

Reverse Total Shoulder Arthroplasty

PHYSICAL THERAPY PROTOCOL

PHASE I: Protective Phase

Goals:

- Minimize pain and inflammatory response
- Achieve staged ROM goals
- Establish stable scapula
- Initiate pain free Rotator cuff strengthening (Infraspinatus and Teres) and deltoid strengthening
- Prevent/Control forearm, wrist, hand swelling

Precautions:

Prosthetic dislocations in Reverse Arthroplasty happen with shoulder extension, patients reaching hand behind scapular plane to roll over in bed, push up from a chair. These activities are not permitted with a Reverse. PLEASE coach and remind the patient of this restriction as I have already both pre-op and post-op.

POST-OP DAYS 1-3

- Elbow, wrist and hand AROM (EWH)
- Supine/Sitting passive forward elevation (PFE) to 90
 - PFE by family member or using patients opposite arm/good hand to surgical arm.
- Supine/Sitting passive external rotation (PE) to neutral
 - T-stick in 20° flexion and 20° abduction
- Codman's pendulum exercises
- C-spine AROM and stretching
- Ice
- Positioning full time in sling
- Cautions:
 - Assure normal neurovascular status
 - No lifting of involved arm
 - Shoulder extension is limited. Elbow not to go behind midline of body
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POST-OP WEEKS 1-3

- Continue elbow, wrist and hand motion
- Shoulder shrugs and retractions (no weight)
- Passive and Active forward flexion permitted and encouraged
- ER permitted as tolerated (If subscapularis repair, limit er to 40-50 the first 6 weeks)
- Isometrics, keeping elbow flexed to 90° (sub maximal, pain free) , NO IR isometrics
- Manual scapula strengthening
- Pain control modalities PRN / Polar Care
- Aquatics PROM, AROM activities (pain free)
- Complications/Cautions:
 - If pain level is not dissipating, decrease intensity and volume of exercises
 - Continue to limit shoulder extension past midline of body

POST-OP WEEKS 4-6

- Heat/Ice PRN to help obtain motion
- D/C sling as comfortable at week 4 and start active forward elevation (AFE)
- Achieve staged PROM goals in FE
- Scapula retractions
- Progressive serratus anterior strengthening (isolated)
- AAFE (pulleys)
- Continue isometric abduction
- Pain control modalities PRN
- Aquatics AAROM→ AROM
- Trunk stabilization/strengthening
- Cautions:
 - Do not initiate dynamic rotator cuff strengthening
 - Assure normal scapulohumeral rhythm with AAFE

PHASE II: Progressive Strengthening

Goals:

Achieve staged ROM goals

Eliminate shoulder pain

Improve strength, endurance and power

PRECAUTIONS:

Again, no reaching behind body, no pushing up out of couch or chair.

POST-OP WEEKS 6-9

- Free weight ER strengthening (pain free, elbow by side)
 - Week 7 or after
 - Very light with high repetitions.
 - Continue self stretching all planes to obtain PROM WFL
- Advance scapula strengthening
- AFE as tolerated to full
- Mobilizations PRN
- Aquatics AROM
- Trunk stabilization/strengthening
- Cautions:
 - Strengthening program should emphasize high repetitions, very light resistance and should be performed a maximum of 2 x day

POST-OP WEEKS 9-12

- Continue stretches PRN for PROM WFL
- Advance theraband strengthening of cuff and scapula below shoulder level
- Initiate isotonic dumbbell exercises for deltoid, supraspinatus, up to 5 lbs max (once nearly full AFE achieved)
- Mobilizations PRN
- Trunk stabilization/strengthening

PHASE III: Return to Activity/Advanced Conditioning

Goals:

Maintain stability of prosthesis

Reverse Total Shoulder Arthroplasty

POST-OPERATIVE INSTRUCTIONS

Normalize strength, endurance and power for age

Return to full ADL's and recreational activities

POST-OP MONTHS 3-6

- Light PFN or manual resistance for cuff/deltoid/scapula (rhythmic stabilization or slow reversal hold) in pain free and comfortable range
- Stretching PRN
- Continue strengthening. **Avoid overuse of deltoid to avoid deltoid fatigue and acromial stress fracture**