



Self-Directed Home Exercise Program Rotator Cuff Disorders

Introduction: This home exercise program is based evidence from large multicenter studies¹ demonstrating a beneficial effect of exercise in the treatment of rotator cuff disorders, including tendinopathy, bursitis, and some select tears. Progression through the program should be based on pain, tolerance of motion, and your specific injury.

The program has 4 components:

1. Stretching, 2. Range of motion, 3. Strengthening Level 1, 4. Strengthening Level 2

Range of motion and stretching exercises should be performed daily. Rotator Cuff strengthening should be delayed until active range of motion is nearly pain free and mobility nearly normal. Rotator Cuff strengthening should be performed 3x/week.

Modalities: It is recommended that heat and any anti-inflammatory medications be taken prior to exercises and ice after.

1. **Stretching:** should be performed daily and should include the following exercises. *Each stretch should be held for 30 seconds and repeated five times with 10 seconds rest between each stretch.*

Anterior shoulder stretching, performed by the patient in a corner or door jam



Anterior Shoulder Stretch: Place hands at shoulder level on each side of a door or in a corner of a room. Gently step forward into door or corner and hold modify arm position if discomfort.

Posterior shoulder stretching using the crossed body adduction technique.



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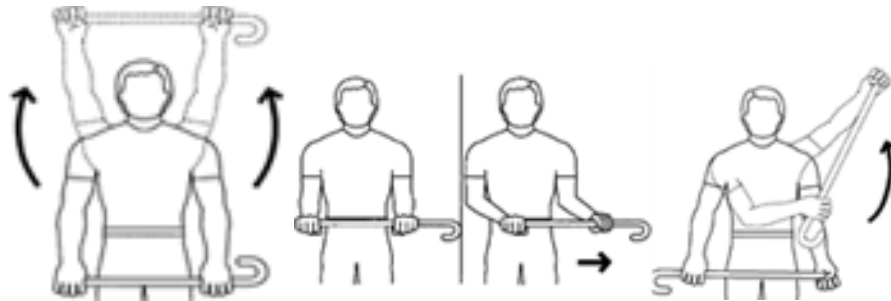
Posterior Shoulder Stretch: Bring involved arm across in front of the body as shown. Hold elbow with other arm. Gently flex the bent elbow which will assist in pulling the arm across the chest until stretch is felt in the back of the shoulder.

- Stretches for the posterior (back part of the) capsule.



Sleeper Stretch: Lie on your side with a pillow supporting your head. Bring your elbow up to a 90 degree angle to your body. Gently push your hand toward the surface until you feel a stretch in your shoulder without pain.

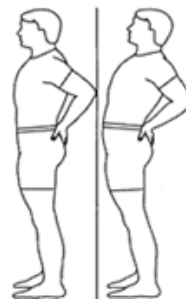
2. **Range of Motion:** You can begin to restore your motion by using active assistive devices such as a cane, pulley or the uninvolved arm. Additional work on postural exercise, like shrugs, and shoulder retraction can be started. Glenohumeral (ball and socket) motion should begin with pendulum exercises, progress to active assisted motion, then to active motion as comfort dictates. Try to avoid "hiking" the shoulder and sometimes a mirror to watch yourself in motion is helpful.



Cane (Stick, Golf Club, Etc.) Exercises: Lying on your back, hold the cane with both hands. Lift the arm to an overhead position using the healthy arm to guide the painful one. These can be done upright when pain subsides.



Active training of the scapular muscles: Shrugs: Pull shoulders up and back and hold.



Posture exercises: Put hands on hips, lean back, and hold.



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Prevent hiking the shoulder: In front of a mirror, practice raising your arm in front of your body without hiking or excessively shrugging the shoulder.

