

EXERCISE RX

# Rehabilitating an Injured Shoulder

The common term “rotator cuff” actually describes four small muscles in the shoulder: supraspinatus, infraspinatus, subscapularis, and teres minor. They hold the ball-and-socket shoulder joint in place while allowing the arm to rotate. Anyone can injure these muscles or the ligaments that hold them in place by doing something like suddenly lifting a heavy box with no preparation. Of course, an injury can also occur during sports that require shoulder-raising movements, such as tennis or baseball.

A rotator cuff injury usually involves a tearing of the supraspinatus. This small

muscle above the lower part of the shoulder blade is also often the source of the symptoms. In the case of a full-blown rotator cuff tear, the patient may report having felt or heard a “pop” in the shoulder.



BY WILLIBALD NAGLER, M.D.

If you suspect a patient has torn a muscle or strained a ligament in the shoulder, surgery is not needed. If there is a gap between the muscle and the tendon where the two have separated completely, the patient will probably require surgery, but an injury this severe is rare.

Exercises that keep the rotator cuff muscles loose and also strengthen them will reduce the likelihood of future injuries. Healing may take at least 8 weeks.

The exercises should be performed twice daily. Patients can start Exercises 1, 2, and 3 immediately, but they should not start Exercise 4 until 10-12 days after the injury, to allow the initial swelling to subside.

Although MRI scans can show the exact location of a tear and might show some areas of swelling, nothing beats examining the patient. A history and physical are important to the diagnosis of all musculoskeletal injuries. Test the range of motion in the shoulder and rule out nerve damage from osteoarthritis of the neck. Ask the patient to raise his or her arms straight out to the side and lower them slowly. If the injured arm gives way too quickly, it is too weak to control the motion and might be torn.

One of the most important things to remember when rehabilitating a shoulder in-

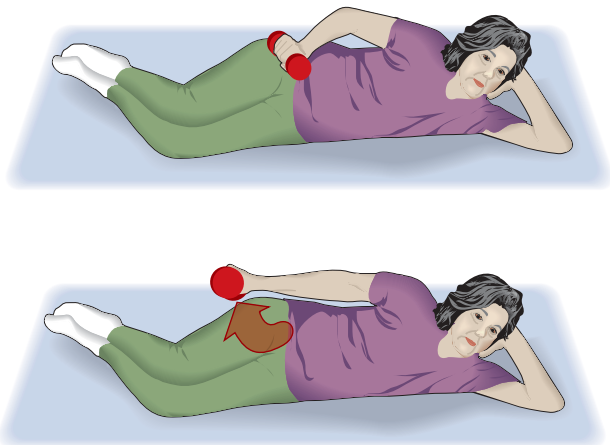
jury is to keep it moving. After applying ice for the first 2 days, patients can use a heating pad on the shoulder for 20 minutes before doing the exercises, in order to loosen the muscles.

