Impingement of the shoulder.

Impingement is a common cause of a painful shoulder. It has also been referred to as tendonitis or bursitis of the shoulder.

Typical pain is in the outer part of the shoulder, this can be felt in the upper arm and as far down as the elbow. Activities where the arm is used away from the body or the arm is rotated are painful. Patients often have difficulty lying on the affected side.

Typical features

- Pain outer shoulder and upper arm
- Worse on reaching above shoulder
- Worse on rotation of the arm
- Night pain



What Happens?

There is a space between the rotator cuff tendons and the under surface of the acromion, which is referred to as the Subacromial space. This contains a BURSA which helps the free movement of the arm and its tendons. When the arm is away from the body this space is reduced. Normally this doesn't cause a problem.

But symptoms can either occur spontaneously, or after a minor injury or overuse of the shoulder, factors below also contribute to developing impingement.

- Bone spurs
- Thickened ligament
- Inflamed bursa
- Ageing of the rotator cuff tendon

Subacromial space



Ligament

subacromial space

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Clinical assessment is based on the history and examination of the patient. It is important to rule out any contribution from other areas such as the neck. If there is weakness in the arm then a rotator cuff tear is suspected and this can be investigated by an Ultrasound or MRI scan.

Initial treatment is usually non operative with physiotherapy and a subacromial steroid injection. The aim of non operative treatment is to improve function and pain. If this fails then one must consider the following

- Is diagnosis correct? Other causes: neck etc.
- Is there a rotator cuff tear
- Is surgery required?

Surgery is performed to increase the subacromial space and to remove inflamed tissue, arthroscopic (key hole) surgery allows the rest of the shoulder and rotator cuff to be inspected. This is done by removing about 5mm of bone from the underside of the acromion and releasing the ligament which forms the arch.

- Increase space above rotator cuff
- Removing bone and releasing ligament
- Remove inflamed tissue
- Arthroscopic surgery

Rehabilitation

After surgery the arm is in a sling for comfort, but pendular and active assisted exercises are started straight away under the guidance of a physiotherapist.