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## **ANTERIOR SHOULDER DISLOCATION/SUBLUXATION CONSERVATIVE REHABILITATION PROGRAM**

The physical therapy rehabilitation for an anterior shoulder dislocation/subluxation will vary in length depending on factors such as:

1. Degree of shoulder instability/laxity.
2. Acute vs. Chronic condition.
3. Length of time immobilized.
4. Strength/ROM status.
5. Performance/Activity demands.

The rehabilitation program is outlined in three phases. It is possible to overlap phases (Phase I - II, Phase II - III) depending on the progress of each individual. In all exercises during Phase I and Phase II, caution must be applied in placing undue stress on the anterior joint capsule as dynamic joint stability is restored. An isokinetic strength and endurance test is scheduled during the latter part of Phase II. The focus in Phase III is on progressive isotonic and isokinetic exercises in preparation for returning to the prior activity level (work, recreational activity, sports, etc.)

### **PHASE I**

1. Apply modalities as needed (heat, ice, electrotherapy, etc.).
2. Perform range of motion exercises (passive, active-assistive, active) as tolerated. For shoulder abduction and external rotation, avoid stress to the anterior joint capsule by positioning the shoulder in the scapular plane (approximately 20° - 30° forward of the coronal plane). Shoulder hyperextension is contraindicated.
3. Shoulder stretch: posterior cuff/capsule stretch.
4. Mobilization (posterior glides as needed).
5. Active shoulder internal/external rotation exercises with surgical or rubber tubing. Arm positioned at side with elbow flexed at 90°. Avoid excessive stress to the anterior joint capsule by limiting external rotation to no greater than a 45° range (as tolerated).

Note: If discomfort persists, isometric exercises may be added. The shoulder position may be adjusted to allow a pain free muscle contraction to occur.

6. Add supraspinatus exercise in the scapular plane if adequate range of motion is available (0° to 90° range).
7. Active shoulder flexion exercise through available range of motion.
8. Active shoulder abduction exercise to 90°. Maintain shoulder in the scapular plane to avoid stress on the anterior joint capsule.

9. Shoulder extension exercise - lying prone or standing (bending at the waist). **Avoid** the shoulder extended position by preventing arm movement beyond the plane of the body. This will decrease excessive stress to the anterior joint capsule.
10. Shoulder shrug exercise - avoid traction in the glenohumeral joint between repetitions by not allowing the arms to drop completely. This will avoid an excessive inferior glide of the humeral head.
11. Active horizontal adduction exercise - perform supine with the starting position in the scapular plane.
12. Active shoulder internal/external rotation - progress to free weights.
  - A. Shoulder internal rotation: perform sidelying. Elevate or support the lateral chest. wall (pillow, bolster, wedge, etc.) to decrease the joint. compression on the involved shoulder.
  - B. Shoulder external rotation: lie on the uninvolved side. Avoid excessive stress to the anterior joint capsule by limiting movement to no greater than 45° - 50° of external rotation.
13. Add forearm strengthening exercises (elbow, wrist).

## PHASE II

1. Continue posterior cuff/capsule stretch, mobilization, and range of motion exercises (as needed).
2. Continue shoulder strengthening with surgical tubing and/or free weights. Emphasize eccentric phase of contraction.
3. Add arm ergometer for endurance exercise.
4. Add push-ups. Maintain proper alignment of the shoulders and elbows at the starting position. *Caution is applied during the descent phase of the push-up to avoid excessive stress to the anterior capsule. Do not lower the body beyond the elbows. Begin with wall push-ups. As strength improves, progress to floor push-ups (modified - hands and knees, or military hands and feet) as tolerated.*
5. Isokinetic test. Perform isokinetic strength and endurance test for the following suggested patterns: shoulder internal/external rotation (arm at side), abduction/adduction, and flexion/extension as tolerated. To perform this test, prerequisite strength requirements of the rotator cuff are 5 - 10 pounds for external rotation and 15 - 20 pounds for internal. rotation. The shoulder should be pain free and have no significant amount of swelling.
6. Add isokinetic strengthening and endurance exercises (high speeds - 200 plus degrees/sec.) for shoulder internal/external rotation with arm at side. Maintain shoulder in 15°- 20°of flexion anal limit external rotation to 45° - 50°to avoid excessive stress to the anterior joint capsule.
7. Add total body conditioning with emphasis on strength and endurance, include flexibility exercises as needed.

## PHASE III

1. Continue posterior cuff/capsule stretching (as needed).
2. Continue to emphasize the eccentric phase in strengthening the rotator cuff.
3. Continue to progress isotonic and isokinetic exercises. For shoulder internal/external rotation, gradually increase the stress to the anterior joint capsule by **positioning the upper extremity** at 45° and 80° to 90° of shoulder abduction. Continue to exercise in the functional shoulder position specific to the sport as tolerated.
4. Add isokinetic exercises for shoulder flexion/extension, abduction/adduction, and horizontal abduction/adduction. Take precautions in avoiding excessive stress to the anterior joint capsule.

5. Add chin-ups.
6. Continue arm ergometer for endurance.
7. Add military press.
8. Isokinetic Test. The second isokinetic test is administered for shoulder internal/external rotation, abduction/adduction, and flexion/extension. For shoulder internal/external rotation, the shoulder may be tested in the functional position (80° - 90° of abduction). Test results should demonstrate at least 80% strength and endurance (as compared to the uninvolved side) before proceeding with exercises specific to the activity setting.
9. Continue total body conditioning program with emphasis on the shoulder (rotator cuff).
10. Skill mastery. Begin practicing skills specific to the activity (work, recreational activity, sport, etc.). For *example, throwing athletes, (e.g., pitchers) may proceed to throwing program.*