

Non-Surgical Relief – Treatments for Common Causes of Shoulder Pain

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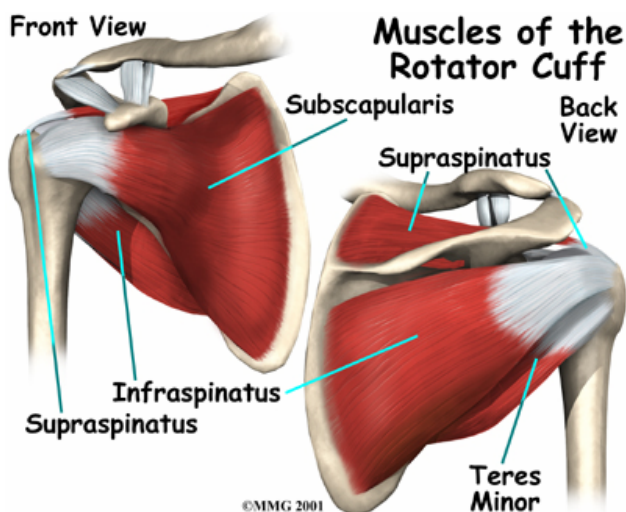


More than likely, you or someone you know has experienced shoulder pain. The shoulder is one of the most complex joints in the human body, and with this complexity come inherent problems. These include bursitis, tendonitis, and rotator cuff tears. Orthopaedic medicine has solutions for each of these conditions.

Bursitis

The most common cause of shoulder pain is impingement. When the rotator cuff muscles are weak or injured, the humeral head (top of the upper arm bone) can ride upward or forward, rubbing, or impinging, under the acromion, a bone above the shoulder socket that is actually part of the scapula (shoulder blade). The acromion is like the ceiling over the rotator cuff. People can have different shapes to their acromions that can make impingement more prevalent.

When the humerus and acromion impinge, the resulting swelling and inflammation of the intervening lubricating bursal sac causes a syndrome known bursitis. As the swelling continues, the room for the rotator cuff to function decreases. Once the swelling and rubbing start, the condition tends to continue and worsen with time and continued use. Strengthening the muscles in the shoulder with low-impact, elastic-resistive exercises can help prevent bursitis. In the short-term, ice, anti-inflammatory drugs, and steroid injections are often used to relieve pain in severe cases.



Rotator cuff anatomy: The two primary bones of the shoulder are the humerus, or arm bone, and the scapula, or shoulder blade. Four muscles originating on the shoulder blade and attached to the arm bone are known as the rotator cuff. The cuff surrounds the shoulder joint to stabilize the shoulder and elevate and rotate the arm. Two of the four rotator cuff muscles are the infraspinatus and teres minor, shown (*right*). The other two muscles are the supraspinatus and subscapularis. The rotator cuff helps the shoulder provide the largest range of motion of any joint in the body.

Tendonitis

Just as the bursa becomes irritated, so can the rotator cuff just beneath the bursa. With continued rubbing, it becomes swollen, irritated, and painful, further weakening its ability to function. This condition is known as rotator cuff tendonitis. The shoulder becomes more painful with use, and the continued swelling, rubbing, and inflammation lead to actual damage to the rotator cuff.

The rotator cuff muscles are meant to keep the ball and socket functioning appropriately and prevent the humerus from riding upward toward the acromion. When the muscles and tendons are irritated, they are less efficient and lose their ability to function, creating a snowball effect that allows the shoulder to impinge even more. The initial treatment is to perform physical therapy to strengthen the irritated muscles and prevent impingement. Anti-inflammatory drugs and cortisone injections are often given for pain relief to aid rehabilitation.

Rotator Cuff Tears

Recurring tendonitis may signal a rotator cuff tear, which initially may be a partial tear. If the impingement is corrected to prevent further rubbing, swelling, inflammation, and tearing, it usually will not require surgical repair. If the condition persists, any sudden, forceful shoulder injury could tear the rotator cuff completely.

Causes of complete tears could be stretching for a tennis ball, a fall, or a minor incident the patient does not even remember. Only surgery can correct a complete rotator cuff tear to allow healing and subsequent rehabilitation. If left untreated, a rotator cuff tear may get larger and more problematic.

Surgical Treatment

The goal of surgery is to repair the torn rotator cuff tendon and rehabilitate the shoulder to facilitate increased strength, motion, and pain relief. Surgical outcomes of arthroscopic repair over the last five to 10 years have improved dramatically. They are now similar to those of open surgery. The age of the patient, the extent of the tear, and the time between the occurrence of the tear and repair can have substantial effects on a successful outcome.

Keeping the shoulder healthy and out of surgery is possible. Bursitis, tendonitis, and partial rotator cuff tears can result in positive outcomes and pain-free shoulders if the patients are diagnosed early and treated with anti-inflammatory medication, rotator cuff exercises, and, when necessary, cortisone injections.