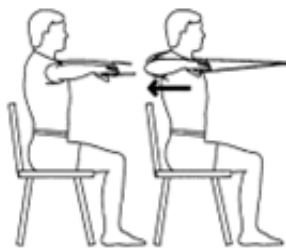


3. **Strengthening Level 1.** Strengthening exercises should focus on the rotator cuff and scapula stabilizing muscles. Rotator cuff strengthening should involve the following exercises with elastic resistance bands: internal rotation with arm adducted to side, external rotation with arm adducted to side, rows and scapular punches or press up. *Each exercise should be performed as 3 sets of 10 repetitions, with increases in elastic resistance as strength improves.*



External rotation: Secure elastic at waist level. Hold elbow at 90 degrees at the side and pull hand away as shown. **Internal rotation:** Secure elastic and hold arm the same way; pull hand toward the body as shown.

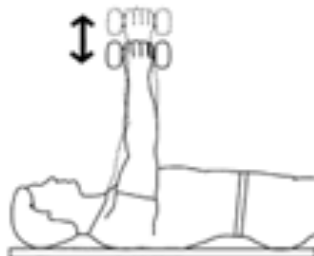
External rotation: Lie on your side, bad arm up. With your arm at side and elbow bent and light weight, move hand up as shown. **Internal rotation:** lie with bad arm down, pull weight up across body away as shown.



Rows: Seated or standing, bend elbows and pull elastic cord back. Try to pinch shoulder blades together.



Upright Rows: One arm at a time while leaning over a table, bending the waist, pull hand and weight back, pulling shoulder blade back.



Press up: Lie on back, elbows locked straight, weights in hands, move arm up toward ceiling as far as possible.



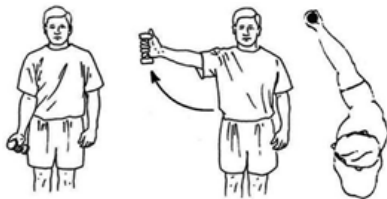
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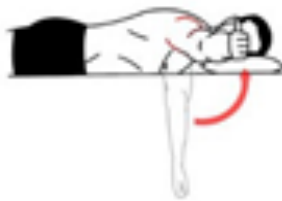
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4. **Strengthening Level 2.** Progress to Level 2 when Level 1 exercises can be performed with mild (3-5 lb) resistance for 30 repetitions without pain or substitution. Level 2 exercises should continue focus on the rotator cuff and scapula stabilizing muscles but can progress to long lever arm and functional tasks for the individual demands of the patient. Incorporation of long lever arm exercise like standing scaption and prone horizontal abduction to build strength and endurance can be attempted as long as there is no pain or compensation from the exercise. Scapular stabilizer strengthening can progress to body weight activities such as chair and variations of push-ups. Combination strengthening while standing using elastic bands should include: forward elevation and extension. *Each exercise should be performed as 3 sets of 10 repetitions, with increases in elastic resistance as strength improves.*



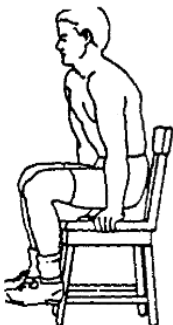
Scaption: Hold arm 30 degrees forward, thumb up or down, and raise arm. Resistance may be added. Only perform this exercise if no pain.



Prone Horizontal Abduction: Lie on your stomach and squeeze your shoulder blades together as you lift your arm out to the side with your thumb up.



Pushup Plus: Do a push-up (on hands or forearms) and then push to bring your spine to the ceiling.



Chair Press: While seated, press up on chair lifting your body off the chair. Try to keep your back straight without arching.



Low Trapezius: Stand upright, grasping elastic bands. Keep your elbows straight and pull, trying to reach behind you.

References

1. Kuhn JE. Exercise in the treatment of rotator cuff impingement: a systematic review and a synthesized evidence-based rehabilitation protocol. *J Shoulder Elbow Surg.* 2009 Jan-Feb;18(1):138-60. doi: 10.1016/j.jse.2008.06.004. Epub 2008 Oct 2. PMID: 18835532.