

# SHOULDER IMPINGEMENT

**Other names:** Subacromial Bursitis, Rotator Cuff Tendonitis ICD9 762.2

**Definition:** Inflammation of the subacromial bursa causing anterior shoulder pain particularly with overhead activities.

## Anatomy:

There is an anti-friction device (a bursa) between the top of the arm bone (the humerus) and an overhanging wing of bone (the acromion) from your scapula that can get inflamed and enlarged for a variety of reasons. When it gets enlarged (swollen) it takes up more space. When it becomes too swollen it hurts when it is compressed between the two bones. The larger it is, the more irritated it gets with motion; the more irritated it gets the larger it gets. It kind of self worsens in a vicious cycle. Certain individuals are predisposed to get this problem due to the downsloping shape of the front lip of their Acromion.

## Affected Persons:

More common in those that do overhead type activities and more common in men than women. Onset usually after 35. Can come from any activity involving the arms and often there is one particular event (for example an auto crash or a canoe trip) that starts the vicious cycle. Past injuries to this joint, fractures and sprains, even if incidental, increase the chances of developing this problem.

## Symptoms:

Initial symptoms are pain with overhead activities. This may progress to pain with activities in front of you also. You may sense a catching or popping sensation with rotation of your shoulder.

## Diagnosis:

Your history anterior shoulder pain with overhead activities is particularly important. Your physician will perform tests to confirm the diagnosis. This may include manipulation of your shoulder and arm in positions that reproduce your pain. X-rays will show the particular shape of your bones; in particular whether your acromion slopes downward in the front. In cases where the pathology is not obvious your Physician may order a MRI to allow him to see the anatomy and in particular the soft tissues that do not show up on a X-ray.

## Treatment:

Cases diagnosed early usually respond to non-surgical treatment. This may consist of activity modification and Physical Therapy to strengthen the weakened muscles of the rotator cuff. These muscles help to depress the humerus and allow more room between it and the acromion. Anti-inflammatory pills may be added to decrease the irritation in the bursa and allow it to unswell. A steroid shot into the bursa is a very potent method of rapidly reducing the swelling in the bursa. More severe cases or those that are refractory to the above may require surgery. This usually entails removing all or a portion of the bursa (it will grow back some) and trimming the front of the acromion so there is more room between the bones. It is possible to perform this entire operation arthroscopically (with very small incisions using a camera and fiberoptics.)

