PROCEDURE

Hip joint replacement

Hip joint replacement is surgery that replaces a damaged hip with artificial parts.

PURPOSE
Reduce pain and improve movement in a damaged hip

PROCEDURE TYPE
Therapeutic surgical joint replacement

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
General or spinal anaesthesia, often with sedation

HOW LONG IT TAKES
About one to two hours

PREPARATION
Fasting, medication review, and skin preparation as instructed

RECOVERY
Same day to several days; no driving until cleared

MAIN RISKS
Infection, blood clots, dislocation, and fracture

RESULTS
Implant position immediately; recovery assessed over weeks to months

Overview

Hip joint replacement, also called hip arthroplasty, replaces damaged parts of your hip with artificial components. Most procedures are total hip replacements, meaning both sides of the joint are replaced.

The hip is a ball-and-socket joint. The ball is the top of your thigh bone, called the femoral head. It sits inside a cup-shaped socket in your pelvis. During surgery, the damaged ball is replaced with a metal or ceramic ball on a stem. The socket is lined with a new metal shell and a smooth plastic, ceramic, or metal insert.

The artificial parts may be fixed with bone cement or designed so that your bone grows onto them. Your surgeon recommends an implant and surgical approach based on factors such as your bone quality, anatomy, age, health, and reason for surgery.

Why the procedure is performed

Hip replacement is intended to reduce persistent pain and help you move more easily. It may be considered when hip damage limits walking, sleep, work, self-care, or other important activities.

Common reasons include:

For planned surgery, hip replacement is usually considered after suitable nonsurgical treatments have not provided enough relief. The decision should reflect how your hip affects your life, your overall health, and what you hope surgery will achieve.

- Osteoarthritis, in which protective joint cartilage wears down
- Inflammatory arthritis, including rheumatoid arthritis
- Osteonecrosis, meaning loss of blood supply damages the femoral head
- A serious hip fracture
- Damage from an earlier injury or childhood hip condition
- Failure of a previous hip operation

Who should and should not have it

You may be offered hip replacement if imaging confirms substantial joint damage and pain or loss of function remains unacceptable despite appropriate treatment. Age alone does not determine whether you are eligible.

The operation may be delayed if you have an active infection, including an infection near the planned incision. It may also be postponed while serious heart, lung, blood-clotting, or other medical problems are assessed or brought under better control.

High blood sugar, poor nutrition, smoking, or certain medicines can raise the chance of complications. These issues do not automatically rule out surgery, but your team may recommend steps to reduce risk first.

Hip replacement may not be the right option if your pain is mainly coming from your back, muscles, or another condition that replacing the joint will not correct. It may also be unsuitable if the likely benefit does not outweigh the risks of surgery and recovery.

How to prepare

Your treating facility's own instructions take priority because preparation differs between hospitals and anaesthetic plans.

Give your team a complete list of prescription medicines, over-the-counter products, vitamins, and supplements. Blood thinners and some medicines for diabetes or immune conditions 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. Following them is important for safe anaesthesia. Tell the hospital if you develop a fever, respiratory illness, skin infection, wound, or other new health problem before surgery.

If instructed, wash with a special antiseptic product. Do not shave the surgical area yourself because small cuts can increase infection risk.

Plan for transport home and help with meals, shopping, pets, and household tasks. Remove loose rugs and other trip hazards. You may need a raised seat, walking aid, or other equipment, but ask your team before buying anything.

What happens during the procedure

You will receive either general anaesthesia, which makes you unconscious, or spinal anaesthesia, which numbs your lower body. Sedation may make you relaxed or sleepy during spinal anaesthesia.

The surgeon makes an incision over the hip. Its location and length reflect the surgical approach being used. The damaged femoral head is removed, and the socket is prepared to receive the new cup.

A stem is placed inside the thigh bone. The new ball is attached to the stem and fitted into the artificial socket. The surgeon checks stability, movement, and leg position before closing the incision.

You may receive antibiotics and medicines or mechanical devices to reduce blood-clot risk. After surgery, you are monitored in a recovery area while the anaesthetic wears off.

Recovery and what to expect afterward

Pain is expected at first, but it should gradually improve. Your team may use several types of pain relief together. Taking pain medicine as directed can make it easier to breathe deeply, sleep, and complete rehabilitation exercises.

You can usually drink and eat when you are awake and not feeling sick. Some people have

nausea or constipation after anaesthesia or pain medicine.

