

ROTATOR CUFF TEAR, SURGERY FOR



■ ■ ■ Indications (Who Needs Surgery, When, Why, and Goals)

Surgery for a rotator cuff tear is reserved for people who have continuing shoulder pain that affects activities of daily living or sports activities despite completing an appropriate rehabilitation program for at least 3 months. For younger athletes, surgery may be recommended without attempting to resolve symptoms with rehabilitation alone. This is because rotator cuff tears do not heal and usually progress to larger tears. The goal of surgery is to eliminate the shoulder pain and attempt to regain motion and strength. The thickened and chronically inflamed bursa and the curve, hook, or spur of the acromion likely cause mechanical wear to the rotator cuff and may play an important role in the cause of rotator cuff tears. Thus these structures are removed. Then the torn rotator cuff is repaired to itself or, more commonly, back to the bone of the humeral head.

■ ■ ■ Contraindications (Reasons Not To Operate)

- Infection of the shoulder
- Inability or unwillingness to complete the postoperative program of keeping the shoulder in a sling or immobilizer or to perform the rehabilitation necessary
- Patients who have emotional or psychological problems that contribute to their shoulder condition

■ ■ ■ Risks and Complications of Surgery

- Infection
- Bleeding
- Injury to nerves (numbness, weakness, paralysis) of the shoulder and arm
- Continued or recurrent of pain
- Retear of the rotator cuff
- Detachment of the deltoid muscle (if open)
- Stiffness or loss of motion of the shoulder
- Inability to return to the same level of competition
- Weakness of the shoulder
- Fracture of the acromion
- Acromioclavicular (AC) joint pain
- Too much acromion or not enough acromion removed

■ ■ ■ Technique (What Is Done)

Different techniques are in use at this time. The overall goals are to remove the chronically inflamed and scarred bursa; remove the acromial curve, hook, or bone spur; occasionally, to remove an arthritic AC joint; and to repair the rotator cuff to itself or to the humeral head. These can be done arthroscopically or through an open incision.

Arthroscopic techniques involve using small incisions (arthroscopy portals) to look in the shoulder joint; then

electricity is used to cauterize small capillaries. Electricity or a motorized shaver is used to remove the bursa and cut the coracoacromial ligament (usually). Next a power burr is used to remove the bony curve, hook, or spur from the acromion. The rotator cuff is repaired with sutures (threads) to itself or to the bone of the humeral head with or without surgical anchors, which are inserted into the bone of the humeral head. Often the humeral head is roughened to help stimulate healing of the tendon to bone. Sometimes this surgery is performed with a small incision at the outer shoulder.

Open rotator cuff repair involves detaching the large deltoid muscle from the acromion, as well as cutting the coracoacromial ligament. Next the acromial curve, hook, or spur is removed using a saw or osteotome (chisel). A rasp is often used to smooth the cut bone edges. The bursa is then removed with scissors. The torn edge of the rotator cuff is freshened by removing the old edge; the bone of the humeral head where the rotator cuff originally attached is roughened, often making a trough; and the tendon is sutured in the trough. This may be done by making bony tunnels and tying the sutures over the bone below the trough or by placing surgical anchors with sutures attached into the humerus and tying the rotator cuff to the bone anchors. The deltoid muscle is then sewn back onto the acromion.

■ ■ ■ Postoperative Course

- Management after surgery varies based on technique used and surgeon preference.
- Keep wound clean and dry for the first 10 to 14 days after surgery.
- Keep the shoulder in a sling, brace, or immobilizer for as long as your surgeon tells you to; this is usually 4 to 8 weeks if done as an open procedure or arthroscopically.

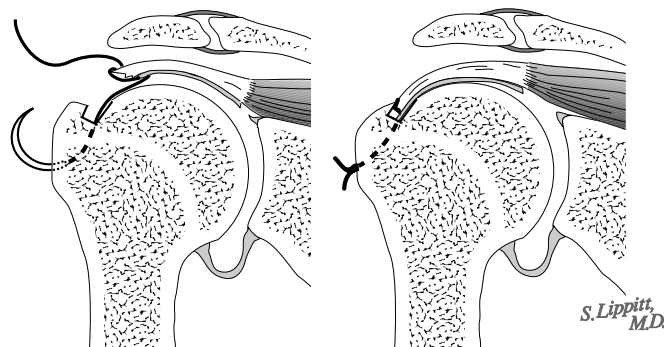


Figure 1

From Rockwood CA Jr., Matsen FA III: *The Shoulder*, 2nd ed. Philadelphia, WB Saunders, 1998, p. 812; modified from Matsen FA III, Lippitt SB, Sidles JA, Harryman DT II: *Practical Evaluation and Management of the Shoulder*. Philadelphia, WB Saunders, 1994.

