

## Rotator Cuff Tears

A rotator cuff tear is a common cause of pain and disability among adults. Each year, almost 2 million people in the US visit their doctors because of a rotator cuff problem.

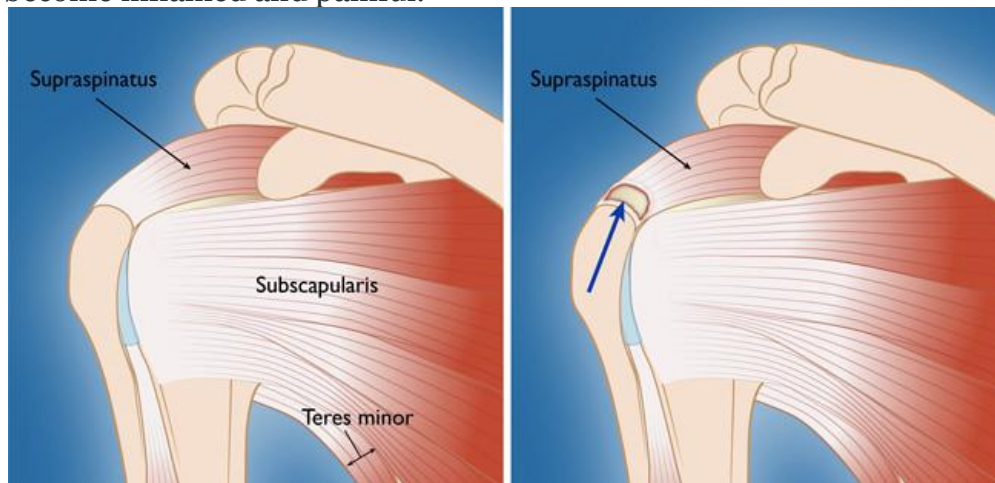
A torn rotator cuff will weaken your shoulder. This means that many daily activities, like combing your hair or getting dressed, may become painful and difficult to do.

### **Anatomy**

Your shoulder is made up of three bones: your upper arm bone (humerus), your shoulder blade (scapula), and your collarbone (clavicle). The shoulder is a ball-and-socket joint: the ball, or head, of your upper arm bone fits into a shallow socket in your shoulder blade.

Your arm is kept in your shoulder socket by your rotator cuff. The rotator cuff is a group of four muscles that come together as tendons to form a covering around the head of the humerus. The rotator cuff attaches the humerus to the shoulder blade and helps to lift and rotate your arm.

There is a lubricating sac called a bursa between the rotator cuff and the bone on top of your shoulder (acromion). The bursa allows the rotator cuff tendons to glide freely when you move your arm. When the rotator cuff tendons are injured or damaged, this bursa can also become inflamed and painful.



(Left) The front view of a normal rotator cuff.

(Right) A full-thickness tear in the supraspinatus tendon.

### **Description**

When one or more of the rotator cuff tendons is torn, the tendon no longer fully attaches to the head of the humerus. Most tears occur in the supraspinatus tendon, but other parts of the rotator cuff may also be involved.

In many cases, torn tendons begin by fraying. As the damage progresses, the tendon can completely tear, sometimes with lifting a heavy object.

There are different types of tears.

- Partial tear. This type of tear is also called an incomplete tear. It damages the



tendon, but does not completely sever it.

- **Full-thickness tear.** This type of tear is also called a complete tear. It separates all of the tendon from the bone. With a full-thickness tear, there is basically a hole in the tendon.

## Cause

There are two main causes of rotator cuff tears: injury and degeneration.

- **Acute Tear:** If you fall down on your outstretched arm or lift something too heavy with a jerking motion, you can tear your rotator cuff.
- **Degenerative Tear:** Most tears are the result of a wearing down of the tendon that occurs slowly over time. This degeneration naturally occurs as we age.

## Risk Factors

- Age greater than 40.
- People who do repetitive lifting or overhead activities.
- Most tears in young adults are caused by a traumatic injury, like a fall.

## Treatment

The goal of treatment is to reduce pain and restore function. The best treatment option is different for every person. Age, activity level, general health, and the type of tear you have are considerations made when determining treatment.

### *Nonsurgical Treatment*

- Rest and activity modification.
- Nonsteroidal anti-inflammatory medication: ibuprofen and naproxen reduce pain and swelling.
- Strengthening exercises and physical therapy. Specific exercises will restore movement and strengthen your shoulder. Your exercise program will include stretches to improve flexibility and range of motion. Strengthening the muscles that support your shoulder can relieve pain and prevent further injury.

### *Surgical Treatment*

Continued pain is the main indication for surgery. If you are very active and use your arms for overhead work or sports, your doctor may also suggest surgery.

Other signs that surgery may be a good option for you include:

- Your symptoms have lasted 6 to 12 months
- You have a large tear (more than 3 cm) and the quality of the surrounding tissue is good
- You have significant weakness and loss of function in your shoulder
- Your tear was caused by a recent, acute injury

