

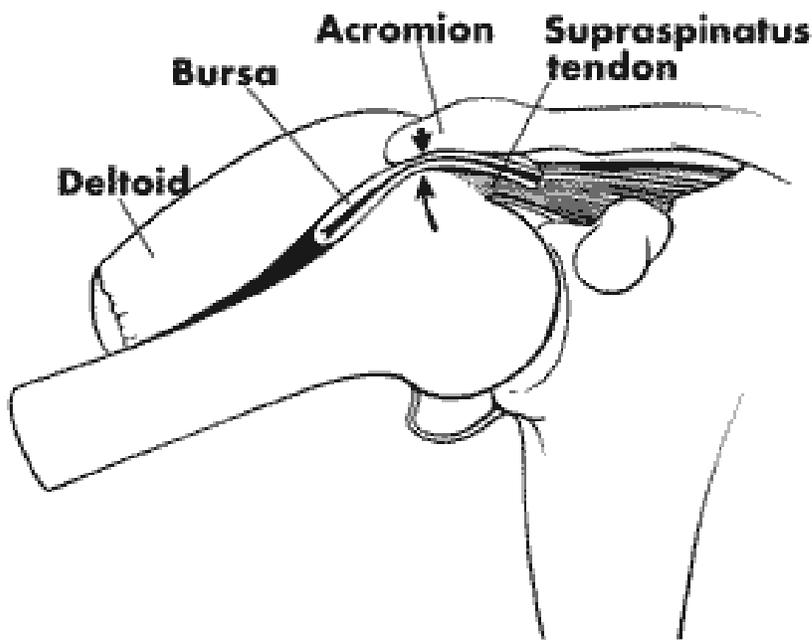
Shoulder Impingement Syndrome



What is Shoulder Impingement Syndrome?

Impingement causes pain when elevating the arm due to entrapment of structures called the bursa and rotator cuff tendons.

The rotator cuff is a small group of muscles that control and stabilise movements of the arm. The bursa is a small sac of fluid that reduces friction on these tendons. There are other names for this condition such as Sub-acromial bursitis, Sub-deltoid bursitis or tendonitis of the rotator cuff muscles



What Causes Shoulder Impingement Syndrome?

This is usually due to an imbalance of the rotator cuff tendons which lead to an instability of the shoulder joint. Repeated movement of the arm can then cause the rotator cuff to contact the outer end of the shoulder blade 'the acromion'. When this occurs the rotator cuff or bursa becomes inflamed and swollen. The swelling and inflammation cause these structures to get trapped and pinched under the acromion. The condition may

also be caused by a traumatic injury or poor posture of the neck and shoulder.

What are the symptoms?

Main Symptoms-Localised pain in the shoulder which may extend from the top of the shoulder to the elbow. Initially this may only be felt on overhead activities and when slept on. However, this may become more severe and result in weakness and restriction of movement of the shoulder.

Other possible symptoms -You may also get pain or stiffness in other parts of the affected arm or neck, and may experience numbness or pins and needles in the arm or hand.

What will physiotherapy consist of?

Physiotherapy will consist of the treatments below to reduce the inflammation and pain coupled with an exercise / postural programme to retrain the rotator cuff and repair the imbalance.

Massage encompasses a variety of techniques and is given with sufficient pressure through the superficial tissue to reach the deep lying structures. It is used to increase blood flow, decrease swelling, reduce muscle spasm and promote normal tissue repair.

Mobilisation is a manual technique where the joint and soft tissues are gently moved by the physiotherapist to restore normal range, lubricate joint surfaces, and relieve pain.

Ultrasonic Therapy transmits sound waves through the tissues stimulating the body's chemical reactions and therefore healing process, just as shaking a test tube in the laboratory speeds up a chemical reaction.

It reduces tissue spasm, accelerates the healing process and results in pain relief.

Interferential Therapy introduces a small electrical current into the tissues and can be used at varying frequencies for differing treatment effects. E.g. pain relief, muscle or nerve stimulation, promoting blood flow and reducing swelling/inflammation.

