

# Shoulder Impingement Syndrome

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The shoulder impingement syndrome (SIS) is one of the more frequently encountered conditions affecting the shoulder joint. The majority of the cases are chronic/recurrent.

Apley's scratch test will usually be normal with reference to the patient placing the involved extremity's hand in front of their upper chest on the opposite anterior shoulder. The test is usually normal with the hand behind and over the head, touching the spine of the contralateral scapula. When the patient attempts to place their arm behind the low back, reaching to touch the inferior angle of the contralateral scapular (internal rotation, extension, and adduction), there is significant pain and restriction.

My favorite orthopedic test for SIS is what I feel comfortable calling the "Slap Me Five" test. If you're from a different part of the country other than Queens, New York, you may feel comfortable calling it "Give Me Five." Have the patient semi-flex their shoulder to 90 degrees, externally rotating the shoulder and pronating the hand (like doing the Macarena), so that the patient's thumb is facing lateral. The doctor places his/her hand along the anterior aspect of the forearm, and exerts muscle-testing pressure inferiorward. Recreation of pain and surrender of muscle resistance are good indications of SIS.

Plain film radiographs are usually negative, but they should still be evaluated to rule out calcific tendinitis, calcific bursitis, and degenerative changes of the glenohumeral and acromio-clavicular articulations. These conditions can be concurrent and asymptomatic. An MRI evaluation is best to evaluate possible soft tissue hypertrophy associated with SIS. Even though imaging findings may be positive for anatomical impingement, this does not mean that the patient will not respond to conservative care. The opposite seems to be true in most cases.

The procedure which I feel is most appropriate in treating SIS is the activator methods technique. The subluxations which I find relatively consistent are the superior scapular, the distal superior clavicle, and the posterior humerus. The external humeral subluxation can also be involved, so I suggest the entire shoulder girdle (including the upper rib cage) be evaluated. The ribs can be responsible for scapula subluxations and must be checked. Needless to say, subluxations in the lower cervical/upper thoracic region must be corrected.

Adjunctive therapy should be performed taking into account the condition of the soft tissue. In most cases, there is little, if any, significant muscle spasm; however, true trigger points are usually evident, especially if the condition is chronic/recurrent. True trigger points may be tender to thumb pressure, but refer or radiate pain to a remote location. A good example may be a trigger point along the anterior shoulder radiating down the arm, or a trigger point along the posterior scapular referring pain into the superior distal clavicle. I like using combination therapy due to the fact that it is both diagnostic and treatment oriented. Between 6-8 treatments are usually necessary to resolve the majority of trigger points when proper adjustive procedures are being used.

With SIS, I recommend the Theraciser Rehabilitation System by Foot Levelers to the patient to exercise the shoulder joint. It is low-cost, low-tech, and very effective. Pendulum and wall-crawling exercises are also helpful.

Nutritional support is vital when treating SIS. Most chiropractors have developed their own protocols with regards to support of the musculo-skeletal system.

Most cases show significant improvement within the first 2 weeks of care with care rendered on a 3x/week basis, or daily if very acute. Treatment should be continued at a lesser frequency until maximum improvement is reached.

The criteria I use to determine MMI is after thorough evaluation of the shoulder, including basic, major and minor activator methods testing, the patient remains subluxation-free in the shoulder for 3 consecutive visits. This typically occurs after the symptoms have resolved, usually within 2-3 months of initiating active care.

Changes in activities of daily living may be in order for the patient, dependant on the patient's occupation, lifestyle, etc. In many cases, due to pre-existing degenerative changes, joint instability, or occupational predisposition, maintenance or symptomatic care may be necessary after MMI is reached.

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