Total Shoulder Arthroplasty Protocol

Precautions

Precautions should be implemented for the first 12 weeks postoperatively unless surgeon specifically advises patient or therapist differently:

- Avoid strengthening activities of the rotator cuff to protect the subscapularis tendon detachment and subsequent reattachment to expose the gleno-humeral joint during surgery

Progression to the next phase based on clinical criteria and time frames as appropriate.

Phase I: Immediate Post-surgical Phase, Joint Protection (Day 1 to week 6)

Goals

- Patient and family independent with joint protection, active/active assisted ROM (AROM/AAROM), dressing, don/doff sling, assisting with home exercise program, application of ice
- Promote healing of soft tissue/maintain the integrity of the replaced joint and subsequent tendon repair
- Increase AAROM of shoulder if prescribed by surgeon
- Restore AROM/AAROM of elbow and wrist
- Independent with activities of daily living (ADLs) with modifications

Precautions

- Sling is worn for 6 weeks postoperatively.
- No shoulder AROM
- No lifting objects with the operative extremity
- Keep incision clean and dry (no soaking/wetting for 2wk)

Days 1 to 4 (acute care therapy)

- Begin AROM/AAROM of elbow, wrist and hand in supine after complete resolution of interscalene block
- Begin periscapular submaximal pain-free isometrics in the scapular plane
- Apply ice 4-5 times a day for 15 minutes

Weeks 2 to 6

- Continue all exercises as above
- Pendular exercises may be added at 2 weeks at surgeon's discretion
- AAROM of external rotation and forward elevation with restrictions may be added at 4 weeks at surgeon's discretion
- Continue to apply ice 4-5 times a day for 15 minutes

Criteria for progression to Phase II

- Patient tolerates any prescribed shoulder AAROM and elbow, wrist and hand AROM

Phase II: AAROM, AROM Phase (Weeks 6 to 12)

Goals

- Continue progression of AAROM (full AAROM may not be expected)
- Gradually restore AROM
- Control pain and inflammation
- Allow continued healing of soft tissue
- Re-establish dynamic shoulder stability
- Discharge sling

Precautions

- Continue to avoid shoulder isotonic strengthening exercises

- In the presence of poor shoulder mechanics avoid repetitive shoulder AROM activity
- Restrict lifting of objects to objects no heavier than a coffee cup
- No supporting of body weight by involved upper extremity

Weeks 6 to 8

- Continue with shoulder unrestricted AAROM and begin AROM as tolerated
- Forward elevation and flexion in the scapular plane in supine with progression to sitting/standing
- ER and IR and the scapular plane in supine with progression to sitting/standing
- Begin gentle GH IR and ER submaximal pain-free isometrics
- Progress strengthening of elbow, wrist and hand
- Gentle shoulder mobilizations if indicated
- Continue use of cryotherapy as needed
- Patient may begin to use operative extremity for light ADLs

Weeks 9-12

- Continue with above exercises and functional activity progression

Criteria for progression to Phase III

- Improving function of the shoulder
- Tolerates AAROM, AROM and isometric program

Phase III: Moderate Muscle Strengthening (Week 12+)

Goals

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

Precautions

- **No lifting of objects heavier than 2.7 kg (6 lb) with the operative upper extremity**
- **No sudden lifting or pushing activities**

Weeks 12 to 16

- **Continue with previous program as indicated**
- **Progress to isotonic exercises, proprioception, functional retraining**

Phase IV: Continued Home Program (Typically 4+ Months Postoperative)

Typically the patient is on a Home exercise program at this stage, to be performed daily with the focus on

- Continued strength gains
- Continued progression toward a return to functional and recreational activities within limits, as identified by progress made during rehabilitation and outlined by surgeon and physical therapist

Criteria for discharge from skilled therapy

- Patient is able to maintain pain free shoulder AROM, demonstrating proper shoulder mechanics (typically 120-140 degrees of forward elevation and 30 degrees of functional ER)
- Maximized functional use of upper extremity
- Maximized muscular strength, power and endurance
- Patient has returned to advanced functional activities