PROCEDURE

# Total hip joint replacement - revision

Revision hip replacement surgery removes and replaces part or all of an existing artificial hip joint.

**PURPOSE**
Replace failed hip components and restore stability and function

**PROCEDURE TYPE**
Therapeutic surgery replacing some or all artificial hip components

**WHERE IT IS DONE**
Operating theatre

**ANAESTHESIA**
General, sometimes spinal anaesthesia with sedation

**HOW LONG IT TAKES**
2 to 4 hours; complex revisions may take longer

**PREPARATION**
Fasting, medication review, infection screening

**RECOVERY**
Several hospital days; no driving until surgeon approval

**MAIN RISKS**
Infection, blood clots, dislocation, fracture

**RESULTS**
Implant position known immediately; cultures may take several days

## Overview

Revision total hip replacement is surgery on a hip that has already been replaced. The surgeon removes and replaces one or more parts of the artificial joint, also called a prosthesis.

A first hip replacement usually includes a cup fixed into the pelvis, a ball attached to a stem in the thigh bone, and a liner between them. During revision surgery, the surgeon may replace only the liner or ball, one fixed component, or the entire artificial joint.

Revision surgery is usually more complex than a first hip replacement. Scar tissue, bone loss, infection, or a fracture can make the operation longer. Special implants, bone grafts, or metal supports may be needed.

## Why the procedure is performed

Revision may be offered when an artificial hip is no longer secure, comfortable, stable, or safe to leave in place. Reasons include:

Pain alone does not always mean that revision is needed. Your team may use an examination, X-rays, blood tests, joint-fluid testing, or other scans to identify the likely problem before recommending surgery.

- Loosening or wearing of an implant
- Repeated dislocation, when the ball comes out of the socket
- Infection around the artificial joint
- A fracture around the implant
- Breakage or incorrect position of an implant
- Bone loss around the joint
- Persistent pain linked to a problem with the replacement
- A difference in leg length or poor joint function that cannot be managed another way

## Who should and should not have it

Revision may be appropriate if testing shows a correctable implant problem and pain, instability, infection, or loss of movement is significantly affecting your life. It may also be needed after a fracture or when an infection threatens the surrounding bone and tissues.

It is not automatically the right choice for everyone. Surgery may be avoided when the implant is stable, symptoms are manageable, or another treatment is more likely to help.

A planned revision may be delayed if you have:

Infection of the artificial hip is a reason for revision rather than a reason to avoid it. However, it may change the surgical plan. Some infections are treated in one operation. Others require removal of the implant, a temporary antibiotic like amoxicillin or doxycycline spacer, and a second operation later.

Your surgeon and anaesthesia team should explain your personal risks, expected benefit, and whether a less invasive option is reasonable.

- An untreated infection elsewhere in your body
- Broken or infected skin near the planned incision

- A medical condition that is not stable enough for major surgery
- Poor nutrition, severe anaemia, or another issue that needs treatment first
- A medication-related bleeding risk that has not been safely managed

## How to prepare

Follow the treating facility's own instructions first, even if they differ from general information here.

You will usually have a preoperative assessment. This may include blood tests, an electrocardiogram to check heart rhythm, X-rays, and screening for infection. If infection is suspected, fluid may be removed from the hip with a needle for laboratory testing.

Tell the team about all prescription medicines, over-the-counter products, supplements, allergies, and previous reactions to anaesthesia. Blood thinners and some diabetes medicines may need special planning. Do not stop them unless the treating team tells you how and when.

You will receive instructions about when to stop eating and drinking. Ask which regular medicines you should take on the morning of surgery.

Before admission, arrange:

Tell the team if you develop a fever, new illness, dental infection, skin wound, or infection symptoms before surgery.

- Transport home and help during early recovery
- A walking aid if the hospital asks you to bring one
- Frequently used items at waist height to limit bending
- Removal of loose rugs and other trip hazards

## What happens during the procedure

Revision hip replacement is usually performed under general anaesthesia, meaning you are unconscious. Some hospitals use spinal anaesthesia, which numbs the lower body, together with sedation.

The surgeon usually opens the hip through the previous scar, although the incision may need to be extended. Scar tissue is moved aside so the implant and surrounding bone can be examined.

The next steps depend on the problem. The surgeon may:

Removing a well-fixed component can require careful cutting around the implant. Wires, cables, plates, or screws may be used to support the bone.

The wound is closed with stitches, staples, or surgical glue. A drain may sometimes be placed to remove fluid. You then move to a recovery area for monitoring.

- Exchange the ball and socket liner
- Remove a loose cup, stem, or both
- Clean infected tissue and take fluid or tissue samples
- Repair a fracture
- Add bone graft or metal supports where bone has been lost
- Insert longer or specially shaped revision components

## Recovery and what to expect afterward

Pain: Pain and swelling are expected at first. You will be offered pain relief, and the team will check that it is working. Revision surgery can cause more soreness than a first hip replacement because more tissue or bone may have been involved.

