



[◀ Back](#)

The shoulder is a very complex structure made up of several joints and muscles, each with a profound influence on shoulder motion. The shoulder has the greatest amount of motion of any joint in the body. This motion gives us the ability to reach and perform various tasks with our hands. Because the shoulder is so mobile, it is susceptible to injury, so it is protected by an intricate network of ligaments and muscles which interact with the neck, back and rib cage. The rotator cuff is a group of four muscles responsible for stabilizing the shoulder. The larger shoulder muscles, such as the deltoid muscle, are responsible for moving the shoulder. When shoulder motions are altered through trauma, pathology, or repetitive motion, shoulder impingement syndrome can result. Shoulder impingement syndrome occurs when the supraspinatus tendon (one of the four rotator cuff muscles), the biceps tendon, or the bursa (a lubricating fluid filled sac located between bones, muscles and tendons to help protect them) is squeezed between two shoulder bones causing pain.

Shoulder impingement syndrome is common in throwing athletes, overhead athletes, swimmers and workers who perform repetitive motions. The repetitive motions performed by athletes and workers can cause certain muscles to become stronger and other muscles to become weaker, leading to altered motion in the shoulder. When this happens, pain is usually experienced when raising the arm above the head, reaching across the body, or when reaching behind the back to put on a shirt or bra. "Snapping" and "cracking" is often heard with these motions. Pain can also be felt when palpating the outer aspect of the shoulder.

Trauma, such as falling and landing on the shoulder, can cause tears in the rotator cuff muscles, tendons, ligaments and or glenoid labrum leading to instability and shoulder pain. Pathology, such as arthritis or bursitis, also cause shoulder impingement syndrome. X-rays are often taken to determine if there are any bony causes for the shoulder pain, such as degenerative spurs. Shoulder impingement syndrome in the elderly is more often caused by degeneration and in those under the age of 40, it is more often due to edema and tendonitis from overuse.

Treatment goals for shoulder impingement syndrome consist of decreasing inflammation, restoring pain free range of motion and normalizing shoulder function. This is accomplished using various conservative methods including medication, joint mobilization, chiropractic manipulation, Active Release Techniques, modalities, and exercise. Active Release Techniques is important in breaking up scar tissue formation, restoring normal blood flow to the injured tissue and stimulating the lay down of proper collagen fiber alignment. Reeducating the muscles of the shoulder is vital to preventing future recurrences. In athletes, it is not only important to evaluate the shoulder, but depending on the sport, the trunk and lower extremities should be evaluated as well. The trunk and lower extremities may need to be treated to help decrease stress on the shoulder, as is often seen with pitchers.

If the treatment as described above is ineffective, a cortisone injection can decrease the inflammation and the pain in the shoulder. Cortisone injections should be combined with a rehabilitation program to help restore normal shoulder function. If this treatment does not provide lasting relief, a MRI is necessary to determine if there is further shoulder pathology that was not visible on the x-ray. If the results of the MRI indicate that there is significant pathology then surgery may be required. In most cases, however, shoulder injuries can be treated without surgery.

**Newtown Performance Chiropractic**  
**153 South Main Street, Newtown, CT 06470 (203) 426-6600 or (203)**  
**417-3375**