Although there are many reasons for shoulder pain, a common problem for people over 40 years of age is a rotator cuff tear. The rotator cuff is comprised of four muscles and tendons that surround the top of the upper arm bone (humerus) and functions to help rotate the arm and stabilize the shoulder joint. A rotator cuff tear may result suddenly from a single traumatic event or develop gradually over time. Most rotator cuff tears are due to age related degeneration and occur slowly over time.

Rotator cuff tears may be partial or full thickness. Partial-thickness tears do not completely sever the tendon where full thickness tears do. Full thickness rotator cuff tears are rarely seen in those younger than 40 years of age. On the other hand, 25% of all individuals over the age of 60 have a rotator cuff tear; however, most of these people do not have any symptoms. Rotator cuff tears do not heal, or repair themselves. In fact, some rotator cuff tears will increase in size if left untreated over time.

**Signs and Symptoms**

- Recurrent, constant pain, particularly with overhead activities
- Pain at night that prevents you from sleeping on the affected side
- Muscle weakness, especially when attempting to lift the arm
- Catching, grating or cracking sounds when the arm is moved
- Limited motion
- May be triggered by a specific incident
Risk Factors

- Repetitive overhead motion, such as painting a ceiling, pitching, or carpentry
- Heavy lifting
- Excessive force, such as a fall
- Degeneration due to aging, including a reduction in the blood supply to the tendon
- Narrowing of the space (acromioclavicular arch) between the collarbone (clavicle) and the top portion (acromion) of the shoulder bone (scapula)
- Rubbing of the rotator cuff surface by the top portion of the shoulder bone
- Family history of rotator cuff tears

Treatment Options

Upon examination, you will have your range of motion and strength tested, as well as have the top and back of your shoulder examined to see if the muscles have begun to shrink (atrophy). At that time, X-rays may be taken to help the doctor see any problems with the bones. Another imaging test, MRI (magnetic resonance imaging), may be required to confirm a rotator cuff tear.

Conservative Treatment

In most cases, initial treatment for a rotator cuff tear is non-surgical. Treatment involves a combination of modalities including:

- Rest. If the tear is due in part to overuse, resting the shoulder may help.
- Physical therapy to restore flexibility and strengthen the shoulder muscles.
- Corticosteroid injections can help reduce pain, but cannot be repeated frequently because they can also weaken the tendon (usually no more than two or three injections are given).
- Nonsteroidal anti-inflammatory medications may help control pain.

Surgical Intervention

There are several surgical options to treat rotator cuff tears, depending on the size, depth, and location of the tear. If other problems with the shoulder are discovered, they will be corrected as well. Structures and conditions in the shoulder that often are involved with the development of a rotator cuff tear include acromioclavicular joint (AC joint) arthritis, biceps tendon degeneration, and coracoid impingement.

- Arthroscopy- small instruments are inserted into small incisions, and are used to remove bone spurs or inflammatory portions of muscle and to repair small tears.
- A mini-open repair combines arthroscopy and the use of small incisions to treat full-thickness tears.
- Open surgery is required to repair the rotator cuff tear that is medium to large in size.

Rehabilitation

Recovery from a shoulder surgery takes several months. Full functioning may not return for six months or more. After a rotator cuff repair surgery, patients are required to wear a sling for four weeks. A physical therapy program will be initiated within a week after surgery and progress to exercises to strengthen the shoulder and restore motion. Your commitment to following the rehabilitation program given to you by your doctor will make a difference in the ultimate results of your surgery. Every case is unique, but in general, a surgical repair of a rotator cuff tear relieves pain for most people and rehabilitation can restore range of motion and function.

♦ Materials borrowed from the American Academy of Orthopaedic Surgeons. More information can be found at [www.aaos.org](http://www.aaos.org)