

fact sheet

Rotator Cuff Tear

Also known as:

Supraspinatus Tendon Rupture

What is it?

A rotator cuff tear occurs when the tendons that form the rotator cuff weaken and tear. The rotator cuff is comprised of four muscles and tendons that wrap over the upper arm (humeral head) in the shoulder. The tendons that attach the muscles to the humeral head come under stress from repeated activities that require lifting and rotating the arm.

Any abnormalities of the shoulder joint aggravate the stress, especially looseness (laxity), pinching under the arch formed by the shoulder blade and the collarbone (impingement), and bursitis. As the tendons become irritated, they become inflamed and eventually weaken and may tear. The tears most often occur in the area with the poorest blood supply, the supraspinatus tendon.

Tears are described as either partial thickness tears or complete rupture, depending on the amount of tissue damage. Partial tears do not go all the way through the cuff, although there may be a fairly large surface area involved. Complete tears demonstrate a hole in the cuff with partial or total loss of function. Most often found in workers >40 years. In the absence of significant injury, most are not work related.

How is it diagnosed?

Workers may have increasing pain with activity and pain at night with inability to sleep on the affected shoulder. They also may complain of weakness early on and later be unable to raise their arm away from their body or to maintain the position if someone has

lifted it for them. Most workers with acute tears will describe a fall or attempt to break a fall by grabbing a rail. Cases that are chronic will describe increasing pain and difficulty with shoulder use.

What to look for

Workers may have pain with abduction and lack of endurance holding the position. Palpation reveals pain over the top of the shoulder into the deltoid.

How is it treated?

Partial tears are treated conservatively with rest, ice, and anti-inflammatory medication, including injections of a steroid around the tendon. Physical therapy is used to increase strength, scapula stabilization, increase ROM, and decrease pain and inflammation.

Partial tears are sometimes debrided arthroscopically. Complete tears in younger adults are treated with a surgical repair, either arthroscopically or with open surgery. In older workers it is based on overall health, weakness of joint, pain, and ability to function.

Tests

There are numerous shoulder physical examination tests; each is specific for different muscle groups and function of shoulder.

Plain x-rays are not diagnostic for rotator cuff tears but will show abnormalities in the bone, shoulder structure, and calcific tendonitis.

Arthrogram, MRI, or combined arthrotomogram CT scan are used to define a tear. Ultrasound may also be used. Diagnostic arthroscopy may be done to evaluate the rotator cuff and shoulder mechanics.

Common Medications

Anti-inflammatories
Steroid Injection

What is the expected return to work?

Medical Treatment/Arthroscopic Treatment:

Job Classification	RTW Minimum-Maximum
Sedentary Work	7 - 21 days
Light Work	7 - 21 days
Medium Work.....	28 - 56 days
Heavy Work	56 - 84 days
Very Heavy Work	56 - 84 days

Surgical treatment, Open procedure:

Job Classification	RTW Minimum-Maximum
Sedentary Work.....	28 - 84 days
Light Work	28 - 112 days
Medium Work	42 - 140 days
Heavy Work.....	70 - 140 days

Work Restrictions and Accommodations

No use or limited use of the affected shoulder may apply. The arm and hand could be used at the worker's side for activities that do not require lifting, pushing, or carrying. All overhead activities should be avoided. Recovery from surgical care is the most restrictive, with no use of the arm and shoulder for approximately two months and with gradual increase in allowed activities. Complete tears that require surgery have a high recovery rate if the tear is small and if there are no complications.