- You will be given pain medications by your physician.
- You may be told to perform passive motion exercises (not using the operated shoulder's muscles to move the arm) immediately after surgery.
- Postoperative rehabilitation and exercises are very important to regain motion and then strength.

■ ■ ■ **Return To Sports**

- Depends on the type of sport and the position played, as well as the quality of the tendon at the time of repair.
- A minimum of 6 months is necessary after surgery before returning to sports.
- Full shoulder motion and strength are necessary before returning to sports.

■ ■ ■ **Notify Our Office If**

- You experience pain, numbness, or coldness in the hand
- Blue, gray, or dusky color appears in the fingernails
- Any of the following occur after surgery:
 - Increased pain, swelling, redness, drainage, or bleeding in the surgical area
 - Signs of infection (headache, muscle aches, dizziness, or a general ill feeling with fever)
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)

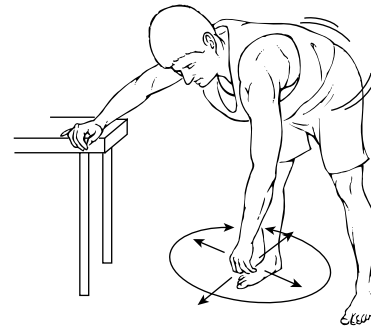
Do not eat or drink anything before surgery. Solid food makes general anesthesia more hazardous.

EXERCISES

➤ **RANGE OF MOTION AND STRETCHING EXERCISES** • Rotator Cuff Tear, Surgery For

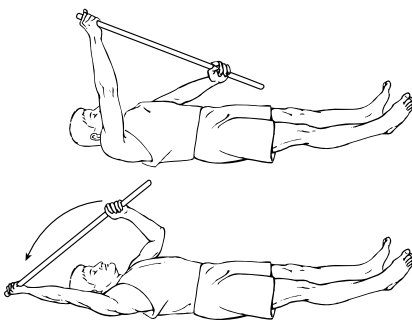
These are some of the *initial* exercises you may start your rehabilitation program with until you see your physician, physical therapist, or athletic trainer again or until your symptoms are resolved. Please remember:

- Flexible tissue is more tolerant of the stresses placed on it during activities.
- Each stretch should be held for 20 to 30 seconds.
- A *gentle* stretching sensation should be felt.



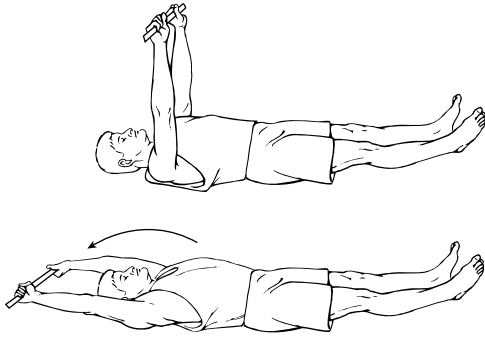
SHOULDER • Pendulum

1. Lean forward at the waist, letting your _____ arm hang freely. Support yourself by placing the opposite hand on a chair, table, or counter as shown.
2. Sway your *whole body* slowly forward and back. This will cause your arm to move. Let your arm hang freely. Do not tense it up.
3. Repeat the above swaying side to side and moving in circular patterns, clockwise and counterclockwise.
4. Do _____ repetitions in each direction.
5. Repeat exercise _____ times, _____ times per day



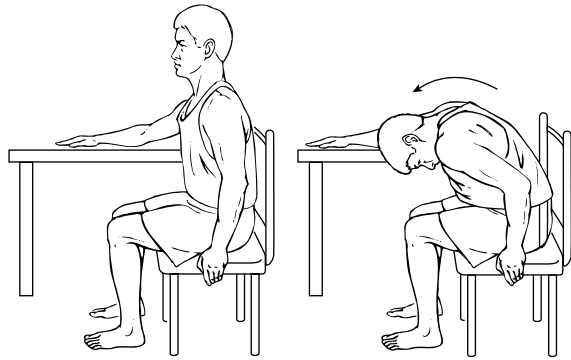
SHOULDER • Flexion

1. Lie on your back. Grasp the bottom of a stick, handle of an umbrella, or blade of a golf club in your _____ hand as shown.
2. Using the stick, raise your arm overhead as shown until you feel a gentle stretch. Lead with the thumb in a "thumbs up" position.
3. Repeat exercise _____ times, _____ times per day. Hold each repetition 5 to 10 seconds.