Staff will help you stand and begin walking, often on the day of surgery or the next day. You may initially use a walker, crutches, or a cane. Follow any instructions about movements or positions to avoid. These precautions differ by surgical approach and individual risk.

Continue only the exercises given by your rehabilitation team. Walking is useful, but increasing activity too quickly can worsen pain and swelling. Blood-clot prevention may include medicine, compression devices, and regular movement.

Do not drive home. Return to driving only when your surgeon says it is safe, you are no longer taking medicines that impair alertness, and you can control the vehicle and perform an emergency stop without hesitation.

Return to work is often measured in weeks rather than days. Desk work may be possible sooner than work involving lifting, climbing, prolonged standing, or driving. Recovery continues for several months.

Risks and possible complications

Most people recover without a major complication, but hip replacement has important risks. These include:

An artificial hip does not last forever. Wear or loosening may eventually require revision surgery, although the timing cannot be predicted for an individual.

- Infection around the wound or artificial joint
- A blood clot in the leg or lungs
- Bleeding, sometimes requiring a transfusion
- Dislocation of the new joint
- A fracture during or after surgery
- Injury to nearby nerves or blood vessels
- A difference in leg length or ongoing limp
- Persistent pain, stiffness, or weakness
- Loosening, wear, or failure of the implant
- A need for another operation
- Heart, lung, or other complications related to surgery or anaesthesia

Results and follow up

An X-ray may be taken soon after surgery to check the position of the new joint. Your wound, walking, pain control, and ability to manage safely at home are assessed before discharge.

Follow-up appointments check wound healing, movement, strength, and implant position. Stitches or staples may need removal unless dissolvable material was used.

Pain from the damaged joint often improves, but muscles and tissues need time to heal. Progress is usually gradual over weeks and months. Your final result cannot be judged in the first few days.

Keep routine follow-up appointments even if recovery is going well. Ask whether you need any long-term activity limits or special advice before future medical or dental procedures.

Alternatives

You can choose not to have hip replacement or delay it after discussing the likely effects with your healthcare team. Alternatives depend on why your hip is damaged and how much it affects you.

Exercise and physical therapy can strengthen supporting muscles and maintain movement. They avoid surgical risk but cannot restore lost joint cartilage.

A walking stick, walker, activity changes, or home adaptations can reduce strain and improve safety. These measures may make daily life easier without correcting the damaged joint.

Pain-relieving or anti-inflammatory medicines may help, but relief may be incomplete and some medicines are unsuitable for people with certain stomach, kidney, heart, or bleeding problems.

A joint injection may provide temporary relief for some conditions. It does not rebuild the joint, and injections close to planned surgery require careful timing because of possible infection concerns.

For selected people, surgery that preserves or reshapes the natural joint may be possible. Hip resurfacing is another option for a limited group, but it has different risks, including femoral neck fracture and concerns related to metal components. For some hip fractures, replacing only the ball of the joint may be appropriate.

When to call your healthcare team

Contact your surgical team promptly for increasing wound redness, warmth, swelling, drainage, or pain, especially if accompanied by fever. Also seek prompt advice for a wound that opens, new calf pain or swelling, or a sudden change in your ability to walk.

Sudden severe hip pain, a shortened or twisted leg, or loss of movement may indicate dislocation or fracture and requires urgent assessment.

Call emergency services for sudden shortness of breath, chest pain, coughing up blood, fainting, or severe difficulty breathing. These can be signs of a blood clot in the lungs or another emergency.

For routine concerns, such as slow improvement, ongoing swelling, medication questions, or difficulty with exercises, contact the team during normal working hours or discuss them at follow-up.

Common questions

Will I be asleep?

You may have general anaesthesia and be fully unconscious. With spinal anaesthesia, your lower body is numb and sedation often makes you sleepy. Your anaesthetist will discuss the planned option.

Can I drive home?

No. Arrange for someone to take you home. You should not drive until your surgeon clears you and you can safely control the vehicle without sedating pain medicine.

How painful is hip replacement?

Pain and swelling are expected after surgery, especially during the first days. Medication, ice if approved, movement, and rehabilitation help. Pain should generally become more manageable as healing progresses.

When will I know if it worked?

The implant position can be checked immediately with imaging. Pain relief and improved function become clearer over the following weeks and months.

How long will the new hip last?

Many implants function for years, but no implant has a guaranteed lifespan. Wear is influenced by the implant, activity, bone quality, body weight, injury, and other factors.

Will I need physical therapy?

You will receive exercises and walking guidance. Some people recover with a home

programme, while others need outpatient or home-based physical therapy.

Sources

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