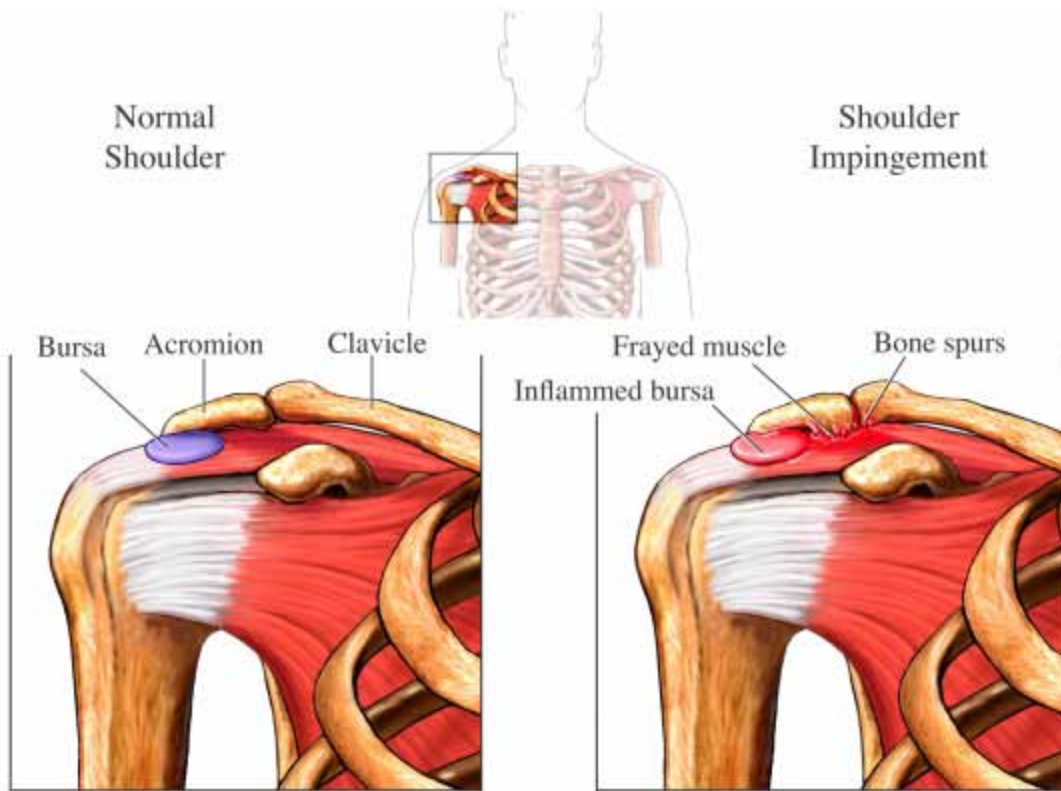


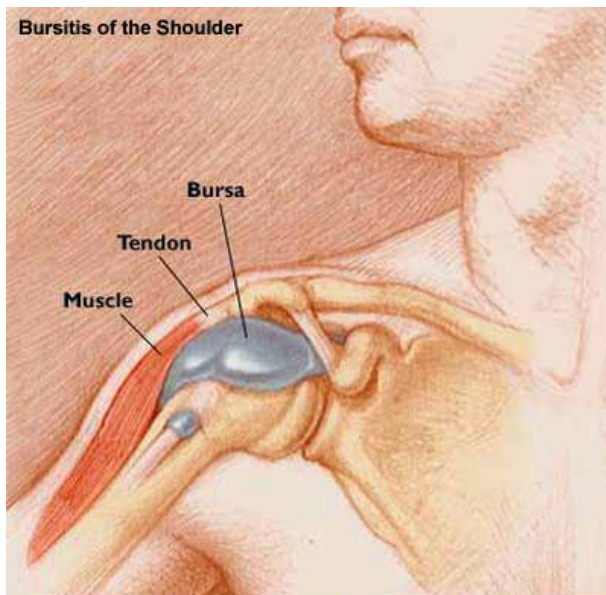
# Shoulder Pain and Impingement Syndrome

