

# Palmetto Health USC

## ORTHOPEDIC CENTER

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### ANTERIOR CAPSULAR SHIFT REHABILITATION PROTOCOL (Regular Program for General Orthopedic Patient)

This rehabilitation program's goal is to return the patient/athlete to their activity/sport as quickly and safely as possible, while maintaining a stable shoulder. The program is based on muscle physiology, biomechanics, anatomy and the healing process following surgery for a capsular shift.

The capsular shift procedure is one where the orthopedic surgeon makes an incision into the ligamentous capsule of the shoulder and pulls the capsule tighter and then sutures the capsule together.

The ultimate goal is a functional stable shoulder and a pain free return to pre-surgery functional level. Compliance to your rehabilitation program is critical to the patient's ultimate outcome.

#### I. PHASE I - PROTECTION PHASE (Week 0-6)

##### A. Goals

1. Allow healing of sutures capsule
2. Begin early protected and restricted range of motion
3. Retard muscular atrophy and enhance dynamic stability
4. Decrease pain-inflammation

##### B. Brace

1. Patients with bidirectional instability are placed in sling for 4-6 weeks
  2. Patients with multi-directional instability are placed in abduction brace 4-6 weeks
- \*\* Physician will make determination

##### C. WEEK 0-2

###### 1. Precautions

- sleep in immobilizer for 4-6 weeks
- no overhead activities for 6-8 weeks
- compliance to rehab program is critical

###### 2. Exercises

- gripping exercises with putty

- elbow flexion/extension and pronation/supination
- pendulum exercises (non-weighted)
- rope and pulley active assisted exercises
  - shoulder flexion to 90°
  - shoulder elevation in scapular plane to 60°
- L-Bar exercises
  - ER to 15° with arm abduction at 30°
  - no shoulder abduction or extension
- AROM cervical spine
- Isometric
  - flexors, extensors, ER, IR, ABD

3. Criteria for Hospital Discharge

- Isometric shoulder ROM (AAROM); flexion 90°, abduction 45°, ER 20°
- Minimal pain and swelling
- “good” proximal and distal muscle power

D. **WEEK 2-4**

1. Goals

- gradual increase in range of motion
- normalize arthrokinematics
- improve strength
- decrease pain/inflammation

2. Range of Motion Exercises

- L-Bar active assisted exercises, gentle PROM exercises
  - ER to 25-30° in scapular plane
  - IR to 30-35° in scapular plane
  - shoulder flexion to 105-115°
  - shoulder elevation in scapular plane to 115°- rope and pulley flexion
- all exercises performed to tolerance and therapist/physician motion guides
- take to point of pain and/or resistance and hold
- gentle self capsular stretches

3. Gentle joint mobilization to re-establish normal arthrokinematics to

- scapulothoracic joint

- glenohumeral joint
- sternoclavicular joint

4. Strengthening exercises

- isometrics
- rhythmic stabilization exercises
- may initiate tubing for ER/IR at 0°

5. Conditioning program for

- trunk

- lower extremities
- cardiovascular
- 6. Decrease pain/inflammation
  - ice, NSAID, modalities

E. **WEEK 4-6**

1. Continue all exercises listed above
2. Range of Motion exercises
  - L-Bar active assisted exercises
    - ER to 25-35° at 45° of shoulder ABD
    - continue all others to tolerance (based on end feel)
3. Continue stabilization exercises
  - PNF with rhythmic stabilization, neuromuscular exercises

II. **PHASE II - INTERMEDIATE PHASE (Week 6-12)**

A. Goals

1. Full nonpainful range of motion at Week 10-12
2. Normalize arthrokinematics
3. Increase strength
4. Improve neuromuscular control

B. **WEEK 6-8**

1. Range of motion exercises
  - L-Bar active assisted exercises at 90° ABD
  - Continue all exercises listed above
  - Gradually increase range of motion to full range of motion Week 12
  - Continue self capsular stretches
  - May initiate IR/ER range of motion at 90° of abduction
2. Strengthening exercises
  - Initiate isotonic dumbbell program
    - side lying ER
  
    - side lying IR
    - shoulder abduction
    - supraspinatus
3. Initiate isotonic dumbbell program (cont'd)
  - latissimus dorsi
  - rhomboids
  - biceps curls
  - triceps curls

- shoulder shrugs
  - push-ups into chair (serratus anterior)
4. Continue tubing at 0° for ER/IR
  5. Continue stabilization exercises for glenohumeral joint
  6. Initiate neuromuscular control exercises for scapulothoracic joint

C. **WEEK 8-10**

1. Continue all exercises listed above, emphasis neuromuscular control drills, PNF stabilization drills, and scapular strengthening
2. Initiate tubing exercises for rhomboids, latissimus dorsi, biceps, and triceps
3. Progress range of motion to full range of motion
  - ER at 90° ABD: 80-85°
  - IR at 90° ABD: 70-75°
  - flexion to 165-170°

**III. PHASE III - DYNAMIC STRENGTHENING PHASE (Week 12-20)**  
**Advanced Strengthening Phase**

\*\* Aggressive strengthening or stretching program based on type of patient.  
(Therapist and/or physician will determine.)

A. **WEEK 12-17**

1. Goals
  - improve strength/power/endurance
  - improve neuromuscular control
  - prepare athletic patient for gradual return to sports
2. Criteria to Enter Phase III
  - full nonpainful range of motion
  - \*\* Patient must fulfill this criteria before progressing to this phase
  - no pain or tenderness
  - strength 70% of better compared to contralateral side
3. Emphasis of Phase III
  - dynamic stabilization exercises
  - eccentric exercises
  - diagonal patterns, functional movements
4. Exercises
  - fundamental shoulder exercises

\*\* emphasis: neuromuscular control drills, PNF rhythmic stabilization,

rotator cuff strengthening, scapular strengthening

- continue tubing exercises for IR/ER at 0° ABD (arm at side)
- continue isotonics
  - for rhomboids
  - for latissimus dorsi
  - for biceps
  - for diagonal patterns D2 extension
  - for diagonal patterns D2 flexion
- continue dumbbell exercises for supraspinatus and deltoid
- continue serratus anterior strengthening exercises push-ups floor
- continue trunk/LE strengthening exercises
- continue neuromuscular exercises
- continue self capsular stretches

B. **WEEK 17-20**

1. continue all exercises above
2. emphasis on gradual return to recreational activities

IV. **PHASE IV - RETURN TO ACTIVITY (Week 20-28)**

A. Goals

1. Progressively increase activities to prepare patient for full functional return

B. Criteria to Progress to Phase IV

1. Full range of motion
2. Non pain or tenderness
3. Isokinetic test that fulfills criteria
4. Satisfactory clinical exam

C. Exercise

1. Initiate interval sports programs (if patient is a recreational athlete)
2. Continue tubing exercises as listed in Phase III
3. Continue all strengthening exercises
4. Continue range of motion exercises