In next month’s column, I will discuss exercises for a stiff neck. ■

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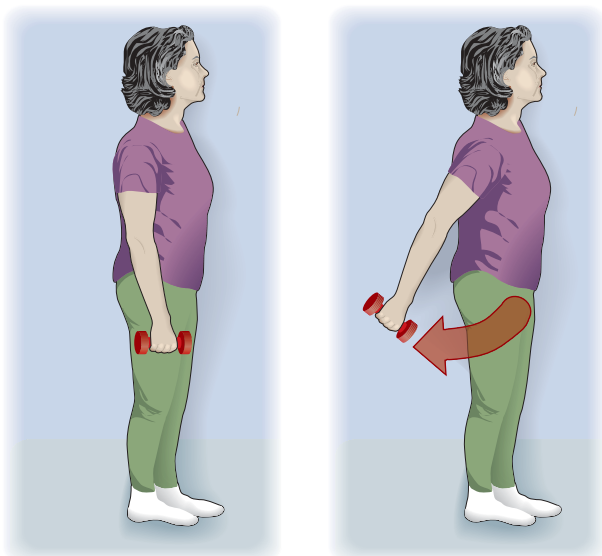
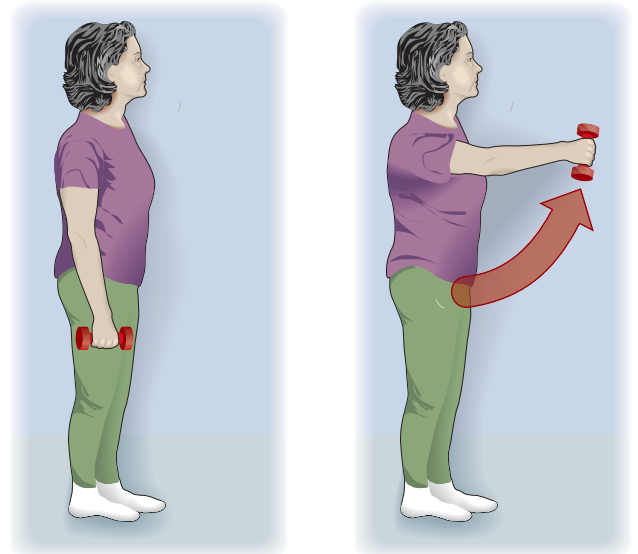
To print the exercises published in this column as an 8½ x 11 handout, which you may photocopy for your patients, go to [www.familypracticenews.com](http://www.familypracticenews.com), select the Archive Collection, Exercise Rx, and Patient Handout.

## Exercises for the Rotator Cuff

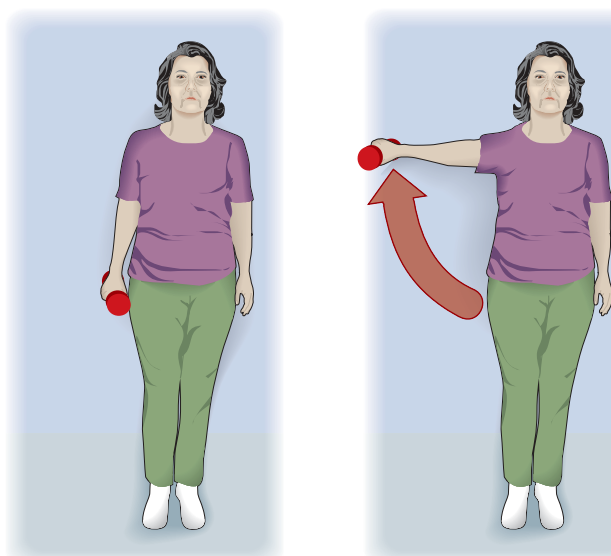


▲ **External rotator strengthener.** Lie on a bed on the side opposite the injured side, supporting your head on your uninjured hand. Hold a 1-pound weight in your right hand at waist level with the right elbow bent 90 degrees. In one motion, raise and straighten your arm to the side, keeping it parallel to the floor. Hold for 5 seconds, return to starting position, and relax for 3 seconds. Start with 8 repetitions and work up to 12. When this becomes easy, increase the weight by 1 pound and repeat. Do this exercise twice daily, beginning immediately after the injury occurs.

▶ **Anterior deltoid strengthener.** Stand up straight, with the injured arm at your side, holding a 3-pound weight. Raise the arm straight up to shoulder level, until it is parallel to the floor. This motion strengthens the front of the muscle. Hold for 5 seconds, then lower and relax for 2 seconds. Start with 8 repetitions and work up to 12. When this becomes easy, increase the weight by 1 pound, and begin again at 8 repetitions.



▲ **Posterior deltoid strengthener.** From the same starting position, holding the weight, raise the arm behind you. Hold for 5 seconds and relax for 2 seconds. This motion strengthens the back side of the deltoid muscle. Be careful not to force the arm too far backward. Start with 8 repetitions and work up to 12.



◀ **Lateral deltoid strengthener.** Wait 10-12 days after the injury before beginning this exercise, but once you begin, do it twice daily along with the other exercises. From the same standing position as exercises 2 and 3, holding the weight, raise the arm laterally to shoulder height so it is parallel to the floor. Hold for 5 seconds, then lower the arm and relax for 2 seconds. Start with 8 repetitions and work up to 12.