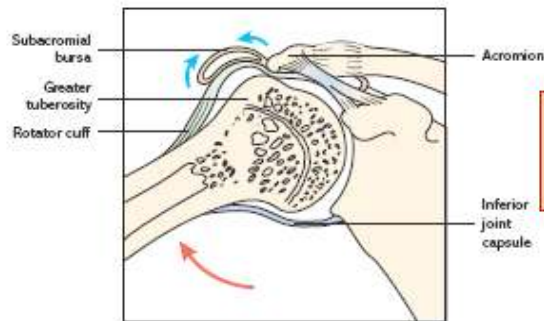


## ROTATOR CUFF PROBLEMS

Rotator cuff injuries are one of the most common complaints affecting the shoulder. The tendon can become worn and painful due to repeated use of the arm, or may be injured after trauma such as after a fall. The rotator cuff is prone to being worn between the acromion and humerus bones when the arm is moved. The subacromial bursitis, the a sac of tissue that sits under under the acromion may also become inflamed.



### Impingement

**The process by which the tendon can become worn is often due to impingement where the tendon(s) become pinched between the bones as the arm is lifted. This can occur for various reasons, such as muscle weakness posture or arthritis.**

### Treatment

Shoulder complaints that are dealt with promptly are more likely to settle quickly, with a full return to normal strength. Relative rest – that is avoiding activities that trigger the pain – is usually recommended.

The treatment will depend upon the specific diagnosis, but the initial things that you can do yourself are:

## **Relative Rest**

Mild cases of shoulder problems can be treated at home. The priority is to rest the injured area by stopping or changing the activity causing the problem. To relieve symptoms you can:

**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 the skin does not change colour (the sign of an ice burn). If the skin has turned bright pink or red after a few minutes, stop using the ice. Applying a film of oil (cooking oil will do) to the skin before applying the pack helps to avoid burning the skin.

**Heat** – for example a hot water bottle in a cover – can also help to settle muscle spasm and alternating with ice can be commonly helpful.

**Anti-inflammatory drugs** may help. For example, Ibuprofen tablets taken according to the directions on the packet, up to the maximum daily dose. Avoid these if you have a history of indigestion or stomach ulcers, and possibly if you have asthma. Paracetamol is an alternative to anti-inflammatories.

**Exercises:** Exercise are often useful, but will depend upon the type of shoulder complaint you have. Some basic exercises are given below and follow advice in the leaflet, 'Shoulder Pain'. Try to avoid the movements that are most painful, especially those that hold your arm away from your body and above shoulder height for prolonged periods

## **Seeing a doctor**

Shoulder pain should always be taken seriously. So, if these approaches are not successful, see a doctor to ensure the diagnosis is correct and to progress treatment.

Many different shoulder problems can be diagnosed on the basis of listening to the story and a good clinical examination. A diagnostic ultrasound is also very useful particularly in rotator cuff problems and x-rays may also be useful. An MRI scan and/or blood tests may also be indicated. The doctor will also want to rule out referred pain, that is a problem elsewhere causing pain in the shoulder.

### **Other treatments:**

**Medications:** Stronger types or doses of anti-inflammatories or other painkillers may be prescribed for short-term use.

**Injection therapies** may be indicated. There are various forms of injections used now that your doctor may discuss with you.

**Shock wave and radial wave therapy** are forms of ultrasound/high energy therapy that can relieve the pain from the condition.

The vast majority of shoulder problems do not need surgical intervention. However, when there is a torn tendon, a cartilage injury or severe arthritis, AND where no improvement has been obtained after non-surgical approaches, then surgery may be an option.

