

Total Elbow Replacement

What is Arthritis?

Arthritis refers to a group of disorders that result in damage to one or more joints.

Your surgeon has recommended a total elbow replacement. However, the decision to proceed with the surgery is entirely up to you.

This document provides information regarding the potential benefits and risks to assist you in making an informed choice. If you have any further questions that this document does not address, please consult your surgeon or the healthcare team.



A total elbow replacement

How Does Arthritis Occur?

The most prevalent form of arthritis is osteoarthritis, which involves the gradual deterioration of a joint. In some cases, this may result from a prior issue or injury, but it often occurs without a clear cause.

Other types of arthritis are linked to joint inflammation that can eventually lead to significant joint damage, with rheumatoid arthritis being the most common.

Arthritis progressively wears away the protective cartilage covering the joint, causing damage to the underlying bone. This leads to pain and stiffness in the joint, which can interfere with daily activities. Total elbow replacement surgery is typically appropriate for individuals with rheumatoid arthritis, as well as for some with osteoarthritis or severe elbow fractures.

What Are the Benefits of Surgery?

The surgery should help reduce pain and improve the mobility of your arm.

Are There Alternatives to a Total Elbow Replacement?

- Over-the-counter pain relievers like paracetamol and anti-inflammatory drugs such as ibuprofen can help manage arthritis pain. Always consult your doctor before taking any supplements.
- Regular, moderate exercise can help alleviate stiffness in your elbow.
- A steroid injection into the elbow joint may reduce pain and stiffness for a few months, though repeated injections can have side effects. Avoid steroid injections within 2 weeks of receiving a vaccination as they may interfere with antibody production.
- In some cases, a smaller procedure to remove inflamed tissue from the elbow joint (synovectomy) can be performed.

These alternatives often become less effective as arthritis progresses, which may prompt your surgeon to suggest an elbow replacement.

What Happens If I Choose Not to Have the Operation?

Arthritis of the elbow tends to worsen over time. While it is not life-threatening, it can become disabling. The symptoms may flare up, particularly in colder weather.

What Does the Operation Involve?

Before surgery, the healthcare team will conduct several checks to ensure the correct procedure is performed on the correct side. You can assist by confirming your name and the planned procedure.

Various anaesthetic options will be discussed with you by your anaesthetist. Local anaesthesia injections may also be used to manage pain post-surgery. To reduce the risk of infection, antibiotics will typically be administered during the operation. The procedure typically lasts between 1 to 2 hours.

There are various types of elbow replacements available, and your surgeon will explain the options.

Your surgeon will make an incision on the back of the elbow, remove the damaged joint surfaces, and replace them with a prosthetic elbow made from metal, plastic, ceramic, or a combination of these materials. The prosthesis is fixed into place with acrylic cement, and the incision is closed with stitches or clips.

What Should I Do About My Medication?

Inform your healthcare team about all medications you are taking, including blood thinners, herbal remedies, dietary supplements, and over-the-counter medications, and follow their guidance.

How Can I Prepare for the Operation?

- If you smoke, quitting now can reduce your risk of complications and improve your overall health.
- Maintaining a healthy weight is important, as being overweight increases the risk of complications.
- Regular exercise can help prepare you for surgery, aid in recovery, and enhance long-term health. Consult your healthcare team or GP before starting any exercise regimen.
- To reduce the risk of infection, follow these steps before surgery:
 - Do not shave or wax the area where the incision will be made in the week before the operation.
 - Take a bath or shower the day before or the morning of the surgery.
 - Keep warm around the time of the procedure and notify the healthcare team if you feel cold.
 - If you have diabetes, control your blood sugar levels around the time of the surgery.

Speak to the healthcare team about any vaccinations you may need to reduce the risk of serious infections during recovery. Practise good hand hygiene and wear a face covering when asked.

What Complications Can Occur?

The healthcare team will take precautions to minimize the risk of complications.

