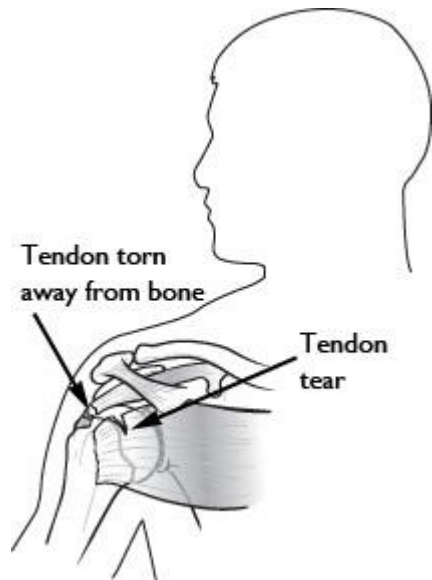


## Rotator Cuff Tears



The rotator cuff consists of four muscles –the supraspinatus, infraspinatus, subscapularis and teres minor—which originate from the scapula (shoulder blade), and together form a single tendon unit that inserts on the upper portion of the humerus. The rotator cuff helps to lift and rotate the arm and to stabilize the ball of the shoulder within its socket in the joint.

You don't need to fall or hit your shoulder to get a rotator cuff tear. A rotator cuff tear may result from an acute injury such as a fall, but can also be caused by chronic wear and tear with degeneration of the tendon. Impingement of the bone at the top of the shoulder, the acromion, on the tendon beneath can be a cause of rotator cuff tears, particularly in people over about 40 years old, though it can happen to younger people as well.

Typically, you will feel pain in the front and side of your shoulder which radiates down the side of your arm. It may be present with overhead activities such as lifting or reaching. You may feel pain when you try to sleep on the affected side. You may note weakness of your arm and difficulty with routine activities such as combing your hair or reaching behind your back.

If the tear occurs with injury you may experience acute pain, a snapping sensation and immediate weakness of the arm. You may even be unable to lift your arm away from your body.

A rotator cuff tear can extend or get larger over time. This can occur with repetitive use or a re-injury. If you know you have a rotator cuff tear, then worsening pain and decreasing strength may mean the tear is getting larger.

If you have injured your shoulder or have chronic shoulder and arm pain, it is best to see your orthopaedic surgeon. Your doctor may recommend a diagnostic study such as an ultrasound or MRI to confirm the diagnosis.



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Early diagnosis and treatment of a rotator cuff tear may prevent muscle atrophy (weakness) and stiffness that can make your problem worse.

Some small rotator cuff tears can be treated without surgery, particularly those that do not extend substantially into the thickness of the tendon. Anti-inflammatory medication, steroid injections and physical therapy can all help to treat symptoms of a rotator cuff tear. The goals are to relieve pain and restore shoulder strength.

Even though a tear won't heal without surgery, satisfactory function can often be achieved without surgery if the tear is very small. The remaining intact rotator cuff may be strengthened to compensate for the torn area and provide some protection from additional tearing.

However, you are active in sports or use your arm for overhead work, or if conservative treatment does not relieve your pain and return your function to normal, then surgery is recommended.

The type of repair performed is based on the findings at surgery. A partial tear may require only a trimming or smoothing procedure called a debridement. A full thickness tear within the substance of the tendon can be repaired side to side. If the tendon is torn from its insertion on the humerus, it is repaired directly back to the bone.

Three techniques are used for rotator cuff repair: traditional open repair, mini-open repair, and arthroscopic repair.

The majority of rotator cuff repairs can be performed arthroscopically, through small incisions with a camera and instruments inserted into the shoulder, but your orthopaedic surgeon can determine which technique will work best for your tear.

Rehabilitation plays a critical role in both the non-operative and surgical treatment of a rotator cuff tear. When a tear occurs, there may be atrophy of the muscles and loss of motion of the shoulder. An exercise or physical therapy program is necessary to regain strength and improve function in the shoulder. Most people who perform their rehabilitation exercises diligently after surgery get an excellent result.

Your orthopaedic surgeon will prescribe an appropriate program based upon your needs and the findings at surgery. Your physical therapist will give you detailed instructions based on the prescription from your doctor, and will teach you how to do your rehabilitation exercises properly. You will see your physical therapist regularly to check on your progress and adjust your exercise program as you get stronger.