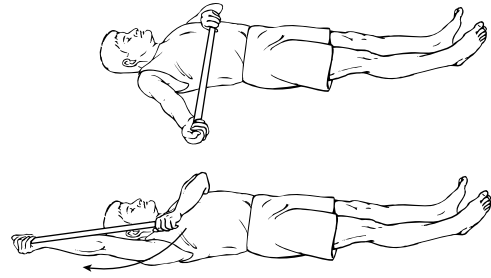
SHOULDER • Flexion

1. Lie on your back holding a stick in both hands, keeping your hands shoulder-width apart.
2. Raise both hands over your head until you feel a gentle stretch.
3. Repeat exercise _____ times, _____ times per day. Hold each repetition 5 to 10 seconds.



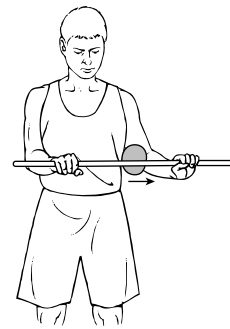
SHOULDER • Flexion

1. Sit in a chair with your _____ arm on a table as shown.
2. Lean forward, sliding your arm forward on the table until you feel a gentle stretch.
3. Return to the starting position.
4. Repeat exercise _____ times, _____ times per day. Hold each repetition 5 to 10 seconds.



SHOULDER • Abduction

1. Lie on your back holding a stick, umbrella handle, or golf club in your hand as shown. The hand should be in the "thumbs up" position.
2. Using the stick, slowly push your arm away from your side and as far overhead as you can without pain. Push until you feel a gentle stretch.
3. Repeat exercise _____ times, _____ times per day. Hold each repetition 5 to 10 seconds.



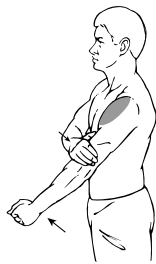
SHOULDER • External Rotation

1. Lie on your back or stand with your _____ arm at your side and your elbow bent to 90 degrees. Hold a stick, umbrella handle, or golf club in your hands as shown.
2. Using the stick turn/rotate your hand and forearm away from your body as shown..
3. ***Make sure you keep your upper arm and elbow next to your side.***
4. Repeat exercise _____ times, _____ times per day. Hold each repetition 5 to 10 seconds.

> STRENGTHENING EXERCISES • Rotator Cuff Tear, Surgery For

These are some of the *initial postoperative* exercises you may start your rehabilitation program with when cleared by your surgeon. When you will be allowed to start these will depend on your surgeon's opinion of the severity of the tear and the strength of the repair. *Do not do these unless specifically instructed to do so!* Do these exercises until you see your physician, physical therapist, or athletic trainer again. Please remember:

- Strong muscles with good endurance tolerate stress better.
- Do the exercises as *initially* prescribed by your physician, physical therapist, or athletic trainer. Progress slowly with each exercise, gradually increasing the number of repetitions and weight used under their guidance.



STRENGTH • Shoulder Flexion, Isometric

1. While standing, raise your _____ arm straight in front of your body as shown.
2. Place the other hand on top of your arm and push down. Do not allow your arm to move. Push as hard as you can without having any pain or moving the arm.
3. Hold this position for _____ seconds and then *slowly* return to the starting position.
4. Repeat exercise _____ times, _____ times per day.



STRENGTH • Shoulder Abduction, Isometric

1. While standing, raise the _____ arm slightly away from the body as shown.
2. Place the other hand on top of your arm and push down. Do not allow your arm to move. Push as hard as you can without having any pain or moving the arm.
3. Hold this position for _____ seconds and then *slowly* return to the starting position.
4. Repeat exercise _____ times, _____ times per day.



STRENGTH • Shoulder, External Rotation, Isometric

1. Bend your _____ elbow to 90 degrees as shown, holding your arm slightly in front of your body.
2. Place your opposite hand over your wrist as shown.
3. Try to turn/rotate your arm outward, away from your body, as if it were a gate swinging open. Resist this motion with the opposite hand that is on your wrist. Do not let any motion occur.
4. Hold this position for _____ seconds.
5. Repeat exercise _____ times, _____ times per day.



STRENGTH • Shoulder, Internal Rotation, Isometric

1. Bend your _____ elbow to 90 degrees as shown, holding the arm slightly in front of the body.
2. Place your opposite hand on the inside of your wrist as shown.
3. Try to turn/rotate your arm inward, toward the body, as if it were a gate swinging closed. Resist this motion with the opposite hand that is on the inside of your wrist. Do not let any motion occur.
4. Hold this position for _____ seconds.
5. Repeat exercise _____ times, _____ times per day.

Notes:

(Up to 4400 characters only)

Notes and suggestions