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Anatomic Shoulder Replacement Rehabilitation Protocol

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This protocol is intended as a general guideline for the therapist in directing the post-operative rehabilitation course of patients undergoing a total shoulder replacement. Modifications and alterations may be necessary depending on each patient's recovery.

Emphasis should be placed initially on protecting the subscapularis repair, followed by establishing scapular control and mobility, supine ROM, and lastly strength and resistance training.

Phase 1: Protection (0-6 wks)

- Shoulder immobilizer for the first 6 weeks. Sleep in the sling (remove neck strap if needed for comfort)

- Range of Motion - remove sling 3 x daily for ROM exercises as below:
  - Pendulum exercises - no larger than a basketball, 5 minutes at time, alternate directions
  - Active ROM in elbow flexion and extension with the elbow at the side and humerus in neutral rotation
  - Forearm pronation and supination, finger and wrist ROM
  - Scapular retractions and trapezial stretch

- May progress to table slides at 4 wks if indicated on therapy prescription

- May begin gentle PROM if indicated on therapy prescription

- Restrictions
  - No active ROM of the shoulder
  - No passive ER beyond neutral at weeks 0-2, no ER beyond 30° weeks 2-6
  - No internal rotation behind the back

- Goals
  - Protect subscapularis repair
  - Supine active assist forward elevation of 90° by week 6, ER no more than 30°

Phase 2: ROM and Early Strengthening (6-12 wks)

- Discontinue shoulder immobilizer, may use simple sling as needed for comfort when out of the house (fatigue, pain, protection)
- Advance to routine ADL's as tolerated, no lifting greater than 2 lbs

- Range of Motion
    - Begin supine active assisted ROM and supine AROM as tolerated
        - Advance table slides to rail slides and wall slides by week 12
        - Advance supine AROM to seated and standing once adequate scapular control demonstrated
        - Wand exercises:
            - Flexion, abduction, and ER: advance as tolerated
            - Progress supine to seated to standing once adequate scapula control
        - Pulleys: flexion, abduction, scaption
    - Scapular mobilization as indicated

- Strengthening
    - Shoulder isometrics: all planes except IR (may perform at 8wks)
    - Scapular strengthening:
        - Protraction, retraction exercises, and prone rows
    - Light weight, high rep rotator cuff retraining exercises (may begin at 10wks once adequate scapular control demonstrated)

- Restrictions
    - No passive ER beyond 60° weeks 6-8
    - No lifting greater than 2lbs

- Goals
    - Establish normal scapulohumeral rhythm
    - Supine forward elevation of 140° by week 12
    - Standing forward elevation of 120° by week 12

Phase 3: Moderate Strengthening (12-16 wks)

- Patient may begin progressive resistance training for rotator cuff strengthening, continued peri-scapular stabilizer strengthening and normalization of ADL's
- Return to increased lifting and carrying activities as limited by discomfort

- Range of Motion
    - Progress as tolerated without limitation
    - Wall washing, etc

- Strengthening
    - Progress from isometrics to band exercises to light weights for cuff strengthening
    - Scapular stengthening:
        - Advance rows and scapular stabilization exercises

- Restrictions
    - No sudden jerking movements, no forceful or painful lifting, no overhead throwing

- Goals
    - Full non-painful AROM with good scapular control
    - Increased muscular endurance and strength

Phase 4: Advanced Strengthening (beyond 16wks)

- Continue to advance strengthening exercises for improved dynamic and overhead function of the shoulder
    - No weight bearing limitations
    - Sport specific rehab as needed

Return to Sport: common return to sport guidelines are noted below

- Golf:
    - 6wks - may begin putting
    - 10 wks - light chipping with 1/4 swing around the green
    - 12wks - begin 1/2 swing with short irons and advance
    - 16 -20wks - full swing with long irons and driver off a tee
    - 5-6 mos - return to full play as tolerated

- Tennis:
    - 12 wks - light ground strokes of a dropped ball
    - 16 wks - progress to stationary ground strokes with a partner or wall drills at sub-maximal effort, light volley as tolerated
    - 20 wks - progress ground stroke intensity and ground strokes while moving
    - 5 to 6 mos - return to sub-maximal serving and then advance to game play as tolerated