Hip Replacement Surgery

What is hip replacement surgery?



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Hip replacement, also called arthroplasty, is a surgical procedure to replace a damaged hip with a prosthesis (an artificial joint). This surgery may be considered following a hip fracture (breaking of the bone) or for someone who has severe arthritis.

More than 234,000 artificial hip replacement surgeries are performed yearly. Hip replacement may become necessary if activities such as walking, sitting, or even resting become painful.

The goal of hip replacement surgery is to replace the parts of the hip joint that have been damaged and to relieve hip pain that cannot be controlled by other treatments.

Hip Joint

Who might be a candidate for hip replacement?

The most common condition that results in the need for hip replacement surgery is arthritis. Osteoarthritis, a degenerative, joint disease that affects mostly middle-aged and older adults, causes the breakdown of joint cartilage and adjacent bone in the hips. Rheumatoid arthritis, which causes inflammation of the synovial membrane and results in excessive synovial fluid, can lead to pain and stiffness. Traumatic arthritis, arthritis due to injury, can cause damage to the articular cartilage of the hip.

Persons with severe degenerative joint disease may be unable to do normal activities that involve bending at the hip, such as walking or sitting, because they are painful.

Also, hip replacement is one method of treating a hip fracture. A fracture is a traumatic event that may result from a fall. Pain from a fracture is severe and walking or even moving the leg is difficult.

Arthritic Hip Joint

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Other conditions that may cause hip joint degeneration and require hip replacement include infections and hip deformities.

The decision to replace the painful hip with an artificial one is a decision made by the patient and physician. Other alternative treatments may first be used, including:

- anti-inflammatory medications
- pain medications
- limiting painful activities
- assistive devices for walking (such as a cane)
- physical therapy

What happens before the surgery?

In addition to a complete medical history, your physician may perform a complete physical examination, including xrays, to ensure you are in good health before undergoing surgery. In addition, you may also meet with a physical therapist to discuss rehabilitation after the surgery and undergo blood tests (or other tests).

How is a hip replaced with an artificial hip joint?

Although each procedure varies, generally, surgery to replace a hip joint usually lasts a few hours. The two most common types of artificial hip prostheses used in replacement surgery are cemented prostheses or uncemented prostheses. Sometimes, a combination of the two types is used to replace a hip joint. A hip prosthesis is made up of metal and plastic. A cemented prosthesis is attached to the bone with a type of surgical cement. An uncemented prosthesis attaches to the bone with a fine mesh of holes on the surface, in order for the bone to grow into the mesh and attach naturally to the prosthesis.

The prosthesis (artificial hip) is comprised of the following two components:

- metal stem component
- metal or ceramic ball component
- metal or plastic (backed with metal) socket component

A traditional hip replacement involves an incision (cut) about 10 to 12 inches long over the hip joint. Newer approaches are being developed that use one or two smaller incisions to perform the procedure, called minimal incision hip replacement or minimally invasive hip replacement. However, the minimally invasive procedure is not suited for all candidates for hip replacement. The physician will determine the best procedure for a person, based on that individual's situation.

While undergoing surgery, the patient may be under general anesthesia or awake with spinal anesthesia.

After surgery:

Hip replacement surgeries usually require an in-hospital stay of several days. While in the hospital, the patient generally begins physical therapy exercises to regain range of motion and strength in the hip. Physical therapy will continue at home. Pain medication also will be administered to keep the patient comfortable. The incision will have stitches or staples that will be removed after a few weeks.

Making certain modifications to your home may help you during your recovery. These modifications include the following:

- proper handrails along all stairs
- safety handrails in the shower or bath
- shower bench or chair
- raised toilet seat
- stable chair with firm seat cushion and firm back with two arms, which will allow your knees to be positioned lower than your hips
- long-handled sponge and shower hose
- dressing stick
- sock aid
- long-handled shoe horn
- reaching stick to grab objects
- firm pillows to raise the hips above the knees when sitting
- removing loose carpets and electrical cords that may cause you to trip