Any risks associated with the surgery are based on studies of individuals who have undergone similar procedures. Your doctor can provide insight into your personal risk level, which may vary depending on age, weight, smoking habits, and other health conditions such as diabetes, heart disease, or lung issues.

Some complications may be severe and potentially life-threatening. If there is anything you do not understand, do not hesitate to ask your doctor for clarification.

Your anaesthetist will discuss the potential risks associated with anaesthesia.

General Risks of Surgery:

- **Bleeding:** While bleeding during or after surgery is uncommon, it may occur. A blood transfusion is rarely needed. Your surgeon may use a tourniquet to minimize bleeding.
- **Infection of the surgical site:** If infection occurs, it is usually treated with antibiotics. Serious infections may require additional surgeries.
- **Allergic reactions:** If you have a known allergy to medications, materials, or equipment, inform your healthcare team. They are trained to identify and manage such reactions.
- **Chest infection:** You may need antibiotics and physiotherapy if this occurs. Your risk of chest infection is lower if you have stopped smoking and are free from COVID-19 symptoms at least 7 weeks before surgery.
- **Venous thromboembolism (VTE):** This includes deep vein thrombosis (DVT) and pulmonary embolism. Measures like early mobilization and the use of medications or special stockings can help reduce the risk. Immediate medical attention is necessary if you experience chest pain, shortness of breath, or cough up blood.
- **Heart attack and stroke:** Both can occur during or after surgery, with the risk of death.

Specific Risks of Elbow Replacement Surgery:

- **Nerve damage:** This can cause weakness, numbness, or pain in the fingers (especially the ring and little fingers), and difficulty moving your fingers (risk: 2 in 100).
- **Infection:** Infections may lead to loosening or failure of the elbow replacement (risk: 3 in 100).
- **Loosening of the replacement:** If the elbow replacement loosens without infection, another surgery may be required (risk: 1 in 15 within 10 years).
- **Dislocation of the replacement:** This may require a closed reduction procedure (risk: 1 in 20).
- **Fracture:** A break around the elbow replacement, either during or after the operation (risk: 3 in 100 during surgery, 2 in 100 post-surgery).
- **Complex Regional Pain Syndrome (CRPS):** Severe pain and stiffness may occur, sometimes persisting for months or even years.
- **Inability to bend the elbow well:** Your surgeon may need to examine your elbow under anaesthesia (risk: 1 in 10).
- **Revision surgery:** Over time, elbow replacements can wear out, particularly with increased activity. About 80% of replacements last 10 years.

Post-Operative Considerations:

- **Pain management:** The healthcare team will provide pain relief to ensure you can move as directed.
- **Scarring:** You may experience visible scarring, though elbow replacement wounds typically heal into neat scars.

Recovery Timeline:

- **In hospital:** After surgery, you will be moved to the recovery area and later to the ward. X-rays will be taken to check the positioning of your replacement. A physiotherapist will assist you in starting elbow movements, usually 6 to 8 days after surgery.
- **At home:** You should be able to go home after 2 to 5 days, but a longer stay may be recommended. Contact the healthcare team if you have any concerns during your hospital stay or at home.

Returning to Normal Activities:

- Follow your healthcare team's instructions to minimize the risk of blood clots. Wear any prescribed compression stockings and take any medication as directed.
- Avoid driving for at least 6 weeks after surgery, or until you can safely control your vehicle in an emergency.
- Avoid contact sports and heavy lifting after surgery to prevent damage to the elbow replacement.
- The elbow replacement should improve your pain and mobility, though it may never feel quite like a natural elbow. Most individuals will achieve an elbow bend of 120 degrees, but full straightening may not be possible.

Summary:

An elbow replacement is a viable solution for people suffering from arthritis, particularly those with severe pain and stiffness. Surgery is typically safe and effective, though risks and complications can occur.

This document provides essential information to help you make an informed decision. Keep this document for reference when discussing your options with your healthcare team.

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