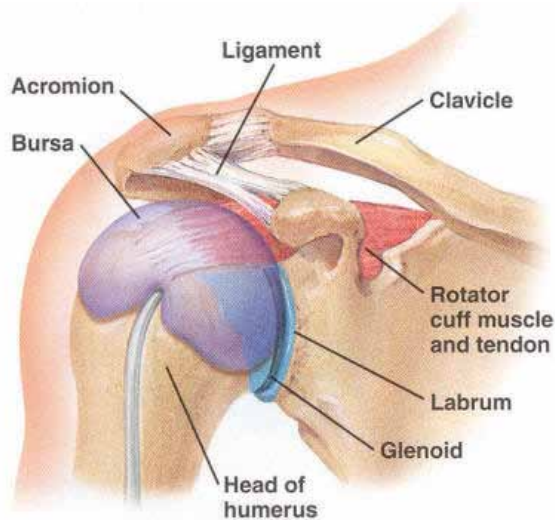
The pain starts innocently enough. As you go about engaging in your recreational activities, you begin to notice some minor pain with overhead motions such as throwing a baseball/softball, or during your tennis serve. Soon, you start to notice pain when reaching up to the top cupboard to grab the syrup. Later on, you notice that you have pain when trying to sleep on that shoulder. Finally, many benign activities such as reaching for your toothbrush, putting on your bra, or scratching your opposite shoulder become very painful. You don't remember an incident when you felt you hurt your shoulder, and are probably wondering what is causing all the pain. This insidious or slow onset of gradually increasing shoulder pain is a common sign of Shoulder Impingement Syndrome.

The dictionary defines impingement as "a sharp collision". In the shoulder, impingement is usually a gradual process that can cause a lot of pain, especially when using the hands above the level of the shoulder. Shoulder impingement syndrome usually occurs when the supraspinatus tendon (one of your rotator cuff muscles) rubs against a part of the scapula (shoulder blade) called the Acromium. This rubbing /impingement of the muscle underneath the acromium can cause a chemical inflammation in the supraspinatus tendon that is felt as shoulder pain. This process is similar in the way that a rope will fray and unravel as it travels through a rough or narrow pulley. Often times, the bursae (a lubricating sack between the rotator cuff and the Acromium ) will become inflamed and irritated, leading to a condition called "Bursitis". Left unchecked, this impingement process can progress to the point where the rotator cuff may eventually tear (either insidious or traumatic). If your rotator cuff tears, the chances of needing surgical intervention to relieve pain and restore normal function increase greatly.



## Shoulder Bursitis





Fortunately, the vast majority of people with this painful syndrome are able to restore normal and pain-free motion to the shoulder without surgical intervention. Utilization of a series of simple stretching exercises in combination with cryotherapy (ice as an anti-inflammatory measure) has been shown to be effective in decreasing pain and restoring normal movement to the impinged shoulder.

## Tips for Stretching the Shoulder:

- 1) Focus more on lots of repetitions and less force...in other words start gently.
- 2) Don't push the stretch into or through the pain barrier.
- 3) Stretch 3x/day for improvement, stretch 1x/day for maintenance.
- 4) Use on/off stretching for repetitions (think two sets of 15) rather than the traditional 3 sets of 30 seconds. This will allow the tissue to relax and you will get a better stretch.
- 5) Often times, moving tender/painful tissue around can be painful. The use of stoplights for stretch progression can help guide your stretching program

**Red Light** : Increase pain during stretch, and pain increase after the stretch = STOP

**Yellow light**: Increased pain during the stretch, but either less or the same amount of pain after the stretch = PROCEED WITH CAUTION

**Green Light**: Decreased pain during the stretch, and decreased pain after the stretch = GO

Pushing through red lights when stretching can lead to increased pain and stiffness of the shoulder, as well as increased chance of injury. Yellow lights will often turn green with continued stretching (but may turn red as well). Green lights give you the okay to increase the force of the stretch, as long as the light does not turn red.

## The Stretches:

**Internal Rotation:** On your bed, lie on the side of the affected/painful shoulder. Place your arm out at your side, and bend elbow about 90 degrees. Stretch the arm straight downward by pushing the arm(of the affected shoulder) towards the bed.

**Extension:** In standing , reach back and grab an immovable object with the affected shoulder. Stretch by lowering your body downward and keeping your elbow straight. An alternative stretch would be to use a broom, cane, or other type of thin cylindrical object to push the shoulder straight backward

## Extension Stretch

## Alternative Extension Stretch

**Combined Internal Rotation and Extension:** If neither of the individual exercises help, sometimes a more forceful stretch may be needed. In this case, combining the two motions may be the key. In this exercise you will need the assist of a towel. Place the towel behind your back, and grab it with the hand of the side of the affected/painful shoulder. While holding the towel, slide it towards the opposite side of your body, as well as gently pulling it upward.