Exercise Programmes encompassing a wide range of techniques to stretch and strengthen muscles, lengthen tissues, improve postural alignment, develop co-ordination and balance.

Other treatments that could be used

Short Wave Diathermy emits electromagnetic waves deep into the tissues. This results in increased blood flow to the area to promote healing, gives pain relief and can produce a heating effect to soften the tissues in preparation for mobilisation/manipulation.

Taping/Strapping may be used if thought necessary to restrict abnormal movement and prevent further damage.

Deep friction is an aggressive massage technique. It is applied across the tissue fibres. Pressure is given as deeply as possible. This technique is initially painful but can cause a numbing effect. It can be used to break down scar tissue, restore normal movement and prepare the injured structure for mobilisation or manipulation.

Laser Therapy emits beams of light into the tissues of the body, stimulating chemical reactions and having a similar effect to ultrasound though using light energy instead of sound energy.

Acupuncture is an oriental technique of introducing needles into the skin to increase or decrease energy flow to promote pain relief and healing.

Injection Therapy is a specialist procedure, which needs the consent of your G.P. A non-harmful steroid and local anaesthetic are injected directly into the injured structure. It has a dramatic effect on removing inflammation and promoting healing.

What should the patient do to help their condition?

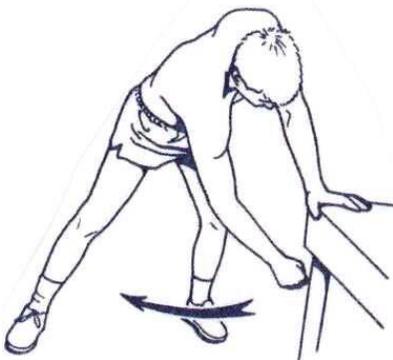
Active Rest – keep active but avoid activities that aggravate your condition i.e. elevating the arm beyond 60 degrees. Resting the arm with it supported at 30 degrees is also helpful.

Apply an ice pack - for a maximum of 20 minutes. A bag of frozen peas wrapped in a damp cloth works well because it moulds to the shape of the arm. Ensure that you do not apply ice directly to the skin as this can cause an ice burn.

Take ibuprofen/analgesia - according to the directions on the packet, up to the maximum daily dose. It is not suitable for people who have a history of stomach ulcers, or for some people with asthma. If in doubt, ask your pharmacist for advice.

Ergonomics - ensure that your workstation is encouraging you to attain good posture and keep the arm close to the body

Exercise/Postural programme – comply with the prescribed exercise/postural programme



Pendular Exercise

Allow the arm to hang freely then gently swing in a gradually increasing motion ensuring no pain is felt

- i.) Circular in both directions
- ii.) side to side
- iii.) forward and backward

