

Shoulder pain and Rotator Cuff

Shoulder impingement and rotator cuff tears



Introduction

The shoulder is a very mobile, shallow ball and socket joint that allows you great range of movement and power in the arm. The upper arm (humerus) is joined to the shoulder blade (scapula) by the 'rotator cuff'. The rotator cuff is a large band of tendon that covers the head of the humerus and is formed by the confluence of 4 muscles that originate on all sides of the scapula. The rotator cuff is important for stabilising and controlling shoulder joint movement. Movement in the shoulder is improved by lubrication between the rotator cuff and the shoulder blade, provided by the 'sub-acromial bursa'.



Shoulder impingement

Shoulder impingement is a common problem both in younger athletes and also in middle-aged people, usually as the result of repetitive overhead activity.

Usually there is enough room between the rotator cuff and the roof of the shoulder blade (acromion) for the rotator cuff tendon to slide to freely when the arm is lifted above head height. With repetitive overhead activity and age the tendon can pinch or rub against the underside of the acromion (where bone spurs form) and cause inflammation in the sub-acromial bursa. This causes the pain of shoulder impingement and may be felt at the front of the shoulder, aching down the outside of the arm and as general ache around the shoulder joint. Plain Xrays and sometimes an Ultrasound or MRI are used to visualise the bone and soft tissue structures around the shoulder

Non-operative treatment

Shoulder impingement responds well to non-operative treatment. It usually settles with rest, activity modification, pain-killers and anti-inflammatories (if tolerated) and physiotherapy. Sometimes a course of cortisone injections into the subacromial bursa can help settle the pain down to allow physiotherapy to continue. About 70% of people with shoulder impingement can be effectively treated in this way.

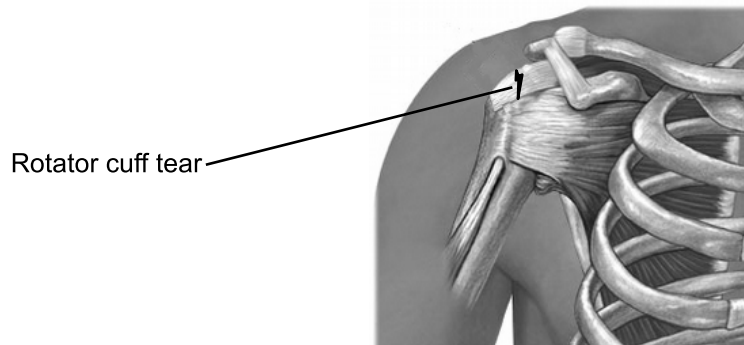
Operative treatment

If you continue to have problems with shoulder impingement despite a reasonable course of non-operative treatment an arthroscopic (keyhole surgery) decompression can be performed which involves cleaning out the inflamed tissue and shaving the bone spurs from the underside of the acromion to enable the rotator cuff to move more freely. A regional anaesthetic block is used to numb the arm and provide post-operative pain relief. You must wear a sling for 1-2 weeks and start physiotherapy and mobilisation exercises immediately.

Rotator cuff tears

Rotator cuff tears cause pain and weakness around the shoulder. The tendon can become damaged by age, wear and tear, inflammation and trauma. Tears usually occur where the tendon inserts into the bone and can be either partial or full thickness. Partial thickness or small tears may stabilise, not causing further problems or they can extend and cause massive tears of the cuff tendon (eg. after a fall). Massive tears of the rotator cuff can cause significant weakness and disability in the shoulder. If a cuff tear is suspected, Xrays, Ultrasound and MRI scans are used to examine the shoulder further.

Unfortunately tears in the rotator cuff do not have a good ability to heal themselves as there is poor blood supply in this area and it is difficult to rest the shoulder altogether.



Non-operative treatment

Many rotator cuff tears are treated surgically. Sometimes the tear cannot be repaired due to poor quality of the tendon tissue, the size of the tear or general ill health. Non-operative treatment can be tried for partial thickness or small tears with painkillers, steroid injections and physiotherapy.

Operative treatment

An arthroscopy of the shoulder is performed and the joint and surrounding structures are inspected. The tear is visualised and tidied up. The subacromial bursa and bone spurs are removed to allow the cuff tendon space to move freely. A small incision is made and the rotator cuff tendon is repaired back to the humerus using special bone anchors. A regional anaesthetic block is used to numb the arm and provide post-operative pain relief. It is important to rest the arm while the tendon heals back to the bone. You must wear a sling for 4-6 weeks and commence mobilising gradually under the guidance of your physiotherapist. It usually takes 3 months to regain good movement and 6 months for strength to return.

Risks and complications

No surgery is risk free. The risks and complications will be assessed and discussed with you. There is always a small risk of infection, blood clots and anaesthetic problems and measures are taken to reduce these. There is approximately a 5% to 10% chance of experiencing problems with recurrent impingement or post-operative stiffness. The tendon repair can fail to heal or re-tear (usually due to trauma). Often this does not cause significant problems but further operation may be required. A successful outcome is achieved in more than 90% of cases.

Recovery (following cuff repair)

Hospital stay	1 night
Sling	4-6 weeks
Driving	6-8 weeks
Movement/ strength	3-6 months
Return to sports	6 months
Final result	12 months

This brochure is a brief overview of shoulder impingement and rotator cuff tears. It is not designed to be all-inclusive. If you have any further questions please discuss them with your surgeon.