Rotator Cuff Tendonitis

Jeff Tanji, MD
Associate Medical Director, Sports Medicine, University of California Davis, Davis, CA

Rotator cuff tendonitis is one of the most common conditions affecting the shoulder. It is generally caused by overuse or overload. Overuse or overdoing shoulder exercise can happen in sports like swimming or during throwing sports, where the repetitive motion of the arm causes irritation to the cuff. Tensile overload is when the shoulder experiences a sudden pull or jerk and can lead to rotator cuff tendonitis. An example of tensile overload to the shoulder is when a person is walking a dog and the dog pulls hard on the leash, resulting in a sudden jerk or pull to the shoulder.

The rotator cuff muscles are four very small, fragile muscles named supraspinatus, infraspinatus, subscapularis and teres minor. The purpose of these four muscles is to help the arm attach and move properly in the shoulder socket. Of the four muscles, supraspinatus is the most important and the most commonly injured.

Symptoms

When the rotator cuff is injured, pain results from inflammation to the muscle group. You may feel pain that is dull, achy, throbbing or piercing. The pain often does not focus on one spot, but occurs in the general location of the shoulder. The pain often worsens when raising the arm overhead or while resting in bed at night.

The history and physical examination given by a physician helps make the diagnosis. X-rays of the shoulder are often taken, but not always. X-rays do not show the rotator cuff muscles only the bones of the shoulder, but may provide useful clues for diagnosis. Most of the time, a doctor will not request a MRI of the shoulder until certain treatments have been tried.
Treatment

The most common treatments for rotator cuff tendinitis include:

- **Ice, anti-inflammatory medications and rest.** These basic treatments focus on reducing inflammation and pain to the shoulder. If you have already tried these remedies, your physician may recommend other treatments.

- **Physical therapy.** Physical therapy will improve your shoulder condition generally 70 percent of the time. You have a choice of pursuing exercises under the guidance of a physical therapist or at home. Physical therapy exercises focus on strengthening the rotator cuff and reducing inflammation and pain. One of the benefits of physical therapy is that the shoulder can improve after just a handful of treatments (often 6 to 8 therapy sessions).

- **Injection to the rotator cuff.** If busy schedules don’t allow time for physical therapy sessions, an injection by a physician is a useful treatment. Injecting medication to the area is successful in improving symptoms from rotator cuff inflammation about 70 percent of the time. The injection usually contains about a teaspoon of a combination of two medications. One is a medicine to numb the shoulder, like lidocaine. The other is an anti-inflammatory medication, such as cortisone. The injection is given in a small space of the shoulder called the subacromial space, not into the shoulder socket. The shot is generally not painful, and is often compared with the sensation of having blood drawn from the arm. After the shot, you should rest the arm for about 48 hours, which means not doing any heavy lifting or repetitive motions, to avoid causing additional shoulder pain and irritation. Check with the governing organization for your sport first. Some organizations may have a policy restricting or banning cortisone use.

Pain

After these treatment choices have been followed, about 85 percent of patients feel a substantial relief of pain. Most patients experience a great reduction in pain, yet still have a small amount of pain that slowly improves over three to six months. It is common for pain from rotator cuff inflammation to last over many months.

If pain continues, stay in touch with your doctor who may use further tests to find the cause. Other causes of pain do not improve with these treatments, such as: a small tear to the rotator cuff, a tear to the cartilage around the shoulder joint, a tight bony spot that continues to cause inflammation or excessive looseness to the shoulder. You and your physician can make choices about diagnostic tests if the pain in the shoulder continues.