



ORTHOPAEDIC ASSOCIATES OF ST. AUGUSTINE, PA.

One Orthopaedic Place • St. Augustine, FL 32086
3055 CR 210 W, Unit # 110 • St. Johns, FL 32259
Ph (904) 825-0540 • Fax (904) 825-2490
www.oastaug.com

SUBACROMIAL IMPINGEMENT

Subacromial impingement is a mixture of conditions involving the region of the shoulder most commonly between the acromion and the humerus. The function of the shoulder is to position the hand in space. In order to achieve this, the shoulder has a great deal of mobility. The shoulder sacrifices stability for this mobility. There are 22 muscles which surround the shoulder, four of which provide stability to the shoulder joint. When these muscles are not actively working to stabilize the shoulder, they can become pinched, inflamed or irritated leading to a painful and sometimes, dysfunctional shoulder.

Commonly two muscles (the supraspinatus and infraspinatus) are pinched as the shoulder is moved forward or moved out to the side and the arm is rotated. There is a protective bag of fluid between the muscles and the bone at the top of the shoulder (the acromion) called the bursa. The function of this is to allow the muscles to slide within the shoulder more easily. This bursa may become inflamed and irritated causing discomfort within the shoulder with activities, as well as discomfort with positioning of the shoulder. With the inflammation within the shoulder, there can be poor blood supply and continuing inflammation, and sometimes this may lead to a tear of the muscle or tendon of the shoulder.

Many treatments are available for this including:

- (1) anti-inflammatory medication,
- (2) avoidance maneuvers,
- (3) injection of medication into the bursa,
- (4) physical therapy,
- (5) surgery.

If the shoulder is positioned so that the arm is down in back, and the palm is upward, this will provide more space inside the shoulder joint. Activities should be attempted to be performed with the arm and hand in this position and avoid activities which would raise the elbow out to the side, particularly with the palm down as these may further contribute to impingement of the bursa and muscles within the shoulder. Before an activity is performed, a person with an impingement syndrome should attempt to drop and push their shoulders back in order to open up this region between the humerus and the acromion.

Anti-inflammatory medication is sometimes useful as it can decrease the inflammation within the shoulder, allowing more blood supply and a better healing phase within the shoulder. Occasionally anti-inflammatory injections are utilized to provide a stronger medication directly at the site of inflammation.

Physical therapy modalities are utilized to strengthen the muscles which stabilize the shoulder and provide a more functional shoulder over time. One of the concerns regarding continued use of the shoulder with discomfort and/or inflammation is that the rotator cuff muscles which provide the stability to the shoulder may, over time, tear secondary to poor nutrition to the muscles of the shoulder.

Surgery is sometimes indicated once conservative treatment methods have failed. The function of this is to decompress the area between the bone and the muscle and relieve the inflammation. This procedure is called a subacromial decompression. This is done through a small incision with an arthroscope (a small camera). Other injuries such as a rotator cuff tear or tears of the tissues of the inside of the shoulder can also be identified and treated at the same time.

James M. Grimes, M.D., P.A., F.A.A.O.S.
Orthopaedic Surgery