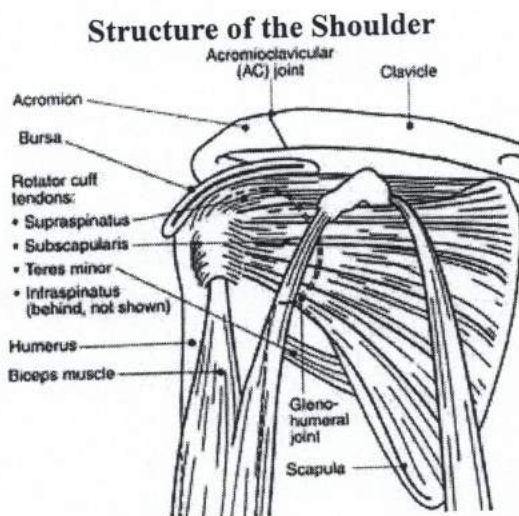


Shoulder Tendinitis and Bursitis

Shoulder Anatomy

A tendon is a flexible band of fibrous tissue that connects muscles to bones. Tendinitis is inflammation of a tendon. Tendons transmit the pull of the muscle to the bone to cause movement. They are found throughout the body, including the hands, wrists, elbows, shoulders, hips, knees, ankles, and feet. Tendons can be small, like those found in the hand, or large, like the Achilles tendon in the heel.

A bursa is a small, fluid-filled sac that acts as a cushion between a bone and other moving parts: muscles, tendons, or skin. Bursae are found throughout the body. Bursitis occurs when a bursa becomes inflamed (redness and increased fluid in the bursa).



Tendinitis, Bursitis, and Impingement Syndrome

Rotator cuff tendinitis causes shoulder pain at the tip of the shoulder and the upper, outer arm. The pain can be aggravated by reaching, pushing, pulling, lifting, raising the arm above shoulder level, or lying on the affected side. The rotator cuff is primarily a group of four muscles that attach the arm to the shoulder girdle/shoulder blade. The rotator cuff attaches the arm to the shoulder joint and allows the arm to rotate and elevate. If the rotator cuff and bursa are irritated, inflamed, and swollen, they may become compressed between the head of the humerus and the acromion, the outer edge of the shoulder blade. Repeated motion involving the arms, or the aging

process involving shoulder motion over many years, may also irritate and wear down the tendons, muscles, and surrounding structures. Squeezing of the rotator cuff is called shoulder impingement syndrome. Tendinitis and impingement syndrome are often accompanied by inflammation of the bursa sacs that protect the shoulder.

Biceps tendinitis causes pain in the front or side of the shoulder and may travel down to the elbow and forearm. Pain may also occur when the arm is raised overhead. The biceps muscle, in the front of the upper arm, helps stabilize the upper arm bone (humerus) in the shoulder socket. It also helps accelerate and decelerate the arm during overhead movement in activities like tennis or pitching.

What Are the Signs/Symptoms of Tendinitis and Bursitis?

- Pain and tenderness at the shoulder, sometimes referring down the arm to the elbow.
- Sharp “twinges” felt on various movements, such as lifting the arm to the side, putting on a jacket, reaching into the backseat, or reaching overhead.
- Difficulties sleeping on the shoulder.
- Onset is usually gradual with no known trauma.
- May have been present for many months or even years.
- May be related to occupational or recreational overuse.

How Are These Conditions Diagnosed?

Diagnosis of tendinitis and bursitis begins with a medical history and physical examination. The involved structures will be painful to palpation, and when resistance is applied to the muscle and tendon.

An MRI can be done to view these soft tissues in the area. X-rays do not show tendons or the bursae, but may be helpful in ruling out bony abnormalities or arthritis. Impingement syndrome can also be confirmed with injection of a small amount of anesthetic (lidocaine hydrochloride) into the space under the acromion to relieve pain.

How Are Tendinitis, Bursitis, and Impingement Syndrome Treated?

In most cases the doctor or therapist will use ultrasound therapy (gentle sound-wave vibrations) to warm deep tissues and improve blood flow, followed by gentle massage and/or transverse friction massage. Electrical stimulation can be used to help decrease pain and inflammation. Light stretching and strengthening exercises are added gradually. These may be preceded or followed by use of an ice pack. Rest and refraining from the activities that provoke the symptoms is necessary for the condition to resolve. If there is no improvement, the doctor may suggest a corticosteroid injection into the space under the acromion.

Often times, your medical doctor will prescribe medication to help resolve the inflammation. Some examples include:

- aspirin
- naproxen (Aleve, Naprosyn)
- ibuprofen (Advil, Motrin, or Nuprin)