

Range of Motion:

- Goals: 130 degrees forward flexion, 30 degrees external rotation with elbow at side.

Therapeutic Exercise:

- **1-4 WEEKS:** PROM (ER/IR) Table slides, passive assisted external rotation. Elbow and wrist flexion/extension
- **5-6 WEEKS:** AAROM (wand), gentle resisted exercise (elbow, wrist, hand), isometric deltoid activation. At 6 weeks begin gentle IR (not to exceed 50 degrees).

Cardiovascular Fitness:

- Stationary Bike
- Walking

Progression to Phase II

- Patient tolerates shoulder PROM and ROM program for elbow, wrist, hand
- Patient demonstrates the ability to isometrically activate all components of the deltoid and periscapular musculature in the scapular plane

PHASE II (WEEKS 6-12) EARLY STRENGHTHENING

Precautions:

- Avoid shoulder hyperextension
- In the presence of poor shoulder mechanics avoid repetitive AROM exercises/activity
- Restrict lifting of objects to no heavier than 1-2lbs
- Can support body weight with operative shoulder at 6-8 weeks

Range of Motion:

- **6-8 WEEKS:** Shoulder AAROM/AROM as appropriate. Forward flexion and elevation in scapular plane in supine with progression to sitting/standing. ER and IR in the scapular plane in supine with progression to sitting/standing.
- **9-12 WEEKS:** AROM supine forward flexion and elevation in the plane of the scapula with light weights of 1-2lbs at varying degrees of trunk elevation.

Therapeutic Exercise:

- **6-8 WEEKS:** GH IR and ER submaximal pain-free isometrics. Initiate gentle scapulothoracic rhythmic stabilization and alternating isometrics in supine. Begin gentle periscapular and deltoid submaximal pain-free isotonic strengthening usually at the end of 8 weeks. Progress strengthening of elbow, wrist, hand. Patient can resume use of walker and start weightbearing on operative shoulder.
- **9-12 WEEKS:** Continue with above exercises and functional activity progression. Progress to gentle GH IR and ER isotonic strengthening exercises.

Cardiovascular Fitness:

- Stationary Bike
- Walking

Progression to Phase III

- Improving function of shoulder
- Patient demonstrates the ability to isotonically activate all components of the deltoid and periscapular musculature and is gaining strength.

PHASE III (WEEKS 12-16) MODERATE STRENGHTHENING

Goals:

- Enhance functional use of operative shoulder and advance functional activities
- Enhance shoulder mechanics, muscular strength, power, and endurance

Precautions:
- No lifting objects heavier than 10-15lbs waist to shoulder level.
- No sudden lifting or pushing activities

Range of Motion:
- Continue with previous program as indicated

Therapeutic Exercise:
- Progress to gentle resisted flexion, elevation in standing as appropriate

Cardiovascular Fitness:
- PT/Patient discretion

Progression to Phase IV
- Patient demonstrates moderate functional return and minor to no difficulties with basic ADLs

PHASE IV (MONTHS 4+) HOME EXERCISE PROGRAM

Goals:
- Home exercise performed 3-4x week with focus on functional strength gains. Progress towards activities within limits of 25-50lbs below shoulder level and 25lbs above shoulder level. Patient can progress to functional activity as tolerated and goals of phase III are met.

Discharge from skilled therapy:
- Patient is able to maintain pain-free shoulder AROM, demonstrating proper shoulder mechanics (typically 90-130 degrees of shoulder flexion/elevation and 30-45 degrees of external rotations).

Lifetime Precautions
- Risk of fracturing acromion and spine of scapula with increased force due to high intensity activity or trauma from falling. Continuous 25lbs weight restriction overhead, advise patient about associated risks.