

Revision Total Shoulder Replacement

What is a Revision Total Shoulder Replacement?

A revision total shoulder replacement involves **removing an existing shoulder implant and replacing it with a new one**. This procedure is recommended when the **previous shoulder replacement fails** or causes **significant complications**.

Your surgeon has suggested this operation. However, the **decision to proceed is yours**. This document provides information on **potential benefits and risks** to assist in making an **informed choice**.

If any concerns remain **unanswered**, consult your **surgeon or healthcare team**. Once you feel ready to proceed, you will be asked to **sign an informed consent form**, which finalizes your decision.

However, you may **change your mind at any time** before the operation.



A total shoulder replacement

Causes of Shoulder Replacement Failure

A shoulder replacement may fail due to various factors:

- **Wear of the artificial joint** – Small plastic particles may be released, causing the joint to loosen from the bone.
- **Infection** – Infections can compromise the integrity of the joint, leading to loosening.
- **Dislocation** – If the joint repeatedly dislocates, surgery may be required to stabilize it.
- **Fracture around the replacement** – A severe fall can break the bone surrounding the replacement.

These complications can lead to pain and limited shoulder function, warranting a revision total shoulder replacement.

Benefits of Surgery

A successful revision should restore **greater comfort and mobility**, allowing for improved daily activities.

Alternatives to Surgery

Surgery is the only effective treatment for a failing shoulder replacement.

- **Progressive loosening** can result in significant bone damage, making early intervention preferable.
- **Infections** may be managed temporarily with antibiotics, but a permanent cure typically requires implant removal.
- **Recurrent dislocations** may be temporarily managed with a brace, though this is often uncomfortable and impractical.
- **Fractures around the replacement** usually require surgical intervention.

Consequences of Avoiding Surgery

- **Persistent pain and worsening joint function.**
- **Increased risk of bone thinning and fractures, requiring more extensive surgery later.**
- **Untreated infections may spread to other joints or vital organs.**

Your surgeon will explain the specific risks based on your condition.

Procedure Details

- The healthcare team will verify patient identity and the surgical site before the operation.
- Various **anaesthetic options** are available, which your anaesthetist will discuss.
- **Antibiotics** may be administered to reduce infection risks.
- **Surgical approach:**
 - A **cut is made at the front of the shoulder.**
 - If the joint is **unstable without wear**, ligament repair or partial component replacement may suffice.
 - If the **implant is loose or worn**, it will be removed, along with any surrounding cement.
- **Bone loss or infection considerations:**
 - **Bone grafts, wire mesh, or metal cages** may be used if bone is thin or fractured.
 - If an **infection is present**, a **staged procedure** may be required:
 1. The **implant is removed**, and **antibiotics** are administered for several weeks.
 2. Once the infection clears (typically after 2-3 months), a **new replacement** is inserted.

Preoperative Considerations

- Inform the healthcare team about **all medications**, including **blood thinners, supplements, and herbal treatments**.
- **Lifestyle modifications:**
 - **Quit smoking** to reduce complications.
 - **Maintain a healthy weight** to minimize surgical risks.
 - **Regular exercise** can aid recovery—seek medical advice before starting new activities.
- **Infection prevention measures:**
 - Avoid **shaving or waxing** near the surgical area in the week before surgery.
 - **Bathe or shower** before the procedure.
 - Keep **warm** around the time of surgery and manage **diabetes** effectively.

Potential Complications

Although precautions are taken, complications may occur. Risk factors include **age, obesity, smoking, and pre-existing health conditions like diabetes, heart disease, or lung conditions**.

General Surgical Risks

- **Bleeding** – A transfusion may be required.
- **Infection** (risk: 1 in 100) – Symptoms include fever, redness, or pus. In severe cases, another operation may be needed.
- **Allergic reaction** – Can occur due to materials or medication.
- **Blood clots (VTE)** – May occur in the leg (DVT) or lungs (pulmonary embolism). Symptoms include **leg swelling, chest pain, or difficulty breathing**.
- **Chest infection** – Smoking cessation and infection control reduce the risk.
- **Heart attack or stroke** – Rare but possible complications.

Procedure-Specific Risks

- **Nerve damage** (risk: <1 in 100) – May cause **weakness, numbness, or pain**. Usually temporary but can be permanent.
- **Implant loosening** (risk: 1 in 20 over 8 years) – May require further revision surgery.
- **Rotator cuff tears** – May necessitate additional repair surgery.
- **Dislocation** (risk: <1 in 50 within 5 years) – May require another operation.
- **Stiffness** – Motion may improve but **full flexibility may not return**.
- **Long-term failure** (risk: 3 in 20 by 15 years) – The replacement may wear out over time, requiring another revision.

Postoperative Recovery

Hospital Stay

- After surgery, you will be transferred to the **recovery area** and **monitored** in the ward.
- A **postoperative x-ray** ensures proper implant positioning.
- **Physiotherapy** usually starts **within 1-2 days**.
 - If the surgery was complex, movement may be **restricted for up to 6 weeks**.
- Keep the **wound dry for 4-5 days** and use **waterproof dressings** when bathing.
- The healthcare team will inform you about **stitch or dressing care**.
- Most patients **go home within 2-3 days**, but a longer stay may be needed in some cases.

Returning to Activities

- **Preventing blood clots** – Follow **medication and compression stocking guidelines** if prescribed.
- **Use a sling** to reduce strain on the joint.
- Recovery may be **longer than for an initial shoulder replacement**.
- Follow **physiotherapy exercises** to optimize movement and prevent complications.
- **Driving** – Only resume when **full arm control is regained** (typically **after at least 2 months** if a rotator cuff repair was performed).
- Avoid **contact sports, heavy tools, or activities with a high fall risk**.

Long-Term Outcomes

- **Most patients experience significant pain relief and improved movement.**
- **An artificial shoulder will never feel identical to a natural shoulder, and long-term care is essential.**
- **Implant longevity** – Between **80-90% of revision replacements last at least 15 years.**
- **Further revisions may be needed over time.**

Summary

A revision total shoulder replacement is recommended when a **previous implant fails** due to **loosening, infection, dislocation, or fracture**. The procedure aims to **restore shoulder function and reduce pain**, but carries risks. Surgery is the **only definitive treatment** for a failing shoulder replacement.

Careful **preoperative preparation, adherence to recovery protocols, and physiotherapy** can optimize outcomes. Though **complications are possible**, most patients **recover well** and regain substantial mobility.

For further guidance, consult your **healthcare team**. This document provides general information and should not replace **personalized medical advice**.

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