

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 orthopaedic 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 0-8)**

Goals: Allow healing of sutured capsule
Begin early protected and restricted range of motion
Retard muscular atrophy and enhance dynamic stability
Decrease pain/inflammation

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

Week 0-2

Precautions:

1. Sleep in immobilizer for 4 weeks
2. No overhead activities for 6-8 weeks
3. Compliance to rehab program is critical.

Exercises:

- Wrist, hand, gripping
- Elbow flex/extension and pronation/supination
- Pendulum exercises (non-weighted)
- AROM cervical spine
- Isometrics
 - Flexors, Extensors, ER, IR, ABD
 - Rhythmic stabilization drills ER/IR
 - Proprioception drills

Week 3-4

Goals: Gradual increase in ROM
Normalize arthrokinematics
Improve strength
Decrease pain/inflammation

1. Initiate Range of Motion Exercises
L-Bar active assisted exercises, gentle PROM exercises
ER at 30 degrees scapular plane to 10-15 degrees.

IR at 30 degrees scapular plane to 15-20 degrees.
 Shoulder flexion to 70 degrees week 3.
 Shoulder flexion to 90 degrees week 8.
 Rope & Pulley Flexion to 70-90 degrees.

- * All exercises performed to tolerance and therapist/physician motion guidelines
- * Take to point of pain and/or resistance and hold

2. Strengthening exercises

- isometrics
- rhythmic stabilization exercises
- may initiate tubing for ER/IR at 0 degrees
- proprioception drills
- scapular strengthening exercises

3. Conditioning program for:

- trunk
- lower extremities
- cardiovascular

4. Decrease pain/inflammation:

- ice, NSAID, modalities

Week 5-8

1. Continue all exercises listed above
2. Range of Motion Exercises
L-Bar Active Assisted Exercises

- *Base rate of ROM progress on amount of motion and end feel
- ER at 40 degrees abduction scapular plane to 40 degrees at week 5
- IR at 40 degrees abd scapular plan to 45 degrees
- Flexion to 125 degrees week 5-6

3. Strengthening exercises

- initiate active ROM week 5
- rhythmic stabilization drills
- emphasize rotator cuff strengthening

II. Phase II - Intermediate Phase (Week 8-14)

- Goals: Full non-painful ROM at week 10-12
 Normalize arthrokinematics
 Increase strength
 Improve neuromuscular control

Week 8-10

1. Range of Motion Exercise
L-Bar active assisted exercises at 90 degrees ABD
Flexion to 145-150 degrees
ER at 90 degrees Abd to 70 degrees
IR at 90 degrees Abd to 55 degrees
*Goal: to obtain 80% (at week 10) of full ROM and allow time and patient to gain the rest
2. Strengthening Exercises
Initiate isotonic dumbbell program
 - sidelying ER
 - sidelying IR
 - shoulder Abduction to 90 degrees
 - supraspinatus (full can)
 - latissimus dorsi prone rowing
 - rhomboids horz. Abd
 - biceps curls
 - triceps curls
 - push-ups into chair (serratus anterior)
 Continue tubing at 0 degrees for ER/IR
 Continue stabilization exercises for the glenohumeral joint
 Scapular strengthening and neuromuscular exercises
3. Initiate Neuromuscular Control Exercises for Scapulothoracic Joint

Week 11-14

1. Continue all exercises listed above, emphasis neuromuscular control drills, PNF stabilization drills, and scapular strengthening.
2. Progress ROM to:
 - ER at 90 degrees ABD: 80 - 85 degrees
 - IR at 90 degrees ABD: 70 - 75 degrees
 - Flexion to 165 - 170 degrees.

III. Phase III - Dynamic Strengthening Phase (Week 14-22)

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

Week 14-17

Goals: Improve strength/power/endurance
Improve neuromuscular control
Prepare athletic patient for gradual return to sports

**** Criteria to Enter Phase III:**

- 1) Full non-painful ROM
 - ** Patient must fulfill this criteria before progressing to this phase.
- 2) No pain or tenderness
- 3) Strength 70% or better compared to contralateral side

Exercises:

- Fundamental shoulder exercises
 - **Emphasis: Neuromuscular control drills, PNF rhythmic stabilization, rotator cuff strengthening, scapular strengthening.
- Continue tubing exercises for IR/ER at 0 degrees ABD (arm at side)
- Continue isotonics:for rhomboids and lower trapezius
 - for latissimus dorsi
 - for biceps
 - for diagonal patterns D2 extension with RS
 - for diagonal patterns D2 flexion with RS
- Continue dumbbell exercises for supraspinatus and deltoid
- Continue serratus anterior strengthening exercises push-ups floor
- Continue closed kinetic chain drills
- Continue trunk/LE strengthening exercises
- Continue neuromuscular exercises and proprioception drills

Week 18-22

- Continue all exercises above
- Emphasis on gradual return to restricted recreational activities (no overhead sports)

IV. Phase IV - Return to Activity (Week 22-30)

Goals: Progressively increase activities to prepare patient for full functional return

Criteria to Progress to Phase IV:

- 1) Full ROM
- 2) No pain or tenderness
- 3) Muscle strength test that fulfills criteria
- 4) Satisfactory clinical exam

Exercise:

- Initiate interval sports programs (if patient is a recreational athlete) (usually at 6-7 months)
- Continue strengthening exercises
- Fundamental shoulder strengthening exercises
- Core stabilization drills
- Endurance training