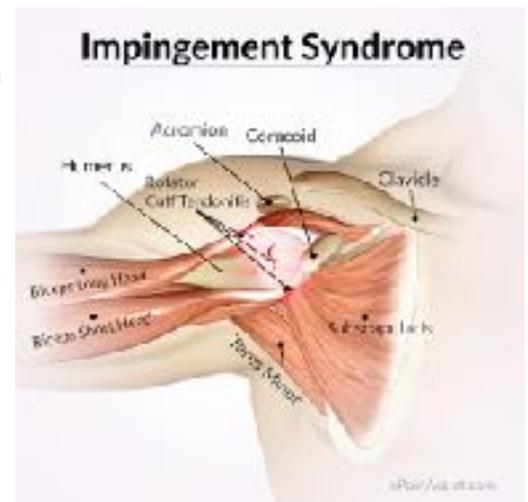


INNER CIRCLE Insights

Impingement Syndrome of the Shoulder and the Application of Manual Therapy

Shoulder pain is a common complaint but has various potential reasons causing the pain. As you may know, referred shoulder pain is possible with diaphragm irritation, gallbladder attack (gallstones), heart attack (left shoulder) and pneumonia. However, most shoulder pain is caused by mechanical problems. Movement disorders involving the shoulder are complex and are often associated with mechanical imbalances of strength, flexibility and posture. There are many possible diagnoses for mechanical shoulder pain such as; dislocation, frozen shoulder, OA, rotator cuff injuries, AC separation and impingement syndrome. All of these diagnoses are the result of mechanical and movement imbalances that occur over a short or long period of time. Mechanical shoulder imbalances can cause pain, lack of function, difficulty with sleep, arthritis, fatigue, postural difficulties, radicular symptoms, increased risk of tears, bursitis and compensation of surrounding (elbow, thoracic or cervical) joints. In this article we will address impingement syndrome and its mechanical properties, as well as evaluation and treatment at a hands-on facility like Inner Circle Rehab.

Impingement syndrome is the irritation and inflammation of the rotator cuff tendon as it passes below the AC joint. This irritation is due to the compression of the structures during the movement of the arm, most often elevation. The underlying cause of impingement syndrome often involves the neck/thoracic, chest and scapular dysfunction. Further pain and injury are likely to occur if these contributing causes are not addressed. Many people with impingement syndrome are affected by mechanical imbalances of the shoulder joint because of muscle spasm (fascial restrictions) which cause improper functioning of the AC joint. Postural assessment is crucial for shoulder improvement since muscular imbalance (poor posture) has been shown to be correlated to shoulder syndromes and pain.



For example, a forward head and rounded shoulders are a common postural misalignment. Tightening of the anterior musculature (scalenes, sternocleidomastoids, and pectorals) lead to weakness (overstretch) to the posterior musculature (rhomboids, trapezius and rotator cuff). The weakness of the posterior muscle does not allow for stabilization of the humeral head with arm elevation, and impingement occurs. There is also involvement of the capsular and ligamentous structures as they also become weak or restricted, contributing to the joint dysfunction.



Evaluation at Inner Circle Rehabilitation begins with a detailed evaluation of the patients history, posture, pain, ROM, muscular restrictions, and strength. Postural muscular restrictions are addressed with manual therapy techniques (myofascial release, strain/counterstrain, acupuncture, muscle energy and mobilization) to lengthen the anterior/lateral musculature, allowing the shoulders to return to their natural position (aligned with the ears). This reduction in pressure on the posterior muscle of the shoulder will allow pain reduction, improved strength, tolerance, mechanical balance and pain free ROM. Strengthening exercises are designed to address the weakened (posterior) musculature and postural awareness exercises are constantly reinforced. Stretching exercises are performed to improve carryover to the

restricted (anterior structures) and scapular stabilization exercises are a vital component of the exercise program. Strengthening exercise requires 3 to 6 months in all rehabilitation conditions in order to obtain statistically significant strength gains and joint stability.

With the manual techniques, (restriction reduction) unique to Inner Circle, irritation of the joint is reduced while exercising and strength gains will be greater and easier. As always it requires the expertise of the medical practitioner and, more importantly, a personal commitment to achieve the strength gains to make lasting changes. By improving the mechanical position of the shoulder joint you can improve many shoulder conditions. Traditional physical therapy is limited by its approach involving exercise and modalities without the application of a skilled hands-on approach and multi-joint assessment. Without removal of the muscular restrictions, strength will be more difficult to achieve, muscular balance is unlikely and patient outcomes will be limited. This hands-on expertise is an underutilized and very important aspect of the treatment approach. Strength training directed to the appropriate muscle groups is equally important and requires skilled evaluation consistency, proper progression and patient motivation. Inner Circle Rehab provides all of these important phases of treatment with a family-like atmosphere.

Professionally yours,
Timothy M. Alloway, MSPT

For an appointment please call (215) 860-3623

*“The Natural Force Within Each of Us
is the Greatest Healer of Disease” – Hippocrates*