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Patient name: _____ **Date:** _____

PHYSICAL THERAPY PRESCRIPTION AND PROTOCOL:
Reverse Total Shoulder Replacement

GENERAL GUIDELINES

Reverse Total Shoulder Arthroplasty (rTSA) is designed specifically for the treatment of glenohumeral (GH) arthritis when it is associated with irreparable rotator cuff damage, complex fractures as well as for a revision of a previously failed conventional Total Shoulder Arthroplasty (TSA) in which the rotator cuff tendons are deficient. The rotator cuff is either absent or minimally involved with the rTSA; therefore, the rehabilitation for a patient following the rTSA is different than the rehabilitation following a traditional TSA.

Important rehabilitation management concepts to consider for a rTSA program are:

- Joint protection: There is a higher risk of shoulder dislocation following rTSA than a conventional TSA.
- Avoidance of shoulder extension past neutral and the combination of shoulder adduction and internal rotation should be avoided for 12 weeks postoperatively.
- Patients with rTSA don't dislocate with the arm in abduction and external rotation. They typically dislocate with the arm in internal rotation, adduction, and extension. As such, tucking in a shirt or performing bathroom / personal hygiene with the operative arm is an especially dangerous activity particularly in the immediate peri-operative phase.

1. **Limit shoulder extension (no shoulder motion behind back) for 8 weeks**
2. **Particularly avoid combined shoulder adduction, internal rotation, and extension.**
3. Sling to be worn full time for 4 weeks. May be extended to 6 weeks in some cases
4. May remove sling for tabletop activities within pain tolerance such as eating, brushing teeth and occasional keyboard use.
5. Use ice on shoulder for 20-30 minutes at a time after exercising.
6. Perform exercises 10 times each, 3 times a day
7. THERAPIST MUST TEACH APPROPRIATE EXERCISES AT EACH STAGE – THEY SHOULD BE PERFORMED AT HOME EVERY DAY
8. PROTECT SUBSCAP AND ANTERIOR CAPSULE – limited ER stretching and IR strengthening as specified

Immediate Post-op Instructions (Week 0-2):

- Ice / cryotherapy / TENS as able for pain and inflammation management
- Insure patient is independent in bed mobility, transfers and ambulation
- Insure proper sling fit/alignment/ use.
- Instruct patient in proper positioning, posture, initial home exercise program
- Provide patient/ family with written home program including exercises and protocol information.
- Pendulums
- Scapular Motion (shoulder shrugs, scapular retraction)
- Active/Active Assisted ROM (A/AAROM) of cervical spine, elbow, wrist, and hand.

Phase I (Weeks 2-4):

- Continue cryotherapy and TENS
- Continue pendulums, elbow range of motion, and hand squeezes
- GENTLE joint mobilization
- Begin PROM in supine
    - o Forward flexion and elevation in the scapular plane while supine to 90 deg.
    - o External rotation (ER) in scapular plane while supine to 20-30 degrees. DO NOT OVERSTRETCH SUBSCAP REPAIR.
    - o No Internal Rotation (IR) range of motion (ROM).
    - o Supine exercises should be done with a small rolled towel placed behind the always be able to see your elbow when doing exercises
- GENTLE joint mobilization
- May d/c sling at 4 weeks unless otherwise specified by MD

Phase II (Weeks 4-6):

- Continue all above exercises:
- May progress PROM forward flexion and elevation in the scapular plane while supine to 120 degrees.
- Gentle resisted exercises of elbow, wrist and hands
- No shoulder strengthening

Phase III (6 to 8 weeks):

- Continue range of motion:
    - o Progression of forward flexion to full overhead as tolerated
    - o Forward flexion and elevation in scapular plane in supine with progression to sitting/standing.
    - o May begin IR to tolerance in the scapular plane, with progression to sitting/standing.
    - o Begin shoulder AA/AROM as appropriate.
- Initiate gentle scapulothoracic rhythmic stabilization and alternating isometrics
- Progress strengthening of elbow, wrist, and hand.
- May start gentle deltoid isometrics.
- Gentle glenohumeral and scapulothoracic joint mobilizations as indicated
- Patient may begin to use hand of operative extremity for feeding and light activities of daily living including dressing, washing.
- Restrict lifting of objects to no heavier than a coffee cup.
- No supporting of body weight by involved upper extremity.

Phase IV (8 to 12 weeks):

- Continue with above exercises and functional activity progression.
- Begin gentle glenohumeral IR and ER sub-maximal pain free isometrics.
- Begin gentle periscapular and deltoid sub-maximal pain-free isotonic strengthening
- 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. progress to sitting/standing).
- Progress to gentle glenohumeral IR and ER isotonic strengthening exercises in sidelying position with light weight and/or with light resistance resistive bands
- No lifting of objects heavier than 2.5 kg (5 lbs) with the operative upper extremity
- No sudden lifting or pushing activities.

Phase V (12 to ?? weeks):

- Progress ROM all planes, address any remaining deficits
- Progress to gentle resisted flexion, elevation in standing as appropriate.
- Continue strengthening all planes
- D/C to home when all ADL goals met, patient demonstrates competence with strengthening exercises

Special instructions:_____

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