Nonoperative Treatment For Adhesive Capsulitis-- Dr. Trueblood

**Indications:** The result of spontaneous inflammation, adherence to the humeral neck, and compensatory contraction of the shoulder capsule, adhesive capsulitis is a common cause of progressive loss of motion and increasing pain in the non-arthritic shoulder. The inciting cause of this inflammation is unknown, though there is occasionally a trivial injury or insult that may trigger the event. Patients often present to medical care after months of progressive dysfunction and are commonly incredulous when told that their problem may be treated nonoperatively as the associated discomfort and night pain may be quite severe. The hallmark of this disorder is loss of motion at the glenohumeral joint, particularly IR at 45 degrees of abduction.

**Presenting Visit:**
- Should have had 3-views of shoulder to R/O calcific tendinitis, arthritis, fracture, and tumor.
- The patient receives an intra-articular injection of 40mg Kenalog and 4cc of 1% Lidocaine under aseptic condition in office.
- Physical therapy Rx by protocol.
- Limited Rx of narcotic pain medications may be used to facilitate early ROM.
- Work note: No overhead lifting. May not drive within 8 hours of taking narcotic medications.
- Follow-up in 6 weeks.

**Phase 1-- Regain AROM/ PROM**

*Therapy 4-5x/ week x 6 weeks*

**ROM:**
- PROM of shoulder. Aggressive stretching, but no ballistic/ jerky motions or manipulations. Stretches should be deep, but not excessively painful.
- Scapulothoracic and glenohumeral mobilizations/ glides as tolerated.
- AROM of shoulder in limits
  - Emphasize coordination of motion and correction of substitution patterns.

**Strengthening:**
- Scapular “clock” exercises. Isometric protraction, retraction, elevation, and depression.
- Isometric rotator cuff exercises.

**Modalities prn**

**HEP--**
- Cane exercises at least 3 times per day, 10 repetitions each in all directions.
- Posterior capsule stretching
  - Cross arm stretch
  - Side lying internal rotation stretch (sleeper stretch)

Progress to Phase 2 when:
1. Full, symmetric AROM/ PROM compared with contralateral shoulder without substitution or pain.

1st follow-up at 6 weeks--
- Assess ROM. Expect that patient will still be somewhat stiff and limited in strength. Focal strength deficits may trigger evaluation for rotator cuff pathology (U/S vs. MRI)
- Physical Therapy referral.
- Work note: If fully recovered, return without limits. If still stiff/ weak → 20# overhead lifting.
- Follow-up in 6 weeks

Phase 2-- Initiate strength/ function (usually between weeks 4 and 7)

*Therapy 1-2x/ week x4 weeks*

ROM: Maintain ROM

Strengthening:
- Initiate theraband for internal and external rotation at 0° abduction (IR later in the phase)
- Shoulder abduction
- Shoulder flexion
- Latissimus dorsi
- Rhomboids
- Biceps curl
- Triceps kick-out over table
- Push-ups to wall (serratus anterior)

Modalities prn
HEP

Progress to Phase 3 when tolerating light isotonic resistance and scapular strengthening without substitution.
Phase 3-- Functional strengthening and transition to home program.

**Therapy 1-2x/ week. Transition to HEP as tolerated.**

**AROM/ PROM**

**Strengthening:**
- Continue internal and external rotation theraband exercises with (arm at side)
- Theraband for rhomboids
- Theraband for latissimus dorsi
- Theraband for a biceps and triceps
- Progressive dumbbell exercises for supraspinatus and deltoid
- Progressive serratus anterior push-up-anterior flexion
- Continue trunk and lower extremity strengthening and conditioning exercises
  - may add cutting and pivoting exercise
  - agility and acceleration training okay
- Isotonic shoulder strengthening exercises isolating the rotator cuff
  - side-lying external rotation
  - prone arm raises at 0, 90 & 120°
  - prone external rotation
  - internal rotation at 0 & 90°
- Progress to standing strengthening exercise once able to tolerate resistance against gravity without substitution
- Progress scapulothoracic/upper back musculature strengthening exercises
- Dynamic stabilization exercises

**Modalities prn.**

**HEP**

2nd follow-up at 12 weeks from initial eval--

- Assess pain. DASH/ ASES score.
- If patient still limited in ROM, definitely obtain MR arthrogram to assess for intra-articular pathology and have pt. must see Dr. Trueblood at next available, non-emergent office visit. May benefit from arthroscopic capsular release.
- Pt. independent with all strengthening activities → RTW no limits. F/u prn.