

Shoulder Impingement/Rotator Cuff Tendinosis

What is it?

Shoulder impingement is a very common condition. The shoulder is made up of several joints, several tendons and muscles which allow a huge range of motion and an active shoulder joint. There are many different components which make up the shoulder and because of this it is vulnerable to many different problems. The rotator cuff is a frequent source of pain in the shoulder. The shoulder is made up of three bones: the humerus bone, the shoulder blade (Scapula) and the collar bone (Clavicle). The humerus is kept in the shoulder socket by the tension of the rotator cuff muscles. These muscles and tendons form a cover around the shoulder which stabilises the ball and socket joint which makes up your shoulder. There is a lubricating sac called a bursa which is between the rotator cuff and the bone on the top of the shoulder called the acromion. The bursa allows the rotator cuff tendons to move freely against the underside of the acromion. This bursa is a common source of pain and irritation within the shoulder. When the bursa becomes inflamed and swells, this is called bursitis, and this is a frequent cause of shoulder pain. If the rotator cuff tendons below this become irritated or damaged this is called tendinitis or tendinosis and this can also cause pain within the shoulder. The cause of this is frequently described as impingement; when you raise your arm above shoulder height, the space between the acromion and the rotator cuff muscles narrows. These muscles then rub against the underside of the acromion or "impinge" on the tendon and the bursa causing irritation and pain.

What are the symptoms?

Shoulder impingement and rotator cuff tendinitis often causes pain in the anterolateral aspect of the shoulder and down the upper arm. This can be worse when lifting the arm above shoulder height and there may also be pain when lowering the arm from a position above the head. Many patients have certain trick movements to avoid the most painful movements of their shoulder. Patients may also describe some pain with lifting and reaching movements, pain with overhead sports or activities and night pain. As the problem progresses, patients often describe frequent pain at night, loss of strength and motion and difficulty performing overhead activities and any movement above shoulder height.

Clinical examination

After a careful discussion of symptoms Dr Taylor will check the range of motion of your shoulder, assess the power of your rotator cuff muscles and assess which of the multiple sites within the shoulder may be causing pain. Frequent cases of pain are impingement syndrome, acromioclavicular joint arthritis or irritation and biceps irritation.

What investigations are required?

All patients are assessed with an Xray, and many patients have an ultrasound scan to assess the integrity of their rotator cuff. If surgery is considered, an MRI scan is usually organised to further assess whether the rotator cuff is damaged and whether it is, indeed, repairable. In younger patients with acute tears, surgery is frequently recommended. In older patients with chronic problems, surgery may be avoided in the favour of non-operative management especially if there are co-morbidities or other illnesses that make surgery a higher risk.

What are the treatment options?

Non-operative Treatment:

Most shoulders will make an improvement without surgery. Treatment options to help the shoulder recover without surgery are physiotherapy, pain killers and anti-inflammatory medications and often a corticosteroid into the subacromial space to reduce the pain and irritation of the bursitis is frequently recommended. In younger patients with acute tears surgery is often more likely to be recommended. In older patients who have more longstanding problems, often non-operative treatment is preferred.

Operative Treatment:

When non-operative treatment does not relieve pain and restore the patient to full function, surgery may be recommended. The goal of surgery is to create more space for the rotator cuff. This is usually performed via an arthroscopic procedure where an arthroscope is inserted into the shoulder to assess the joint surfaces and the rotator cuff. Once this is performed, usually the bursa is resected from the subacromial space, the under surface of the acromion bone is identified and frequently resected to create more space for the rotator cuff. If a rotator cuff tear is noted, this is frequently repaired. Arthroscopic surgery also allows a full assessment of the joint to assess the joint surfaces, rotator cuff tendons, the under surface of the acromion and the bursa and the acromioclavicular joint and biceps tendon if required.

Possible complications

The complications are generic to all shoulder procedures which are infection, bleeding and damage to surrounding structures.

DR FRASER TAYLOR