

Trapeziectomy

What is the Trapezium?

The trapezium is a cube-shaped bone in the wrist that connects to the base of the thumb, forming the **trapeziometacarpal joint**.

Your surgeon has recommended a **trapeziectomy**, a procedure to remove the trapezium. However, the decision to proceed with surgery is entirely yours.

This document provides important information about the potential benefits and risks of the procedure to help you make an informed decision. If you have any questions that are not addressed here, it is essential to consult your surgeon or healthcare team.

Once you have received all necessary information and feel ready 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.



The trapeziometacarpal joint

How Does Osteoarthritis Occur?

Osteoarthritis is the most common form of arthritis, characterized by the gradual breakdown of joint cartilage. In some cases, it develops following a previous fracture (**post-traumatic osteoarthritis**), but more often, it occurs without a known cause (**idiopathic osteoarthritis**). Studies suggest that osteoarthritis at the base of the thumb is more prevalent in women and may have a genetic component.

Over time, osteoarthritis wears away the cartilage that cushions the joint, leading to damage in the underlying bone. This can cause pain, stiffness, and weakness, particularly during thumb movements. Activities such as gripping, lifting, or gardening may become difficult, and in some cases, objects may slip from your grasp.

What Are the Benefits of Surgery?

The primary goal of surgery is to relieve pain and improve the function of your thumb. While movement typically improves, some reduction in thumb strength is common.

Are There Alternatives to Trapeziectomy?

- **Splints** – A splint can help by limiting thumb movement, but it may make some daily tasks more difficult.
- **Steroid Injections** – A corticosteroid injection into the joint can provide temporary pain relief, though symptoms often return after a few weeks or months.
- **Thumb Joint Replacement** – An artificial joint made of metal and plastic can be used as an alternative, but these replacements have a high failure rate and may still cause discomfort.
- **Arthrodesis (Joint Fusion)** – For younger, more active individuals with no arthritis beyond the trapezium, fusing the thumb bones together using screws can provide pain relief and increased strength, but this permanently restricts movement.

What Happens If I Choose Not to Have Surgery?

Osteoarthritis at the base of the thumb typically worsens slowly over time but is not life-threatening. Some individuals choose to manage the pain and reduced mobility without surgery. If you decide to have the procedure later, the surgery will not be more difficult, and the likelihood of success remains the same.

What Does the Surgery Involve?

Before coming to the hospital, remove any rings from your affected hand.

The healthcare team will perform several checks to ensure the correct procedure is being performed on the correct hand. You can assist by confirming your name and the planned surgery with your surgeon and the team.

The procedure, which typically lasts between **60 to 90 minutes**, can be performed using different anaesthetic techniques. Your anaesthetist will discuss the available options. Antibiotics may also be administered during surgery to minimize the risk of infection.

During the procedure:

- A small incision is made at the base of the thumb on the back of the hand.
- The **trapezium bone** is removed.
- A ligament may be reconstructed using a nearby tendon to maintain thumb stability.

- The incision is closed with stitches, and a bandage or cast is applied to protect the area.

Medication Considerations

Inform your healthcare team about all medications you take, including blood thinners, herbal supplements, dietary supplements, and over-the-counter medications. Follow their recommendations regarding any necessary adjustments before surgery.

How Can I Prepare for Surgery?

- **Quit Smoking** – Stopping smoking before surgery reduces the risk of complications and promotes better long-term health.
- **Maintain a Healthy Weight** – Excess weight can increase the risk of surgical complications.
- **Exercise Regularly** – Engaging in physical activity can help with recovery, but consult your healthcare provider before starting any new exercise routine.
- **Minimize Infection Risk** – Taking a bath or shower on the day before or the day of surgery can help reduce the risk of infection.

Discuss with your healthcare team whether you need any vaccinations before the procedure to lower the risk of illness during recovery. While in the hospital, practice good hand hygiene and wear a face covering if required.

Possible Complications

The healthcare team will take measures to reduce the risk of complications. However, risks may vary depending on individual factors such as age, smoking, obesity, and existing health conditions like diabetes or heart disease.

Your anaesthetist will explain the potential risks associated with anaesthesia.

General Surgical Risks:

- **Bleeding** – Swelling may occur but usually improves if you keep your hand elevated for the first two days.
- **Wound Infection** – Keep the wound dry and covered. If you have a cast, ensure it stays dry. Contact your healthcare team if you develop a fever, notice pus, or experience redness, pain, or swelling. Most infections are treatable with antibiotics, but in some cases, additional treatment may be required.
- **Allergic Reactions** – Inform your doctor of any allergies. The healthcare team is trained to detect and manage allergic reactions.
- **Chest Infection** – The risk is lower if you have quit smoking and have been free of COVID-19 symptoms for at least seven weeks before surgery.

Specific Risks of Trapeziectomy:

- **Nerve Damage** – Temporary or permanent numbness, pain, or weakness in the thumb may occur due to injury to the sensory branches of the radial nerve. A neuroma (painful lump) may develop, requiring further treatment.
- **Artery Damage** – The artery near the trapezium may be affected, necessitating additional surgery.
- **Complex Regional Pain Syndrome (CRPS)** – A rare condition that can lead to severe pain, stiffness, and loss of hand function. Taking a **vitamin C supplement for six weeks** after surgery may help lower this risk—your doctor can provide further advice.
- **Persistent Pain or Limited Thumb Movement (Risk: 1 in 5)** – Some individuals may continue to experience discomfort or reduced thumb function despite surgery.

Post-Surgical Considerations

- **Pain Management** – Medication will be provided to manage discomfort. Take it as prescribed to facilitate recovery.
- **Scarring** – The surgical incision generally heals well, leaving a minimal scar.

Recovery Timeline

In Hospital:

After surgery, you will be monitored in the recovery area before being transferred to a ward.

- **Hand Elevation:** Keep your hand raised above heart level using a sling or pillow.
- **Discharge:** Most patients can go home the same day, but in some cases, an overnight stay may be recommended.
- **Concerns:** If you experience any issues at home, contact your healthcare team for guidance.

Returning to Normal Activities:

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

- A responsible adult should take you home and stay with you for **at least 24 hours**.
- Avoid driving, operating machinery, signing legal documents, or drinking alcohol for **at least 24 hours**.

Post-Surgical Care:

- **Keep your hand elevated for two weeks** to reduce swelling.
- **Bandages/Cast:** Your surgeon will advise when it can be removed.
- **Exercise:** Start **gentle thumb and finger exercises** as soon as recommended to aid recovery. Move your **elbow and shoulder** to prevent stiffness.
- **Physical Activity:** Regular exercise will aid recovery, but consult your healthcare provider before resuming strenuous activities.
- **Driving:** Avoid driving until you can fully control your vehicle, including in emergencies. Check with your surgeon and insurance provider before resuming driving.

Long-Term Outlook

The surgery successfully relieves pain in **4 out of 5 patients**, allowing for better thumb mobility. However, full recovery can take **over three months**, and mild stiffness or aching may persist for a while. Improvement continues over the following year, though some weakness may remain, making tasks like opening jars more difficult.

Summary

Osteoarthritis at the base of the thumb can cause pain and impair daily activities. A trapeziectomy can help relieve pain and improve thumb function.

While the surgery is generally safe and effective, complications may occur. Understanding these risks will help you make an informed decision and recognize potential issues early.

Keep this document for reference and discuss any concerns with your healthcare team. Some information, such as risk statistics, is derived from global studies and databases. Consult your surgeon for personalized advice and alternative treatment options.

Note: This document is for informational purposes only and does not replace professional medical advice.

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