General Rehabilitation Guidelines

Frozen Shoulder
Protocol for Arthroscopic Capsular Release and Manipulation under Anesthesia

Rehabilitation Considerations
  - The goal of surgery and rehabilitation is maintenance of the range of motion achieved at surgery. In general there are no motion restrictions. The home program that patients perform on the in between days are critical to maintaining range and great emphasis should be placed on encouraging compliance with the HEP and assuring stretches are done with the proper technique.
  - Disuse from stiffness and pain leads to atrophy of the rotator cuff and periscapular muscles which must be strengthened with the goal of promoting endurance followed by strength.
  - Tightness in the posterior capsule may lead to scapular dyskinesis which can lead to secondary impingement due to malpositioning of the acromion. A thorough scapular stabilization program should be added to the therapy program.
  - Aquatic programs may be very beneficial in treating this condition and may be instituted at the outset of treatment

Outpatient Phase 1: Acute Phase (Weeks 1-4)
  - ROM
    - Instruct in home program, and begin, pendulum exercises
    - Instruct in home program, and begin, general flexibility program with emphasis on posterior capsular stretching and anterior chest wall stretching
      - HEP should be done 2-3x per day
    - Pulleys with hands supinated to clear greater tuberosity
    - Glenohumeral mobilizations as tolerated
    - Core flexibility as needed
  - Strength
    - Instruct in home program and begin postural control exercises
      - May include scapular taping to discourage compensatory muscle recruitment patterns
    - Cuff: any remaining cuff attachment should be strengthened to improve the head depressor effect
      - Start with submaximal isometrics with emphasis on ER/IR
      - Progressive two-hand supine press
    - Deltoid: all components of deltoid should be strengthened with emphasis on anterior deltid
      - Start with submaximal isometrics
    - Scapular Stabilization
      - Isometric retraction, depression and shrugs
      - UBE in reverse: start with low resistance
      - Table top ball rolls and scapular clocks
    - Aerobic conditioning
  - Other:
- Modalities to decrease pain and inflammation
- cryotherapy

**Outpatient Phase 2:** Recovery Phase (Weeks 5-8)

- **ROM:**
  - Continue full flexibility program with goal of motion symmetric with contralateral side

- **Strength**
  - **Posture:**
    - Continue postural improvement exercises and assessment for substitution patterns
  - **Cuff:**
    - Begin isotonic strengthening of remaining cuff muscles with low resistance high repetition exercises using therabands or light dumbbells
    - Emphasize IR/ER
      - Start with eccentric and progress to concentric
      - May progress from neutral to progressive degrees of abduction as able
  - **Deltoid**
    - Begin isotonic strengthening with low resistance high repetition exercises using therabands or light dumbbells
      - Emphasize anterior deltoid in combination with scapular stabilization
  - **Scapular Stabilization**
    - Prone and seated rows with exaggerated scapular retraction
    - Push-ups with a plus: wall, table, floor
    - Table-top ball rolls and wall washes as tolerated
    - UBE in reverse with progressive resistance

  **Notes:** reeducation of substitution patterns should be addressed with emphasis on preventing upper trapezial recruitment during shoulder elevation
  - Scapular taping may be used as tolerated to facilitate this

- **Other**
  - Continue aerobic conditioning

**Outpatient Phase 3:** Maintenance phase (Weeks 9-12)

- **ROM**
  - Instruct in HEP for comprehensive flexibility program

- **Strength**
  - Instruct in HEP for maintenance cuff, deltoid and periscapular strengthening
  - Encourage aerobic activities that combine motion and strength like rowing and swimming
  - Maintenance aerobic conditioning program