



**Rotator Cuff Surgery** 



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The Department of Orthopaedic Surgery offers specialist medical and surgical treatments on musculoskeletal disorders, joint replacements, foot and ankle disorders, among other trauma injuries. Our consultants and surgeons work closely with sports medicine physicians, physiotherapists, podiatrists and other healthcare professionals to help patients return to their normal activities after surgery.

### What is the rotator cuff?

The rotator cuff is a group of deep muscles and tendons that wrap around the 'ball' (head of the humerus) and 'socket' (glenoid fossa) of your shoulder joint.

Its two main functions are to stabilise your

Front view Back view

shoulder joint and to facilitate its movement.

It is particularly important in enabling you to lift your arm, rotate it, and reach overhead.

### What is a rotator cuff tear?



A complete tear of the rotator cuff

Rotator cuff tears are a common cause of shoulder pain for people who are middle-aged. A torn rotator cuff can weaken your shoulder. Daily activities, like combing your hair or getting dressed, may become painful and difficult. The pain and weakness a tear causes vary among individuals.

Tears usually occur in the tendon, near where it inserts into the bone. Tears can be "partial-thickness" or "full thickness". "Partial-thickness" tears do not completely sever the tendon. "Full-thickness" tears completely detach a section of the tendon from the bone.

### What causes rotator cuff tears?

There are two main causes of rotator cuff tears: injury and wear.

**Injury:** If you fall on your outstretched arm or lift heavy loads, you can tear your rotator cuff. This can occur with other shoulder injuries, such as dislocations or fractures.

**Wear:** Most tears are the result of gradual degeneration of the tendon over time. This naturally happens as we age. It can be worsened by repetitive movements of the shoulder.

Rotator cuff tears usually occur due to a combination of these mechanisms. This is why it is more common in people over 40 years old and its incidence increases with age.

# How are rotator cuff tears diagnosed?

Diagnosis of rotator cuff tears are based on symptoms, physical examination and radiological investigations.

**X-rays:** The X-rays are usually performed first. They do not directly show rotator cuff tears but may show other related problems in the shoulder joint.

Magnetic resonance imaging (MRI) and ultrasound: These investigations help visualise the rotator cuff tendons directly. They can determine the location, size and extent of a tear. They can also show if other tissues are injured.



### What is the natural history of rotator cuff tears?

Only a small proportion of "partial-thickness" tears enlarge. In contrast, almost half of "full-thickness" tears will get larger over time. This risk of progression increases with age. However, the severity of pain and duration of symptoms do not always correlate with the size of the tear.

In the long term, some patients with very large rotator cuff tears may develop secondary arthritis ("degeneration") in the shoulder joint. This is known as Cuff Tear Arthropathy.

#### How are rotator cuff tears treated?

The goal of treatment is to reduce pain and restore function. Your doctor will consider your age, activity level, general health and type of rotator cuff tear you have, when planning your treatment.

Many patients find relief from their symptoms without surgery. Your doctor may start your treatment with nonsurgical options.

**Rest:** Reducing overhead activities help to 'rest' your shoulder.

Painkillers: These can help to relieve pain and/or swelling.

**Steroid injections:** Corticosteroids are effective antiinflammatory medications but should be used cautiously as they may weaken the tendons.

**Physiotherapy:** Specific exercises can improve movement and strength in your shoulder. They may also provide pain relief.

**Surgery:** If your symptoms do not improve, your doctor may recommend surgery. Other reasons for surgery include weakness in your shoulder, rotator cuff tears caused by a fall or accident, and large rotator cuff tears.



# What is rotator cuff surgery?

Rotator cuff surgery is a surgical technique that is performed to re-attach the torn tendon to its original position on the bone in the shoulder. The procedure can be done through a single incision (mini-open approach) or through multiple key-hole incisions (minimally invasive, arthroscopic approach).



In some cases, the rotator cuff tears are too large to be repaired and your surgeon may have to perform other procedures on a case-by-case basis. Potential options include a Superior Capsular Reconstruction, Insertion of a Balloon Spacer or Reverse Shoulder Arthoplasty.





### **Anaesthesia**

The surgery is usually performed under general anaesthesia. An injection around the nerves (nerve block) may be performed to help with pain relief. Do not be alarmed if your arm feels numb when you wake up from anaesthesia. The nerve block usually lasts for a few hours but pain relief medication will also be administered.

# What happens after rotator cuff surgery?

**Wound care:** Keep the dressing on your shoulder clean and dry. You can shower if a waterproof dressing has been applied, but do not immerse the wound in water. Observe for bleeding over the shoulder. If the dressing gets soaked or peels off, get the wound cleaned and dressing changed at a clinic or hospital.

**Pain relief:** Take painkillers as prescribed by your doctor. Contact the clinic or hospital if your pain worsens despite taking the painkillers.

**Blood circulation:** If your operated arm feels numb or your fingers are cold and/or turning blue, contact the hospital or proceed to the Emergency Medicine Department (A&E) immediately.

**Arm sling:** You will be required to wear an arm sling for about 4 to 6 weeks. The sling may be removed for showering, dressing or physiotherapy.

**Rehabilitation:** Follow the exercises that the physiotherapist has taught you. This will help in pain relief and also prevent stiffness. There may be restrictions in range of motion and load carrying on the affected arm. Your physiotherapist will quide you on how to work around these restrictions.

The information in this brochure is not exhaustive. If you would like to know more, please approach any of our staff.

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