

# Treatment Of Shoulder Pain



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Reach up to a top shelf? Never think about it. Have an itch below the shoulder blade? Not a moment's hesitation before a scratch. Fasten your bra behind your back? Been doing it for years. All of a sudden your shoulder begins to ache, and it is no longer so easy to reach, to stretch, to dress. Holding your arm out in front to lift, to carry or to wash is now impossible.

When there is an injury such as a fall on to the outstretched arm, and it becomes impossible to raise the arm above the shoulder, the diagnosis of a rotator cuff tear is likely. This happens most often when there is already a tendonitis affecting the shoulder, but traumatic tears of the rotator cuff can occur in the absence of such a problem.

The most common tendon to be involved in a tear is the tendon of the supraspinatus muscle, along with the deltoid muscle, one of the two muscles that elevates (abducts) the arm sideways at the shoulder. An acute or recent tear usually requires an orthopedic surgical procedure to repair it.

However, there are situations when the MRI scan of the shoulder does not show a complete tear, or shows only tendon inflammation or even a normal appearing tendon, and the shoulder still does not move fully, or without pain. Then other shoulder conditions must be considered.

A common problem is the impingement syndrome, in which the tendon of the supraspinatus muscle that attaches to the humerus is caught between the head of the humerus and a part of the shoulder blade (scapula) called the acromion when the arm is elevated sideways (abducted). This often results in a tendon inflammation that causes pain when the arm is in the mid-phase of swinging from the side to over the head. Bringing the arm back down through the mid-phase of the movement is also painful.

This condition is often associated with the development of painful shoulder muscles and with myofascial trigger points. The initial treatment is physical therapy, Anti-inflammatory drugs such as ibuprofen or the newer selective cox-2 inhibitor drugs may be helpful in reducing pain and inflammation. If these measures do not succeed in restoring a pain-free movement, then an orthopedic surgical consultation is in order to assess the benefits of arthroscopic surgical correction.

An immobile shoulder with limited movement in elevation (abduction) or in rotation in front or in back of the body (reaching across the front of the chest or behind the back) can follow treatment of a rotator cuff injury or an impingement syndrome. It can also follow seemingly innocent injuries such as a pull to the arm or a minor fall. Reduced movement at the shoulder can also occur after immobilization of the arm during treatment of a shoulder

or upper arm fracture. It is not uncommon following a stroke in which the arm is paralyzed or weak and spastic. Examination of the shoulder region usually identifies painful, shortened muscles. The key muscle, one that is all too often overlooked, is the subscapularis muscle that lies on the undersurface of the shoulder blade, and that attaches to the front of the upper portion of the humerus, or upper arm bone. It is instrumental in bringing the arm down to the side, and in turning or rotating the arm inside to allow one to reach behind the back, as in scratching the back or in hooking a bra. The subscapularis muscle has been called the gateway muscle to the shoulder, because of its central role in movement of the shoulder and in limiting motion of the shoulder when it is irritated.

The subscapularis muscle can be felt by the clinician palpating deep into the axilla or armpit to reach the undersurface of the shoulder blade or scapula. When the condition has persisted for months, or even years, trigger point release by needling the muscle or by injecting the trigger points with a local anesthetic can be an effective (and even a necessary) means of treatment. Release of the trigger points in the subscapularis as well as the other shoulder region muscles can often rapidly restore a more normal movement at the shoulder with reduced pain. Physical therapy can be more effective after such treatment. The key to this approach, however, lies in the recognition that painful limitation of shoulder movement almost always involves the subscapularis muscle as a principal factor. Once this muscle is included in the treatment program, reduction in pain and increase in movement usually proceeds quickly.