
Protocol R3
Non-Operative Strengthening Program for
Scapular Winging or Dyskinesis

Phase I: Early Strengthening (weeks 0-6)

GOALS:

- Improve shoulder stability.
- Strengthen scapular stabilizers to minimize winging.

ANCILLARY MEASURES:

- Use pain medications as needed.
- Ice the shoulder (cold pack) after exercise as needed.

EXERCISES:

- **Shoulder Shrug:** Start with simple shoulder shrug, lifting the top of your shoulder as high as possible, 20 repetitions.
- **Low Row:** Stand sideways with symptomatic shoulder adjacent to a fixed table. Trunk extended, scapula retracted, arm and elbow extended with hand pushing posteriorly against the table (isometric exercise). Perform 20 repetitions.
- **Scapular Clock:** Stand sideways with symptomatic shoulder adjacent to a wall. Place hand on the wall with shoulder abducted, arm and elbow fully extended, supporting the weight of the arm. Scapula is sequentially elevated, depressed, retracted and protracted, 20 repetitions.
- **Scapular Control:** Stand facing a mirror, arms outstretched resting on the mirror. Hold scapulae protracted (by pushing your shoulders towards the front), then hold scapulae retracted (by bringing your shoulders toward the back). Continue by holding scapulae elevated and retracted, then depressed and retracted. Complete the sequence by holding shoulders internally rotated and elevated, then externally rotated and depressed. Progress to 20 repetitions of this isometric sequence.
- **Forward Lunges:** Stand facing a mirror. Bring symptomatic arm forward and across your body with elbow straight (as though throwing a punch) while stepping forward with the opposite leg. Perform 20 repetitions.
- **Blackburn (or “Superman”) Exercises:** Start lying on your abdomen with head well supported. Hold arms outstretched to the side (as though flying), palms facing downward and pinch scapulae together in the midline. Progress through sequence of positions for this isometric exercise: (1) arms outstretched to the side, thumbs upward, (2) arms outstretched overhead, palms downward, (3) arms outstretched overhead, thumbs upward, (4) arms outward, elbows flexed 90 degrees, thumbs upward and (5) arms outstretched directed toward legs and feet with palms downward. In all six positions, the scapular should be pinched together in the midline, 20 repetitions.
- **Pushups:** Start with modified pushups against a wall from a standing position, 20 repetitions. Progress to more difficult pushups with hands on a table, 20 repetitions.

**Non-Operative Strengthening Program for
Scapular Winging or Dyskinesia**
(continued)

Phase I: Early Strengthening (weeks 0-6)

- **Press Plus:** Lying on your back, a bench press type exercise is performed with a weight lifting bar. Hold the bar with both hands positioned about three feet apart. Push the bar away from your body (the press) and then raise your shoulder blades off the table (the plus), 20 repetitions.

PRECAUTIONS:

- Therapist should stretch the inferior and posterior shoulder joint capsule and the pectoralis minor, if necessary.
- Therapist may progress to Phase II exercise program after the patient has mastered the Phase I exercises.

Protocol R3
Non-Operative Strengthening Program for
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Phase II: Advanced Strengthening (weeks 7-12)

GOALS:

- Improve shoulder stability, particularly in overhead athletes.
- Strengthen scapular stabilizers to minimize winging.

ANCILLARY MEASURES:

- Use pain medications as needed.
- Ice the shoulder (cold pack) after exercise as needed.

EXERCISES:

- **Continue with the Phase I isometric exercises.** Gradually transition to isotonic exercises by adding resistance (therabands, then light free weights) to the strengthening program as described below.
- **Shoulder Shrug:** Start with simple shoulder shrug, lifting the top of your shoulder as high as possible, 20 repetitions. When the shrug becomes easy, shrug against the resistance of a theraband, 20 repetitions. Then progress to more resistive therabands. Finally, may hold light free weights in each hand (no more than three pounds) and repeat the shrug, 20 repetitions.
- **Low Row:** Stand sideways with symptomatic shoulder adjacent to a fixed table. Trunk extended, scapula retracted, arm and elbow extended with hand pushing posteriorly against the table (isometric exercise). Progress to isotonic low row by pulling theraband posteriorly with shoulder extended, scapula retracted, arm and elbow in full extension, 20 repetitions.
- **Forward Lunges:** Stand facing a mirror. Bring symptomatic arm forward and across your body with elbow straight (as though throwing a punch) while stepping forward with the opposite leg. After this exercise becomes easy, you may increase resistance by holding a one pound free weight during the lunge (dumbbell punches).
- **Diagonal Pulls:** Pull a theraband fixed to the floor upward and diagonally across your body as though pulling a lawnmower starter cord. Begin with low resistive theraband, 20 repetitions. Progress to more resistive therabands.
- **Pushups:** Start with modified pushups against a wall from a standing position, 20 repetitions. Progress to more difficult pushups with hands on a table, then semi-prone pushups from kneeling position, then standard prone pushups from the floor. Seated pushups, pushing off from a seated position with arms outstretched and elbows locked, may also be added.

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(continued)

Phase II: Advanced Strengthening (weeks 7-12)

- **Press Plus:** Lying on your back, a bench press type exercise is performed with a weight lifting bar. Hold the bar with both hands positioned about three feet apart. Push the bar away from your body (the press) and then raise your shoulder blades off the table (the plus). When you can control the unweighted bar for 20 repetitions, then weight may be gradually added to the bar (up to maximum of one third body weight). This exercise should be done under the direct supervision of a physical therapist.

PRECAUTIONS:

- Therapist should stretch the inferior and posterior shoulder joint capsule and the pectoralis minor, if necessary.
- Therapist should discontinue therapy and send patient back to the office, if the patient does not improve with this strengthening program.