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# POSTOPERATIVE REHABILITATION PROTOCOL: ARTHROSCOPIC GLENOHUMERAL CAPSULAR RELEASE (FROZEN SHOULDER)

Phase 1: Weeks 0-3

#### Goals

Relieve pain Restore motion

### Restrictions

Limitation only by pain

#### **Immobilization**

Cryocuff for first 24 hours until interscalene anesthetic block has resolved May use cryocuff prn over first week for cold therapy, but should be counseled against its use for immobilization

No immobilization beyond 24 hours following surgery

## Pain control

Reduction of pain and discomfort is essential for recovery

- Medication NSAIDs
- Injection
- Therapeutic modalities
  - Ice, ultrasound, HVGS
  - Moist heat before therapy, ice at conclusion

## **Shoulder motion**

#### Goals

- o Begins immediately following surgery, while anesthetic block still effective
- Controlled, emphasized ROM exercises
- ROM may be more aggressive when pain not a limiting factor
- Focus on active and passive stretching at ROM limits
  - Forward flexion
  - Abduction scapular plane
  - External rotation arm at side
  - External rotation at 90° arm abduction
  - Internal rotation at 45° and 90° arm abduction
- Note: on day of initial surgery, make sure bandage is not restricting motion, may change prn to dry, sterile gauze dressing and tape.
- No restrictions on range, but communicate to avoid injury

### Exercises

- o Focus on all planes of motion outlined above
- Active ROM exercises
- Active-assisted ROM exercises
- Passive ROM exercises
- Home exercise program instituted from the beginning
  - Patients should perform 3-5 times per day
  - Sustained stretch of 15-30 seconds at end ROM in all planes

#### Motion: elbow

Passive – progress to active

- o 0-130°
- Pronation and supination as tolerated

## Muscle strengthening

Grip strengthening with racquetball, etc.

## Frequency of in-office visits

Day of surgery: Surgery performed in AM, postoperative therapy to begin that afternoon. If not seeing patient day of surgery, may follow outline as below Postop days 1-3: Daily visits on consecutive days 1 through 3

Postop weeks 1-3: 3 times per week in office, with home program three times daily (active and passive stretching program)

# **Criteria for Progression to Phase 2**

Improvement in shoulder discomfort Improvement of shoulder motion Satisfactory physical examination

## Phase 2: Weeks 3-8

#### Goals

Improve shoulder motion in all planes Improve strength and endurance of rotator cuff and scapular stabilizers

### Pain control

Reduction of pain and discomfort is essential for recovery

- Medication NSAIDs
- Injection
- Therapeutic modalities
  - Ice, ultrasound, HVGS
  - Moist heat before therapy, ice at conclusion

#### Shoulder motion

## Goals

 Maintenance of prior range of motion achieved intra-operatively (no restrictions)

### Exercises

- Active ROM
- Active-assisted ROM
- Passive ROM

## Muscle strengthening

Start gradually as range of motion stabilizes (focus should continue to be on maintaining motion over achieving strength)

Rotator cuff strengthening (3x/week, 10-15 reps for 3 sets)

- Closed-chain isometrics with elbow at 90° and arm at side
  - Internal rotation
  - External rotation
  - Abduction
  - Forward elevation
- Progress to light isotonic dumbbell exercises
  - Internal rotation
  - External rotation
  - Abduction
  - Forward elevation

Strengthening of scapular stabilizers

- Closed-chain strengthening exercises
  - Scapular retraction
  - Scapular protraction
  - Scapular depression
  - Shoulder shrugs
- o Progress to open chain

Deltoid strengthening

## Frequency of in-office visits

Postop weeks 3-6: 2 times per week in office, with home program three times daily (active and passive stretching program)

Postop weeks 6-8: 1 time per week in office

# **Criteria for Progression to Phase 3**

Significant functional recovery of shoulder motion

Successful participation in activities of daily living

Resolution of painful shoulder

Satisfactory physical examination

## Phase 3: 8 weeks- up

## Goals

Home maintenance exercise program

- ROM exercises two times a day
- Rotator cuff strengthening 3x per week
- Scapular stabilizer strengthening 3x per week

## Frequency of in-office visits

At discretion of physical therapist and physician

# **Maximal Improvement**

Typical at 6-9 months after surgery

## **Warning Signals**

Loss of motion Continued pain

This protocol provides you with general guidelines for the rehabilitation of the patient with adhesive capsulitis (frozen shoulder) undergoing arthroscopic glenohumeral capsular release.

The frequency of visits may be determined mutually by the patient and therapist, depending upon patient comfort level, progress, and understanding of the home program.

Specific changes in the program will be made by the physician as appropriate for the individual patient. Patients with progressive pain and/or persistent stiffness may be candidates for injection therapy and/or further surgical treatment.

Questions regarding the progress of any specific patient are encouraged, and should be directed to Dr. Lervick at **952-456-7111**.

### REFERENCE:

Clinical Orthopaedic Rehabilitation, 2<sup>nd</sup> edition. SB Brotzman, KE Wilk. Mosby 2003.