

Arthroscopy of the Elbow

What is Elbow Arthroscopy?

Elbow arthroscopy, also known as **keyhole surgery**, is a **minimally invasive procedure** used to **diagnose and treat elbow joint conditions**. It involves inserting a **small telescope** (**arthroscope**) through tiny incisions to visualize the **internal joint structures**. Specialized instruments may be used to **repair or remove damaged tissues** without requiring a larger incision.

Your **surgeon has recommended an elbow arthroscopy**, but the decision to proceed is yours. This document provides **essential information** regarding the **procedure**, **benefits**, **and risks** to assist in making an **informed choice**.

If you have **any questions**, consult your **surgeon or healthcare team**. Once all concerns are addressed and you decide to proceed, you will be asked to **sign an informed consent form**, marking the **final step in the decision-making process**. However, you may **change your mind at any time** before the surgery.

Benefits of Surgery

The primary objective of elbow arthroscopy is to accurately diagnose the issue and, in many cases, provide immediate treatment. Compared to open surgery, keyhole surgery typically results in less postoperative pain and, for some patients, a faster recovery.

Alternatives to Surgery

Imaging tests such as **MRI** and **CT** scans can help diagnose elbow conditions. However, they may not detect early joint damage, small ligament injuries, or the extent of cartilage deterioration. If these tests do not provide a definitive diagnosis, arthroscopy may be necessary for both evaluation and treatment.

Consequences of Not Having the Surgery

Without arthroscopy, your surgeon may not be able to determine the most effective treatment. If the procedure is required for treatment, your symptoms may worsen over time. In some cases, symptoms may resolve naturally or with activity modifications, but persistent pain, stiffness, or limited movement may necessitate surgical intervention to prevent further complications.



An arthroscopy of the elbow

What Does the Operation Involve?

Before coming to the hospital, **remove any rings** from your hand. The healthcare team will perform **several checks** to confirm the procedure and its correct side. You can assist by **verifying your name and the procedure with your surgeon and healthcare team**.

Elbow arthroscopy is generally performed under **general anaesthesia**, but in some cases, a **nerve block** may be used, where **local anaesthetic and painkillers** are injected near the major arm nerves. Your **anaesthetist will discuss** the best option for you. **Local anaesthetic injections** may also be given post-surgery to manage pain. Additionally, **antibiotics** may be administered during the procedure to minimize the risk of infection.

The **procedure lasts approximately 30 minutes**. A **small frame** supports your arm, and fluid is injected into the joint to enhance visualization. A **tourniquet (tight strap)** is often used to **reduce bleeding**.

The surgeon will make **two to four small incisions**, each about **half a centimetre long**, around the joint. A **small telescope** (**arthroscope**) is inserted through one incision to examine the joint, while **surgical instruments** may be used through the others to address any joint issues.

The procedure may involve **flushing out loose debris**, **removing loose fragments**, or **smoothing rough joint surfaces** caused by wear and tear. Once completed, the incisions are closed with **stitches or adhesive plasters**.

Medication Considerations

Inform the healthcare team about **all medications** you take, including **blood thinners, herbal supplements, dietary supplements, and over-the-counter drugs**. Follow their instructions regarding adjustments before surgery.

Preparing for the Operation

- Smoking cessation can reduce complications and improve long-term recovery.
- Maintaining a healthy weight lowers the risk of surgical complications.
- **Regular exercise** before surgery can **aid recovery and overall health**. Seek guidance from your healthcare team or GP before starting an exercise regimen.
- Reducing infection risks:
 - Avoid **shaving or waxing** the surgical area in the week leading up to the operation.
 - o Take a **bath or shower** the day before or on the day of surgery.
 - Stay warm around the time of the procedure and inform the healthcare team if you feel cold.
 - o If you have diabetes, keep your blood sugar levels well-controlled.

Speak to the healthcare team regarding **recommended vaccinations** to lower the risk of infections during recovery. Follow **hand hygiene** and wear a **face covering** when instructed.

Possible Complications

The healthcare team takes precautions to **minimize risks**, but complications can still occur. Your doctor can assess whether you have a **higher or lower risk** based on age, weight, smoking status, or underlying health conditions like **diabetes**, **heart disease**, **or lung disease**.

