SEAN ROBINSON, MD REVERSE TSA REHAB

- Range of motion: Patients and therapists must have a realistic goal of ROM gains. This is determined on a
 case by case basis. Normal or full ROM should not be expected.
- Joint protection: A higher risk of shoulder dislocation exists with the RTSA and therefore, the precautions
 must be followed.
 - No shoulder extension beyond neutral avoid combination of adduction and IR for first three months postoperatively
 - Adduction and IR place the shoulder at risk for dislocation; therefore, avoiding these activities (i.e. tucking in a shirt, personal hygiene) in the postoperative phase should be stressed.

<u>Phase I – Immediate Postoperative Surgical Phase (Day 1-6 weeks):</u>

Goals:

- Joint protection, progressive PROM, family/independent living patient and family independent with:
- Progressive restoration active range of motion (AROM) of elbow/wrist/hand.

Precautions:

- Sling x 6 weeks. May be used for 8 weeks if revision surgery.
- In supine position, elbow must be supported with pillow to prevent shoulder extension. Patient should always see their elbow.
- NO lifting of objects with operative extremity.
- Keep incision clean and dry (no soaking/wetting for 2 weeks); No whirlpool, Jacuzzi, ocean/lake wading for 4 weeks.

Day 5 to 21:

- Start sub-maximal pain-free deltoid isometrics in scapular plane (avoid shoulder extension when isolating posterior deltoid.)
- Frequent (4-5 times a day for about 20 minutes) cryotherapy.
- Begin PROM in supine/bed after resolution of block:
 - FF to 90 degrees
 - ER to 20-30 degrees
 - NO IR!

3 Weeks to 6 Weeks:

- Continue with above exercises
- Progress PROM with goal of:
- o FF 120, ER to tolerance respecting soft tissue constraints.

Progress to Phase II if criteria for progression to the next phase (Phase II):

• Satisfactory PROM, deltoid and periscapular isometrics.

Phase II – Active Range of Motion Phase (Week 6 to 10-12):

Goals:

- Progress PROM though full PROM is not expected
- Gradually restore AROM.
- · Re-establish dynamic shoulder and scapular stability.

Precautions:

- Continue to avoid shoulder hyperextension and internal rotation
- In patients with poor mechanics, avoid repetitive AROM and exercises.
- Restrict lifting of objects to no heavier than a coffee cup.

Week 6 to Week 8:

- Continue with PROM program.
- At 6 weeks post op start PROM IR to tolerance (not to exceed 50 degrees) in the scapular plane.
- Start shoulder AA/AROM to tolerance, progress from supine to standing position.

- Start ER and IR isometrics (sub-maximal and pain free)
- Start scapulothoracic rhythmic stabilization and alternating isometrics in supine as appropriate
- Progress strengthening of elbow, wrist, and hand.
- Gentle glenohumeral and scapulothoracic joint mobilizations as indicated (Grade I and II).
- Continue use of cryotherapy as needed.
- Patient may begin to use hand of operative extremity for feeding and light activities of daily living including dressing, washing.

Week 9 to Week 12:

- Continue and progress above exercises.
- Begin AROM supine forward flexion and elevation in the plane of the scapula with light weights (1-3lbs. or .5-1.4 kg) at varying degrees of trunk elevation as appropriate. (i.e. supine lawn chair progression with progression to sitting/standing).
- Progress to gentle glenohumeral IR and ER isotonic strengthening exercises in side lying position with light weight (1-3lbs or .5-1.4kg) and/or with light resistance resistive bands or sport cords.

Criteria for progression to the next phase (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 - Moderate strengthening (Week 12 +)

Goals:

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

Precautions:

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

Week 12 to Week 16:

- Continue with the previous program as indicated.
- Progress to gentle resisted flexion, elevation in standing as appropriate.

Phase IV - Continued Home Program (Typically 4 + months postop):

Typically the patient is on a home exercise program at this stage to be performed 3-4 times per week 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 80 120 degrees of elevation with functional ER of about 30 degrees.)
- Typically able to complete light household and work activities.

Protocol modified and used with permission from BWH Sports/Shoulder Service.