Shoulder Impingement (Bursitis, Tendonitis)

What is it?
Shoulder impingement is an irritation or inflammation of the lubrication sac, the bursa, located just over the rotator cuff and/or inflammation of the rotator cuff tendons, called tendonitis.

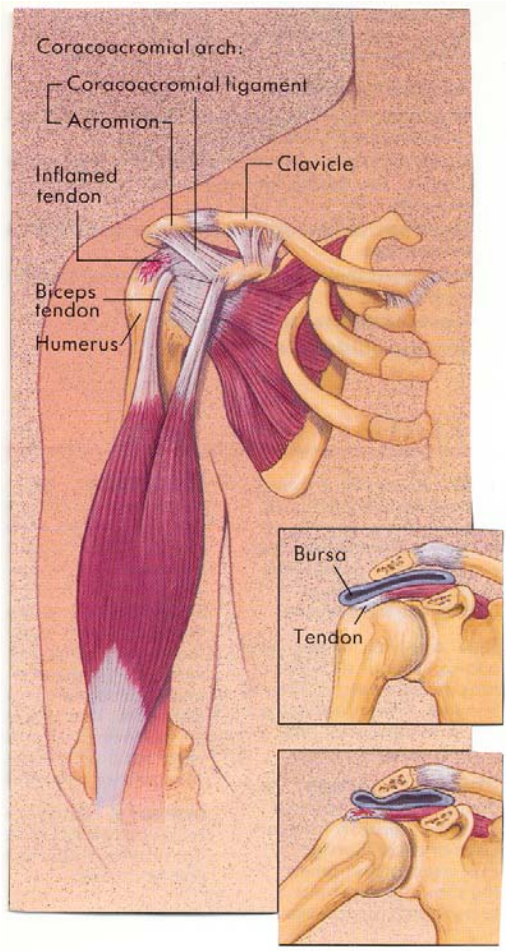
How does it occur?
The bursa and tendons can become inflamed from repetitive motion of the shoulder. This can include overhead athletic activities such as swimming, tennis, or throwing. It can also occur from occupational activities such as painting or carpentry.

What are the symptoms?
Patients may initially notice minor pain and a loss of strength. This, however, can progress into increasing discomfort with lifting the arm above the head, out to the side, or reaching behind the body.

What is the treatment?
Treatment involves three steps.
Step 1: Once impingement is diagnosed, the patient needs to avoid any painful activities or motions. Anti-inflammatory medications may be beneficial to decrease inflammation or swelling in the bursa or tendons. Rotator cuff strengthening exercises are crucial to successful treatment, as when the rotator cuff muscles are strong, bursitis and tendonitis is less likely to occur.

Step 2: A cortisone injection, a direct acting anti-inflammatory, may be recommended to treat the Impingement. The cortisone is injected into the subacromial bursa and acts by decreasing inflammation and increasing blood flow to the area which aids in healing.

Step 3: Arthroscopic surgery to remove any bone spurs, open the space above the rotator cuff, and remove the enlarged bursa. Surgery is an outpatient procedure that takes about 30 minutes. Rehabilitation time is 3-6 weeks.



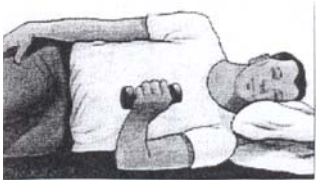
What are the exercises?
Three main exercises effectively work the rotator cuff: Internal rotation, External rotation, and Supraspinatus. These exercises can be done with either therabands (rubber tubing), a pulley system at a gym, or hand weights.

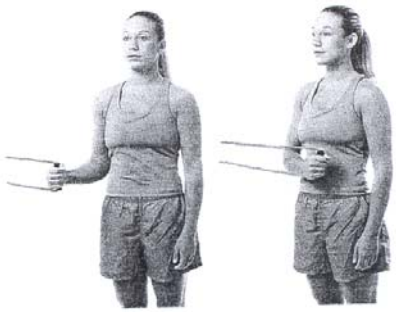
Internal rotation with weights is done with lying on the side, holding the lower arm bent at the elbow out to the side 90 degrees and slowly turning the arm inward towards the chest. With bands the band should be attached to a door or wall waist high, the patient stands with the arm bent 90 degrees at the elbow holding the other end of the band, the arm should rotate inward while the elbow remains at your side.

External rotation with weights is done while lying on your side, the upper arm bent 90 degrees at the elbow holding the weight and turning it out to the side / up.
With bands the exercise is done with the band attached to a door or a wall and the tubing comes across the body into the opposite hand. The arm is bent at 90 degrees at the elbow and slowly rotating the band outwards, pulling the band across the body.

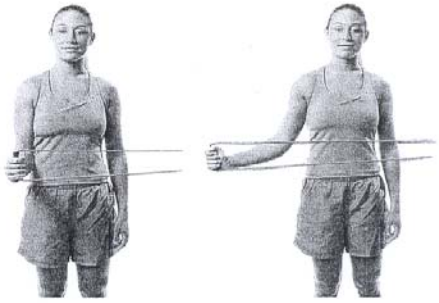
Supraspinatus is done while the patient is standing, holding weights in both arms with the thumbs pointed downwards. Keep the elbows straight and slowly raise the arms out to the side 45 degrees to just below shoulder height, bring the weight down slowly. Tubing can be used by having one end around the foot on the same side or opposite side, the other end of the band is in the hand. While the elbow is straight, slowly raising the arm out to the side 45 degrees and up to just below shoulder height, while the thumbs are pointed down. Slowly bring the arms down.
Each exercise should be done PAIN-FREE, and for 3 sets of 20 repetitions. If the patient is unable to do 20 reps, then either the weight or the resistance should be decreased.

Internal Rotation





External Rotation



Supraspinatus