Some complications can be **serious or life-threatening**. If anything is unclear, ask your doctor. The **anaesthetist will discuss risks associated with anaesthesia**.

General Complications of Any Surgery

- **Bleeding** during or after the procedure, though **blood transfusions are rarely needed**. The use of a **tourniquet reduces this risk**.
- Surgical site infection (risk: less than 1 in 100). Showering is usually safe after two days, but wounds should be kept dry and covered. If you develop a fever, pus, or redness, contact the healthcare team. Antibiotics typically resolve infections, but severe cases may require additional surgery.
- Allergic reactions to surgical materials, equipment, or medications. Inform your doctor if you have known allergies.
- Chest infection risk is lower if you stop smoking and are free of COVID-19 symptoms for at least seven weeks before surgery.

Specific Complications of Elbow Arthroscopy

- **Bleeding into the joint** (risk: **1 in 100**) may cause **pain and swelling**, requiring another arthroscopy to flush out the joint.
- Elbow joint infection (risk: less than 1 in 100) may necessitate antibiotics or further surgery.
- Complex regional pain syndrome (CRPS) can lead to severe pain, stiffness, and loss of function in the arm or hand. Treatment includes pain management and physiotherapy, though recovery may take months or years.

- **Nerve damage** around the joint (risk: **1 in 100**) can cause **weakness**, **numbness**, **or pain**, which typically improves but may be permanent.
- Radial nerve injury, which may cause weakness in finger-extending muscles. This usually resolves over time, but permanent damage is rare.

Post-Surgery Expectations

Pain and Scarring

- **Pain management**: You will receive **pain medication**, which should be taken **as directed** to facilitate movement.
- Scarring is generally minimal, as arthroscopy incisions are small and heal neatly.

Recovery Timeline

Hospital Stay

After surgery, you will be taken to the **recovery area** before moving to the **ward**. The **surgeon or physiotherapist** will advise how long your **arm needs support**.

Most patients **go home the same day**, but some may need to **stay longer**. If you experience **any concerns at home**, contact the healthcare team for guidance.

Resuming Daily Activities

If you had sedation or general anaesthesia, follow these precautions for at least 24 hours:

- A responsible adult must accompany you home and stay with you.
- Stay **near a phone** in case of emergency.
- Avoid driving, operating machinery, cooking, or engaging in hazardous activities until vou regain full coordination.
- Do not sign legal documents or consume alcohol during this period.

Wound care:

- Keep wounds dry for 4-5 days.
- Use waterproof dressings for bathing.
- Stitches are usually removed **after 1-2 weeks**.

Rehabilitation and Exercise

The **physiotherapist will provide exercises** to restore movement and strength in the **elbow joint**. Following these instructions **closely** will improve recovery outcomes. **Avoid contact sports or heavy lifting** until the healthcare team confirms it is safe. Full recovery may take **several weeks**.

Before starting exercise, consult your healthcare team or GP.

Driving and Mobility

Do not drive or cycle until you can **fully control your vehicle**, including in **emergency situations**. Confirm with your **insurance provider and healthcare team** before resuming driving.

Long-Term Outlook

Most patients experience **significant improvement** following elbow arthroscopy, though **pain relief and mobility restoration take time**. Symptoms may return over time, and **some patients require additional surgery**.

If the arthroscopy was **performed for diagnosis**, follow-up **clinic appointments** will be scheduled to discuss results and possible **future treatments**. If **biopsy samples** were taken, results are usually available within **three weeks**.

Summary

Elbow arthroscopy is a **minimally invasive procedure** that allows surgeons to **diagnose and treat** joint problems without making **large incisions**. This technique generally results in **less pain and faster recovery**.

Although surgery is **generally safe and effective**, complications can occur. Understanding these risks helps in making an **informed decision** and recognizing potential issues **early**.

Keep this document as a **reference** and consult your **healthcare team** if needed. Risk statistics are derived from **global studies** and databases. If you have concerns about risks specific to **your condition**, your **surgeon or doctor** can provide **personalized information** and discuss **alternative treatments** if necessary.

This document is intended for **informational purposes only** and should **not replace** professional 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

info@thearmdoc.co.uk www.thearmdoc.co.uk