

Shoulder Surgery (Rotator Cuff)

What is the Rotator Cuff?

The rotator cuff consists of four muscles and tendons that connect the upper arm to the top of the shoulder blade (acromion). It is located just beneath the collarbone and is not easily felt, as it is covered by the deltoid muscle. When the rotator cuff tears or becomes worn, it can lead to pain and weakness in the shoulder.

Your surgeon has recommended shoulder surgery, but the decision to proceed is entirely yours.

This document provides information on the **benefits and risks** of the procedure to help you make an **informed choice**. If you have **any unanswered questions**, consult your **surgeon or the healthcare team**.



Tear

A tear in the rotator cuff

Causes of Rotator Cuff Problems

Rotator cuff issues typically result from two types of damage:

- Rotator Cuff Tear Often caused by a fall or lifting a heavy object, leading to sudden pain and immediate weakness in the shoulder.
- Rotator Cuff Degeneration Develops gradually due to aging, repetitive wear, or genetic factors, causing progressive weakness and pain, especially when raising the arm above shoulder height or lying on the affected shoulder.

Benefits of Surgery

Surgery aims to **reduce pain** and improve **shoulder function**, though **full strength may not be restored** to its pre-injury state.

Alternatives to Surgery

- Many people can regain good shoulder function without surgery through activity modifications, exercises, and physiotherapy.
- Avoiding overhead movements can help manage symptoms.
- Pain relief with paracetamol or anti-inflammatory medications like ibuprofen may be effective.
- Steroid injections can provide temporary pain relief, though frequent injections can have side effects. Steroid injections should not be taken within two weeks of a vaccination, as they may reduce antibody production.

What Happens if I Choose Not to Have Surgery?

- **Physiotherapy** may help strengthen **undamaged muscles**, improving shoulder function.
- In some cases, **symptoms improve over time** without intervention.

What Does the Operation Involve?

- Ultrasound or MRI scans may be needed to assess the type and extent of damage to the rotator cuff, helping the surgeon plan the procedure.
- Surgery is usually performed as **keyhole (arthroscopic) surgery**, but **open surgery** may be required for **larger repairs**.

Surgical Procedure

- The healthcare team will verify your **identity and the correct shoulder** before surgery.
- The procedure is typically done under **general anaesthesia**, but other **anaesthetic options** may be available. Your **anaesthetist** will discuss these with you.
- Local anaesthetic injections may be administered for postoperative pain relief.
- Antibiotics may be given during surgery to reduce infection risk.
- Surgery usually takes **45 to 90 minutes**.

Keyhole (Arthroscopic) Surgery

- Preferred approach due to less pain, minimal scarring, and faster recovery.
- Three or four small incisions are made around the shoulder.
- A tiny telescope and surgical instruments are inserted to remove thickened tissue, release tight structures, and shave bone for improved rotator cuff movement.
- If necessary, torn tendons can also be repaired arthroscopically.

Open Surgery

- Required for larger rotator cuff tears.
- A **single incision** is made at the front of the shoulder.
- The **rotator cuff is repaired with stitches** anchored to the bone.
- **Stitches or clips** are used to close the incision.

Medication Considerations

- Inform your healthcare team about **all medications** you take, including **blood thinners**, **supplements**, **and herbal remedies**.
- Follow their advice regarding medication adjustments before surgery.

Preparing for the Operation

- **Smoking cessation** before surgery can lower the risk of complications and improve long-term health.
- Maintaining a healthy weight reduces the likelihood of complications.
- **Regular exercise** before surgery can aid recovery and overall health. Seek advice from your **GP** or healthcare team before starting an exercise routine.
- To reduce the risk of infection in a surgical wound:
 - Avoid **shaving or waxing** the area where the incision will be made **one week before surgery**.
 - Take a bath or shower either the day before or on the day of the procedure.
 - **Stay warm** around the time of surgery and inform the healthcare team if you feel cold.
 - For diabetic patients, maintaining stable blood sugar levels around the time of surgery is crucial.
- Discuss with the healthcare team whether **vaccinations** are needed to lower the risk of serious illness during recovery.
- In the hospital, practice hand hygiene and wear a face covering when instructed.

Possible Complications

The healthcare team will take steps to **minimize risks**. Some complications can be serious. Your **doctor can assess whether your risk is higher or lower** based on factors such as **age, obesity, smoking, diabetes, heart disease, or lung disease**.

If you have any concerns, discuss them with your **doctor or anesthetist**, who will explain the **potential complications of anaesthesia**.

