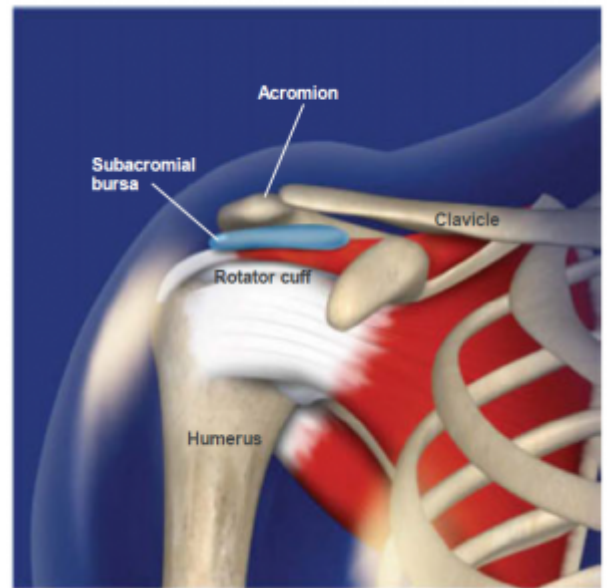


Shoulder Impingement and Subacromial Bursitis

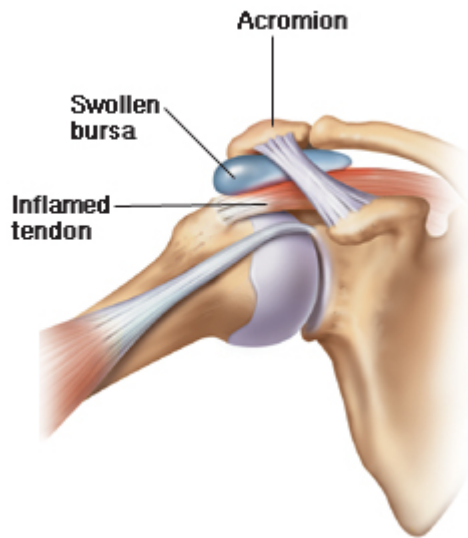
Shoulder impingement is a common and at times quite disabling condition. It occurs during lifting movements of the arm as a result of some of the shoulder structures getting caught in the space between the top of the humeral head (ball) and the acromion as the arm is raised. Through repetitive or prolonged overhead activities the tendons of the rotator cuff muscles and/or the subacromial bursa are irritated as they get caught in the space between the top of the humeral head and the acromion. Patients often complain of a pinching pain in the shoulder when raising their arm.

Bursa, are a small sacs filled with lubricating fluid. They are designed to reduce friction between adjacent soft tissue or bony layers. The subacromial bursa reduces friction between the bony prominence of the acromion (above the bursa) and the tendon of the supraspinatus rotator cuff muscle (which attaches to the upper part of the humeral head) below the bursa. The subacromial bursa can be irritated through repetitive movements that cause impingement or a direct blow to the shoulder by falling onto the elbow or outstretched hand. When irritated the bursa will become inflamed and swollen, which will increase the likelihood of further impingement as the bursa takes up more space below the acromion.



The exact cause of impingement can vary greatly between patients, some of the common causes are listed below;

- -A narrowing of the gap below the acromion due to new bone growth
- -poor muscle control and/or weakness of the muscles of the shoulder (rotator cuff)
- -A loss of the humeral head (ball) 'centering' in the joint socket, called the glenoid, as the humeral head rises up and closes down the space below the acromion. This can be due to an imbalance between the Deltoid muscle which raises the arm and the rotor cuff muscles which stabilizes the humeral head in the Glenoid.
- -Trauma to the shoulder
- -Muscle tightness
- -Degeneration or tears of the tendons around the shoulder (rotator cuff)
- -Repetitive use of the shoulder in positions of elevation
- -Poor posture over a long period of time and poor shoulder blade (scapula) positioning and control



Treatment will initially be rest from aggravating activities, to allow any irritation to settle. Anti-inflammatory drugs, cortisone injections and ice may have a role particularly if there is irritation to the subacromial bursa.

Treatment will then be primarily focused on restoring the correct biomechanics of the shoulder which will increase the gap between your humerus and acromion thus decreasing the catching pain associated with arm movements.

Treatment may consist of massage, stretches, taping, postural exercises and strengthening exercises. Many exercises are aimed at improving muscle control and timing to centre the humeral head optimally in the joint socket.

The timeframe for treatment will vary between patients, depending on the exact cause of your shoulder impingement. It can vary from one month to a year, but in most cases will improve within a few months.

Article by Philip Ting