

# Palmetto Health USC

## ORTHOPEDIC CENTER

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### **NON OPERATIVE REHABILITATION FOR ANTERIOR SHOULDER INSTABILITY**

This program is designed to return the patient/athlete to his activity/sport as quickly and safely as possible. The program's length will vary depending on several factors;

1. Severity of injury
2. Acute vs. Chronic condition
3. Range of motion/strength status
4. Performance/activity demands

#### **I. PHASE I - ACUTE MOTION PHASE**

GOALS:        Re-establish nonpainful range of motion  
                 Retard muscle atrophy  
                 Decrease pain/inflammation

\*\*        During the early rehabilitation program caution must be applied in placing the anterior capsule under stress (I.e. ABD, ER) until dynamic joint stability is restored.

#### **1. RANGE OF MOTION EXERCISES**

- A. Pendulum
- B. Circumduction
- C. Rope and pulley
  - \* flexion
  - \* abduction to 90°, progress to full range of motion
- D. T-Bar
  - \* flexion
  - \* abduction
  - \* internal rotation (scapular plane)
  - \* external rotation (scapular plane)

- progress to 90° of abduction with IR and ER

- E. Posterior capsular stretching
- F. Upper extremity ergometer
- \*\* Shoulder hyperextension is contraindicated

2. **STRENGTHENING EXERCISES**

- A. Isometrics
  - \* flexion
  - \* abduction
  - \* extension
  - \* internal rotation (multi-angles)
    - external rotation (scapular plane)
    - rhythmic stabilization to increase proximal joint stability, open and closed chain

3. **DECREASE PAIN/INFLAMMATION**

- A. Therapeutic modalities (ice, heat, electrotherapy, etc.)
- B. NSAID
- C. Joint mobilization

**II. PHASE II - INTERMEDIATE PHASE**

**CRITERIA TO PROGRESS TO PHASE II:**

- 1. Full range of motion
- 2. Minimal pain or tenderness
- 3. “Good” MMT or IR, ER, flexion, and abduction

**GOALS:** Regain and improve muscular strength. Normalize arthrokinematics. Improve neuromuscular control of shoulder complex.

- 1. Continue isometric strengthening as necessary
- 2. Initiate surgical tubing exercises
  - \* internal rotation
  - \* external rotation
    - performed with arm at side with elbow flexed to 90°
- 3. Initiate isotonic strengthening
  - A. Shoulder flexion
  - B. Shoulder abduction to 90°
  - C. Shoulder internal rotation
  - D. Side lying external rotation to 45°
  - E. Shoulder shrug
  - F. Shoulder extension
  - G. Horizontal adduction
  - H. Supraspinatus

- I. Biceps
- J. Push-ups

**NORMALIZE ARTHROKINEMATICS OF SHOULDER COMPLEX**

- 1. Continue joint mobilization
- 2. Patient education of mechanics of activity/sport

**IMPROVE NEUROMUSCULAR CONTROL OF SHOULDER COMPLEX**

- 1. Initiation of proprioceptive neuromuscular facilitation
- 2. Upper body utilization of the "Fitter"

**\*\* CONTINUE USE OF MODALITIES AS NEEDED**

**III. PHASE III - ADVANCED STRENGTHENING PHASE**

**CRITERIA TO PROGRESS TO PHASE III:**

- 1. Full non-painful range of motion
- 2. No palpable tenderness
- 3. Continued progression of resistive exercises

**GOALS:** Improve strength/power/endurance  
Improve neuromuscular control  
Prepare patient/athlete for activity

- 1. Continue posterior capsular stretches
- 2. Continue use of modalities as needed
- 3. Continue isotonic strengthening (PRE's)
- 4. Emphasize PNF
- 5. Initiate Isokinetics
  - \* flexion/extension
  - \* abduction/adduction
- 6. Advancement of eccentric exercises
- 7. Initiate plyometric training
  - \* wall push ups
  - \* chin-ups
  - \* medicine ball
  - \* step-up boxes
- 8. Begin military press, chest press, supine flys

**\*\* PRECAUTION IS AVOIDING EXCESSIVE STRESS ON ANTERIOR CAPSULE**

**IV. PHASE IV RETURN TO ACTIVITY PHASE**

CRITERIA TO PROGRESS TO PHASE IV:

1. Full range of motion
2. No pain or palpable tenderness
3. Satisfactory clinical exam
4. Satisfactory isokinetic test

GOALS:       Progressively increase activity level to prepare patient/athlete for full functional return  
                  Maintain optimal level of strength/power/endurance

1. Continue modalities as needed
2. Continue posterior capsular stretches
3. Continue isotonic strengthening
4. Continue eccentric strengthening
5. Initiate interval program

**V. FOLLOW UP**

1. Isokinetic test
2. Monitor of interval program
3. Instruction of exercise program