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## Reverse Total Shoulder Arthroplasty

\*\*Adjunctive exercises

### Phase I (Protective Phase)

- Goals: Maintain stable prosthesis  
Minimize pain and inflammatory response  
Achieve staged ROM goals  
Establish stable scapula  
Initiate pain free rotator cuff and deltoid strengthening

#### Days 1 to 3

- i. Elbow, wrist and hand AROM (EWH)
- ii. Supine passive forward elevation in plane of scapula (PFE) to 90
  1. 10-20 reps, 2 x day
  2. Supine PFE by family member or using opposite arm
- iii. Supine passive external rotation (PE) to neutral
  1. T-stick in 20° flexion and 20° abduction
  2. 5-10 reps, 2x day
- iv. Codman's pendulum exercises
- v. C-spine AROM
- vi. Ice
- vii. Positioning full time in sling
- viii. Cautions:
  1. Assure normal neurovascular status
  2. No lifting of involved arm
  3. Shoulder extension is limited. Elbow not to go behind midline of body

#### Weeks 1 to 2

- i. Continue EWH
- ii. Shoulder shrugs and retractions (no weight)
- iii. **Continue PFE. Progress to full as tolerated**
- iv. Continue T-bar PER at 20° abduction
  1. Limit ER to 30 degrees if subscapularis repair performed
- v. Isometrics, keeping elbow flexed to 90° (sub maximal, pain free)
- vi. \*\*Manual scapula strengthening
- vii. \*\*Pain control modalities PRN / Polar Care
- viii. Complications/Cautions:
  1. If pain level is not dissipating, decrease intensity and volume of exercises
  2. Continue to limit shoulder extension past midline of body

## Weeks 2 to 6

- i. Heat/Ice PRN to help obtain motion
- ii. **D/C sling at week 4**
- iii. **Progress passive and AAROM ER exercises to full after week 3**
- iv. **Start AROM at week 4**
- v. Theraband scapula retractions
- vi. Progressive serratus anterior strengthening (isolated)
- vii. AAFE
- viii. Continue isometric abduction
- ix. **\*\*Pain control modalities PRN**
- x. **\*\*Trunk stabilization/strengthening**
- xi. Cautions:
  1. Do not initiate dynamic rotator cuff strengthening
  2. Assure normal scapulohumeral rhythm with AAFE

## **Phase II (Progressive Strengthening)**

Goals: Maintain stability of prosthesis  
Achieve staged ROM goals  
Eliminate shoulder pain  
Improve strength, endurance and power

## Weeks 6 to 9

- i. Theraband ER strengthening (pain free, elbow by side)
  1. Week 7 or after
  2. Very light with high repetitions.
  3. Continue self stretching all planes to obtain PROM WFL
- ii. Advance scapula strengthening
- iii. AFE as tolerated to full
- iv. **\*\*Mobilizations PRN**
- v. **\*\*Aquatics\*\* AROM**
- vi. **\*\*Trunk stabilization/strengthening**
- vii. Cautions:
  1. Strengthening program should progress only without signs of increasing inflammation
  2. Strengthening program should emphasize high repetitions, very light resistance and should be performed a maximum of 2 x day

## Weeks 9 to 12

- i. Continue stretches PRN for PROM WFL
- ii. Advance theraband strengthening of cuff and scapula below shoulder level
- iii. Initiate isotonic dumbbell exercises for deltoid, supraspinatus
  1. Up to 2 lbs max (once nearly full AFE achieved)
- iv. **\*\*Mobilizations PRN**
- v. **\*\*Trunk stabilization/strengthening**

## **Phase III (Return to activity/Advanced conditioning)**

Goals: Maintain stability of prosthesis

Normalize strength, endurance and power for age  
Return to full ADL's and recreational activities

**Months 3 to 6**

- i. Light PFN or manual resistance for cuff/deltoid/scapula  
(rhythmic stabilization or slow reversal hold) in pain free and comfortable range
- ii. Stretching PRN
- iii. Continue deltoid/cuff/scapula strengthening. Avoid overuse of deltoid.

**Discharge/Return to sport criteria**

1. PROM WFL for ADL's/work/sports
2. MMT 5/5 shoulder girdle
3. Successful return to functional activities