

# What is impingement?

Impingement is another common cause of pain in the adult shoulder. It results from the front edge of the shoulder blade exerting pressure on the rotator cuff as the arm is lifted. The rotator cuff is a network of several tendons and four muscles: the supraspinatus, the infraspinatus, the subscapularis and the teres minor. Together, these muscles cover the “ball” (head of the humerus bone) of the shoulder and work to lift and rotate the joint. The pain may be due to an inflammation of the bursa overlying the rotator cuff (bursitis) or an inflammation of the tendons themselves (tendonitis).

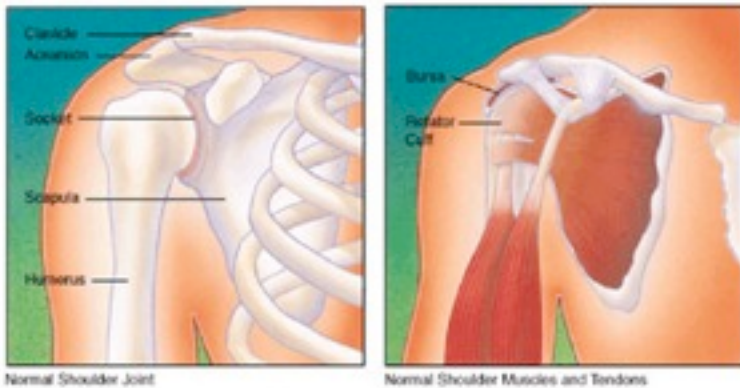


Figure 1: Normal anatomy of the shoulder

Symptoms of shoulder impingement may include:

- Pain present at activity and at rest
- Pain or difficulty with lifting and reaching movements
- Pain radiating down the shoulder and into the arm

It is common for impingement to result in local swelling and tenderness in the front of the shoulder. As the problem progresses, simple movements may become difficult. In advanced cases, loss of motion may result in a “frozen shoulder.” Diagnosis of shoulder impingement involves imaging studies, such as an X-ray or MRI scans, as well as physical examination. Partial tearing of the rotator cuff is sometimes correlated with this injury.



Figure 2: Impingement lesion.

Non-surgical treatments typically include stretching exercises to increase range of motion and non-steroidal anti-inflammatory medication to relieve pain. Many patients benefit from supervised physical therapy or the administration of a local anesthetic or cortisone preparation to the affected area. However, when non-surgical methods do not relieve pain, surgery will be recommended. The goal of surgery is to remove the impingement and create space for the “ball” to move freely. The most common surgical treatment is subacromial decompression or anterior acromioplasty, which can be performed using either arthroscopic or open techniques.