Eating: You can usually start drinking and eating once you are awake and not feeling sick. Constipation is common after surgery because of reduced activity and some pain medicines.

Activity: Staff usually help you stand and walk with a frame or crutches soon after surgery. How much weight you can place on the leg depends on the implant, bone repair, and any fracture. Follow your specific restrictions. A physiotherapist will teach exercises and safe ways to use stairs, sit, and get in and out of bed.

Driving: Do not drive home. Return to driving only when your surgeon allows it, you are no longer taking medicines that impair alertness, and you can safely control the vehicle and perform an emergency stop.

Work: Office work may be possible sooner than physically demanding work. The timing can range from several weeks to several months based on your operation, mobility, and job duties.

You may stay in hospital for several days. Recovery usually takes longer than after a first hip replacement, especially if bone grafting, fracture repair, or staged infection treatment was required.

## Risks and possible complications

Revision hip replacement has greater technical difficulty and generally higher complication risks than a first hip replacement. Important risks include:

An infection can return even after treatment. A new implant can also loosen over time and occasionally needs another revision. Your individual risk is influenced by the reason for surgery, bone quality, general health, and the extent of reconstruction required.

- Infection in the wound or around the implant
- Blood clots in the leg or lungs
- Hip dislocation
- Fracture of the thigh bone or pelvis
- Bleeding, sometimes requiring a blood transfusion
- Injury to nearby nerves or blood vessels
- A change in leg length
- Ongoing pain, weakness, or stiffness
- Loosening, wear, or breakage of the new implant
- Problems related to anaesthesia

## Results and follow up

The surgeon can usually explain which components were replaced soon after the operation. Postoperative X-rays show the position of the new implant.

If tissue or fluid samples were collected, laboratory results may take several days. Culture results can identify bacteria or other germs and may change the antibiotic plan. Some cultures require longer observation.

Routine follow-up checks wound healing, walking, pain, and hip movement. Further X-rays may be taken to monitor the implant and bone. Keep these appointments even if recovery seems to be going well.

Improvement is gradual. Revision can reduce pain and improve stability or function, but the result may not match that of an uncomplicated first hip replacement.

## Alternatives

The realistic alternatives depend on why the artificial hip is failing.

Monitoring without surgery may be reasonable for mild symptoms and a stable implant. It avoids surgical risks but does not correct loosening, wear, fracture, or advancing bone loss.

Pain medicine, activity changes, physiotherapy, and walking aids may improve comfort and mobility. They do not repair a loose or broken implant.

Debridement with implant retention removes infected tissue while leaving fixed components in place. It is less extensive than full revision but is suitable only for selected infections and may not clear the infection.

Fracture fixation uses plates, cables, or screws to repair some fractures around a stable implant. If the implant is loose, fixation alone is unlikely to solve the underlying problem.

One-stage infection revision removes the infected implant and inserts a new one during the same operation. It avoids a second major operation but is not suitable for every infection.

Two-stage infection revision uses a temporary spacer before a later replacement. It requires at least two operations and a longer recovery period but may be advised for more difficult infections.

In uncommon situations, removing the implant without replacing it may control severe infection or pain when reconstruction is not possible. This usually leaves the leg shorter and walking more difficult.

## When to call your healthcare team

For routine questions about swelling, exercises, medicines, wound care, or follow-up appointments, contact the surgical team during normal office hours.

Seek prompt medical advice the same day for:

Call emergency services for chest pain, severe difficulty breathing, fainting, or coughing blood. Also seek emergency care if the hip suddenly looks deformed, the leg becomes numb or cold, or you cannot move it after a fall.

- Increasing wound redness, warmth, drainage, or opening
- Fever or chills
- Pain or swelling that is getting worse rather than gradually improving
- New calf pain or one-sided leg swelling
- A new clicking, shifting feeling, or sudden loss of hip function

## Common questions

Will I be asleep?

Most revision hip replacements use general anaesthesia, so you are unconscious. Spinal anaesthesia with sedation may be another option. The anaesthesia team will explain what is suitable for you.

Can I drive home?

No. Arrange for someone to take you home. You must wait to drive until the surgeon clears you and you can control the car safely.

How painful is revision hip replacement?

Pain is expected, especially during the first days. Medicines, cold packs when approved, positioning, and gradual movement can help. Tell staff if pain relief is not adequate.

When will I know whether it worked?

The surgeon can describe the repair and implant position soon after surgery. Pain, strength, and walking improve over weeks to months. Infection culture results may take several days or longer.

Is recovery longer than after my first hip replacement?

It often is. Recovery is especially prolonged when surgery involves extensive bone loss, fracture repair, infection treatment, or limits on weight-bearing.

Will the whole artificial hip be replaced?

Not always. The surgeon may replace one component, exchange the ball and liner, or revise the entire joint. The final plan may be adjusted after the existing implant and bone are examined.

## Sources

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