General Complications of Any Surgery

- **Bleeding** during or after surgery (a blood transfusion is rarely needed).
- Wound infection (risk: 1 in 100) Usually settles with antibiotics, but in some cases, further treatment may be required. Keep the wound dry and covered. Contact the healthcare team if you experience fever, pus, redness, pain, or swelling.
- Allergic reaction to medications, materials, or surgical equipment. Inform the doctor of any known allergies.
- Chest infection The risk is lower if you stop smoking and have been free from COVID-19 symptoms for at least 7 weeks before surgery.

Specific Complications of This Surgery

- Bleeding into the shoulder (1 in 100) May cause pain and swelling; in some cases, another arthroscopy is required.
- Frozen shoulder (1 in 50) Can restrict movement. Treatment may include physiotherapy, medication, and injections.
- Shoulder infection (less than 1 in 100) Requires antibiotics and, occasionally, another surgical procedure.
- Blood clot in the axillary vein (under the shoulder joint) (less than 1 in 100) May cause arm swelling and requires further treatment.

- Complex regional pain syndrome (CRPS) Characterized by severe pain, stiffness, and loss of function in the arm and hand. Recovery can take months to years, and in some cases, pain and stiffness may become permanent.
- Nerve damage (less than 1 in 100) May lead to numbness, pain, or weakness in the shoulder or arm. This typically improves but can be permanent.
- Re-tear of the rotator cuff or failure of the repair to heal (10 to 20 in 100) More common in older individuals with long-standing tears.
- Persistent shoulder weakness Full pre-injury strength may not be restored.

Consequences of the Procedure

- **Pain Management:** The healthcare team will provide **pain medication**, and it is important to take it as instructed to facilitate movement and recovery.
- Scarring: There may be visible scarring, especially if open surgery was performed, as the incision is larger and located at the front of the shoulder. However, scars usually heal neatly over time.

Recovery Timeline

In the Hospital

After the procedure, you will be moved to the **recovery area** before being transferred to the **ward**.

- You will need to **keep your arm in a sling**, and your **surgeon or physiotherapist** will inform you how long support is required.
- Most patients can **go home the same day**, but some may need to stay longer based on medical recommendations.
- If you experience **any concerns or complications**, contact the **healthcare team** for guidance.

Resuming Normal Activities

If you had sedation or general anaesthesia and are discharged on the same day:

- A **responsible adult** must accompany you home by **car or taxi** and stay with you for at least **24** hours.
- Keep a **phone nearby** in case of an emergency.
- Avoid driving, operating machinery, or engaging in hazardous activities (such as cooking) for at least 24 hours.
- Do not sign legal documents or consume alcohol for at least 24 hours.
- Wound Care: Keep the wound dry for 4 to 5 days and use a waterproof dressing when bathing.
- Stitches or Clips: Usually removed after 1 to 2 weeks.
- **Physiotherapy:** A **physiotherapist** will provide **exercises and guidance** to support recovery. **Following these instructions carefully** will help restore **strength and movement** in the shoulder.
- Activity Restrictions: Avoid contact sports and heavy lifting until approved by the healthcare team. Full recovery may take up to a year.
- Driving Restrictions:
 - Do not drive **until you regain full control** of your vehicle, including in an **emergency**.
 - Always **check your insurance policy** and consult the healthcare team before resuming driving.
 - If your rotator cuff tear was repaired, you should avoid driving for at least 2 months.

Long-Term Outlook

• 9 in 10 people experience significant improvement, but pain relief and mobility restoration take time.

- Complete strength recovery may not be possible, depending on the extent of the initial injury.
- Shoulder problems may recur over time, and in some cases, additional surgery may be required.

Summary

- Rotator cuff injuries can lead to pain and weakness in the shoulder.
- Surgery aims to relieve pain and restore some function to the shoulder.
- While generally safe and effective, complications can occur.
- Being informed about **potential risks and complications** will help in making a **well-informed decision**.

Keep this **document for reference**, and use it to discuss any concerns with your **healthcare team**.

Some risk and complication statistics are based on global studies and databases.

For **personalized risk assessment and treatment options**, consult your **surgeon or doctor**.

Note: This document is for **informational purposes only** and **should not replace medical advice** from your **healthcare provider**.

Professor M. A. Imam MD, D.SportMed, PhD, FRCS (Tr and Orth) Subspecialist in Upper limb and Complex trauma reconstruction Tel: 020 3384 5588 <u>info@thearmdoc.co.uk</u> <u>www.thearmdoc.co.uk</u>