

Posterior Shoulder Dislocation/Subluxation

Non-operative treatment

The physical therapy rehabilitation for an posterior shoulder dislocation/subluxation will vary in length depending on factors such as degree of instability, acute versus chronic condition, length of time immobilized, strength and range of motion status, and performance/activity demands.

This program is in three phases and phases can overlap. In all exercises during phase 1 and 2, caution must be applied in placing undue stress on the posterior joint capsule as dynamic joint stability is restored. An isokinetic strength and endurance test is scheduled during the latter part of phase 2. The focus of phase 3 is on progressive isotonic and isokinetic exercises in preparation for returning to the prior activity level.

Phase 1

- Apply modalities as needed (heat, ice, electrotherapy, etc.).
- Perform range of motion exercises (passive, active-assist, active) as tolerated. For shoulder abduction and external rotation, avoid stress to the anterior joint capsule by positioning the shoulder in the scapular plane (about 20-30 degrees forward of the coronal plane). Shoulder hyperextension is contraindicated.
- Stretch anterior cuff and capsule.
- Mobilization (anterior glides as needed).
- Active external rotation may be performed from 0 degrees rotation to full external rotation. Arm is positioned at side with elbow flexed 90 degrees. Use rubber tubing for resistance. If pain persists, isometric exercises may be added. As strength improves, progress to using free weights, lying prone with arm abducted to 90 degrees or sidelying with arm at side.
 - a. Prone: Perform the combined movements of horizontal abduction followed by external rotation to protect posterior joint capsule.
 - b. Sidelying: Limit the degrees of internal rotation to protect the posterior capsule.
- Add active internal rotation performed from full external rotation to 0 degrees rotation using rubber tubing. Limiting the degrees of internal rotation is necessary to avoid excessive stress to the posterior capsule. If there is pain with active movements, strength can be maintained by performing an isometric contraction. The shoulder position may be adjusted to allow a pain free muscle contraction to occur.
- Add supraspinatus exercise, if adequate range of motion available (0-90 degrees). Shoulder is positioned in the scapular plane about 20-30 degrees forward of the coronal plane.
- Active shoulder flexion exercise through available range of motion.
- Active shoulder abduction exercise to 90 degrees.
- 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.

- Active horizontal abduction exercise (posterior deltoid) in prone lying position. Avoid excessive stress to the posterior capsule by limiting movement from 45 degrees of horizontal adduction to full horizontal abduction.
- Add forearm strengthening exercises (elbow and wrist).

Phase 2

- Continue anterior cuff/capsule stretch, mobilization, and range of motion exercises.
- Continue shoulder strengthening (emphasis on rotator cuff and posterior deltoid) with tubing and/or free weights. Emphasize eccentric phase of contraction.
- Add arm ergometer for endurance exercise.
- Add push-ups. Movement should be pain free with emphasis on protecting the posterior capsule. Shoulders are positioned in 80-90 degrees of abduction. *Caution is applied during the ascent phase of the push-up to avoid excessive stress to the posterior capsule.* Do not raise the body beyond the scapular plane. Begin with wall push-ups. As strength improves, progress to floor push-ups as tolerated.
- Isokinetic test. Perform isokinetic strength and endurance test for the following suggested patterns: shoulder internal/external rotation (arm at side), horizontal abduction, and abduction/adduction. To perform 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.
- Active shoulder internal rotation, using free weights, may be added performed supine with the arm positioned at the side.
- Horizontal abduction may be performed through an increased range (starting position at 90 degrees of horizontal adduction as tolerated).
- Add total body conditioning with emphasis on strength and endurance, including flexibility exercises as needed.

Phase 3

- Continue anterior cuff/capsule stretching (as needed).
- Continue to emphasize the eccentric phase in strengthening the rotator cuff.
- Add isokinetic strengthening and endurance exercises (high speeds-200+ degrees/sec) for shoulder internal and external rotation with the arm at the side.
- Isokinetic strengthening for horizontal abduction/adduction may be added. Shoulder flexion/extension and abduction/adduction may be added as needed
- Add military press and continue arm ergometer for endurance.
- The second isokinetic test is administered for shoulder internal/external rotation, horizontal abduction/adduction and abduction/adduction is given. For shoulder IR/ER, the shoulder may be tested in the functional position (80-90 degrees abduction). Test results for internal/external rotation and horizontal abduction should demonstrate at least **80%** strength and endurance (as compared to opposite side) before proceeding with exercises specific to the activity setting.
- Continue total body conditioning program.
- Skill mastery. Begin practicing skills specific to the activity (work, recreational activity, sport, etc). *For example, throwing athletes may proceed to throwing program.*