### **Physiotherapy**

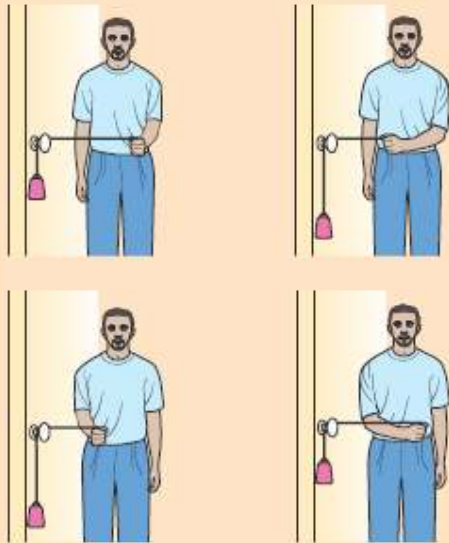
Treatment will include exercises both for the arm and for the neck, as some arm pain can be referred to the elbow. Some of these are shown below and you can start these before you see a physiotherapist. If necessary they may then provide a structured approach to returning to the activity that caused the problem, involving strengthening muscles, flexibility work changes to sporting technique and other activities. Postural changes are also helpful.

A programme of resistance training, using weights or rubber bands, will strengthen the arm muscles. You can return to sports and other activities when the arm is pain-free and strength is back to about four-fifths of what it was before the injury.

Sportspeople may need advice and training from a coach to correct errors of technique and equipment.

General principles

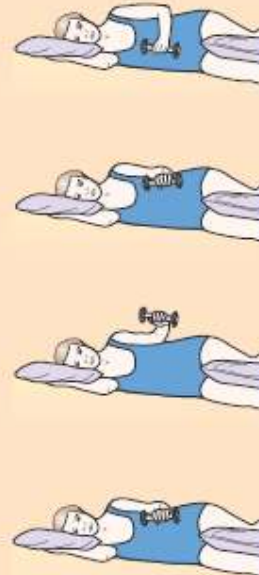
- Do each set of exercises once or twice every day.
- Gradually build up the number of exercises you do.
- Do not force through pain.
- If you feel worse after doing the exercises, stop and let your physiotherapist know.



Specific exercises

1. Shoulder flexion, rotation, adduction and abduction using pulley system. Set up a simple pulley system with a 1–2 kg weight. Work through 1–2 sets of controlled exercises in flexion, internal or external rotation (as shown above), adduction and abduction, building up from five to ten repetitions per set. (CONTINUED)

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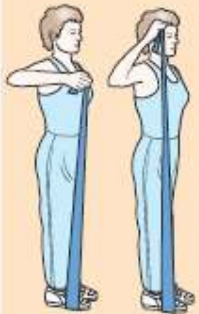


2. Shoulder external rotation lying on side. Lie with your affected shoulder uppermost. Bend the upper elbow to 90°, keeping it tucked in to the side and your body perpendicular to the bed. Keep your head supported and in line with the spine. Slowly roll the arm upwards without letting the body move, then slowly roll it back down. Repeat 5–10 times. The exercise may be done with weights of 0.25–1 kg in the hand. (CONTINUED)

(CONTINUED)



3. Shoulder external rotation with resistive band. Tie one end of the band to a stationary object or hold it with the good hand. Start with the upper arm of the affected side at your side and the elbow bent to 90°. Keep the elbow fixed in this position and maintain the 90° angle while rotating the arm from the shoulder away from the midline of the body. Slowly return to the starting position. As you rotate the arm away from the midline, draw your shoulder blade down and in towards the spine. Repeat this 5–10 times. Do 1–3 sets (each comprising 5–10 repetitions) twice daily. Discontinue exercises if painful.



4. Advanced lateral shoulder rotation with resistive band. Start with the band in the hand on the affected side and stand on the opposite end to anchor the band. Keep the elbow just below shoulder height and bent to 90°. The palm should start in the facing-down position. Without moving the position of the elbow relative to the shoulder, rotate the arm backwards. Return slowly to the starting position. Do 1–3 sets of 5–10 repetitions. Make the exercises more difficult by increasing the tension of the band and/or the speed of the movements. This must be done with control; discontinue exercises if painful.

(CONTINUED)



5. Bow and arrow with resistive band. Hold one end of the band with your arm straight. Hold the other end of the band in the hand on the affected side, with the hand and elbow just below shoulder height. Draw the band back, leading with the elbow (keeps the biceps relaxed). As you draw the band back, pull the shoulder blade in and down towards the spine. Slowly return to the starting position. Do 1–3 sets of 5–10 repetitions. Discontinue if painful.