

## Shoulder Impingement Syndrome

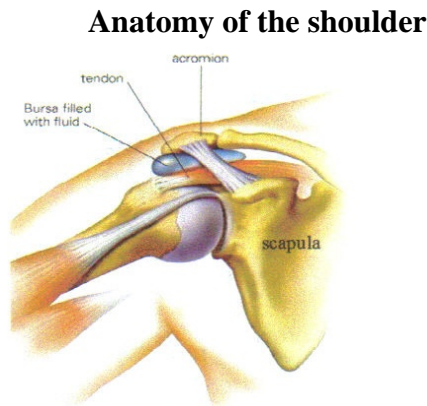
### Shoulder Anatomy

The shoulder is made up of 3 bones: the scapula (shoulder blade), the humerus (upper arm bone), and the clavicle (collarbone)

The rotator cuff connects the humerus to the scapula. The rotator cuff is formed by the tendons of four muscles; the supraspinatus, infraspinatus, teres minor, and subscapularis.

Tendons attach muscles to bone. Muscles move the bones by pulling on the tendons. The rotator cuff assists in raising and rotating the arm.

When the arm is raised, the rotator cuff also keeps the humerus tightly in the socket or glenoid. The acromion (roof of the shoulder) is formed by the upper part of the scapula.



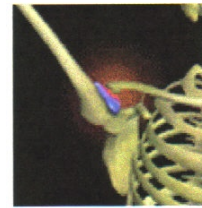
### Symptoms of Impingement Syndrome

- Aching shoulder pain in the early stages
- Pain when raising the arm out to the side or in front of the body
- Night pain
- Sharp pain reaching into your back pocket
- As the condition worsens, the joint may become stiffer
- Limited range of motion

### Causes of Impingement Syndrome

Normally, there is enough space between the acromion and the rotator cuff so that the tendons slide easily underneath the acromion as the arm is raised. Every time you raise your arm, there is a bit of rubbing or pinching on the rotator cuff tendons or bursa. This rubbing or pinching action is called *impingement*.

- Day to day activities that involve overhead motion can cause some impingement. Usually this does not lead to any prolonged pain.
- But repeated throwing activities or other repetitive actions of the shoulder can cause impingement to become a problem.



### Diagnosis

The diagnosis is usually made on the basis of your medical history and physical examination. The doctor may order X-rays to look for an abnormal acromion or bone spurs. An MRI may be performed if your doctor suspects a tear of the rotator cuff tendons.

### Non-surgical Treatment

- Rest
- Ice
- Anti-inflammatory medications
- Physical therapy

### How will physical therapy help?

Physical therapy is helpful in restoring full shoulder range of motion. Therapy that includes improving the strength and coordination of the rotator cuff and scapula muscles will allow the humerus to move in the socket without pinching the tendons or bursa under the acromion