10 times in each direction

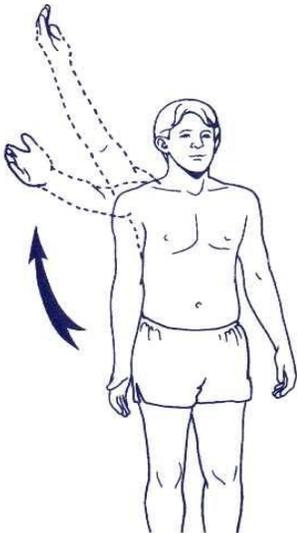
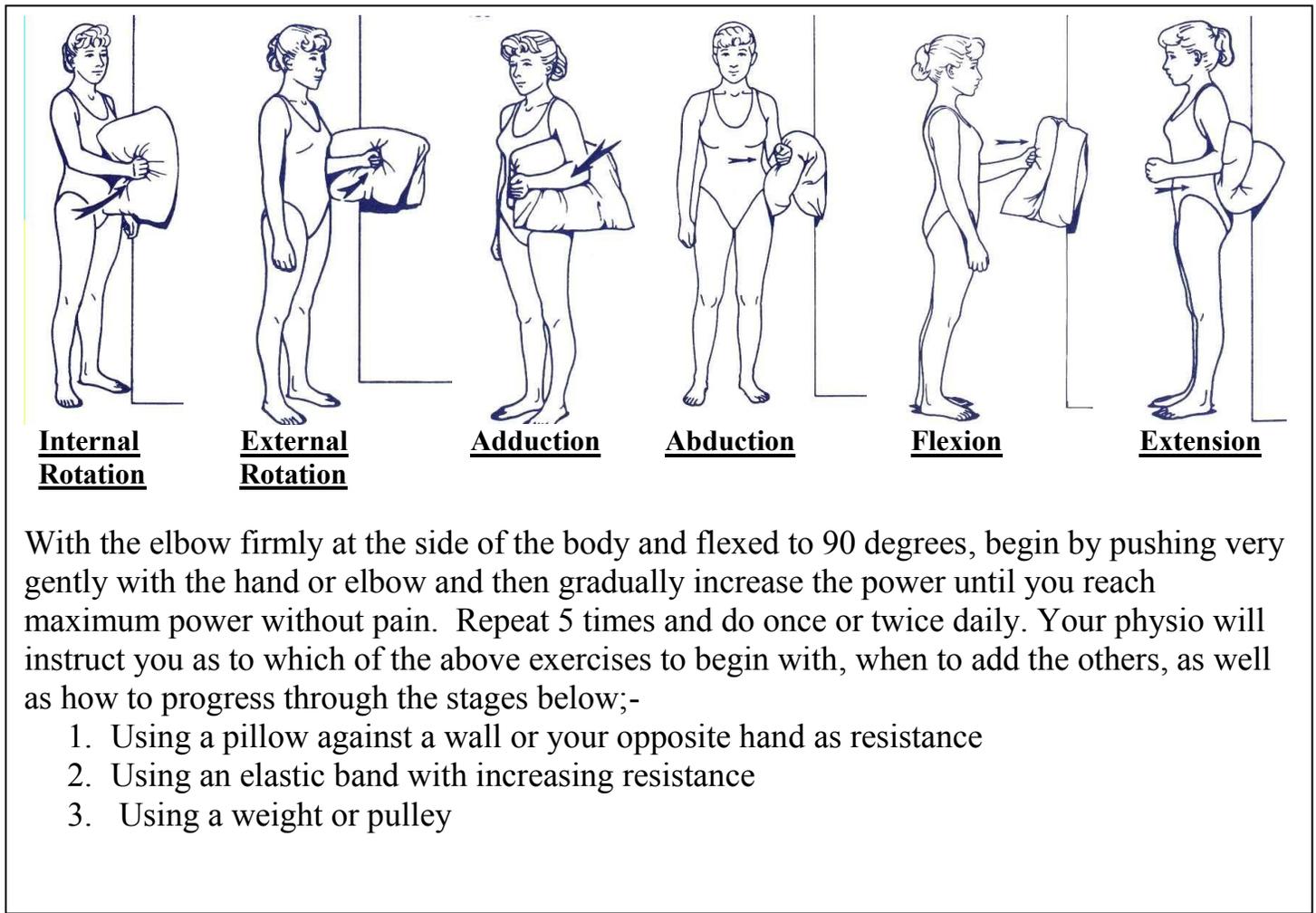
Scapular Setting

Lying face down and initially under supervision of your therapist



Pull the shoulder and scapula backward and upward to its neutral position. Progress through the stages below under instruction from your therapist.

1. lifting shoulders only
2. lifting elbows and shoulders
3. lifting whole arm
4. lifting whole arm with elastics/weights



Elevation of the arm

Slowly and with control raise the arm from the side to the ear ensuring no pain is felt. Progress through the following stages

1. lying on your back using the surface for support
2. lying on the unaffected side
3. in standing using a wall for support
4. in standing
5. using elastics or a weight

What if physiotherapy does not help or resolve my condition? It is very rare that physiotherapy does not give great benefit, in these cases a cortisone injection may be appropriate and in very extreme cases surgery is a possible option. These options can be discussed with your therapist if appropriate.