

What is a hip replacement?

If the non-surgical treatments no longer relieve pain and inflammation in your hip, you and your physician may consider total hip replacement. If you both decide that this is the best way to restore your ability to carry on your normal activities of daily life, the following information will be helpful for you to know.

The purpose of hip replacement surgery is to remove the two damaged and worn parts of the hip joint – the hip socket, acetabulum, and the ball, femoral head – and replace them with smooth, artificial implants called prostheses, which will help make the hip strong, stable and flexible again.



The most recent and effective hip replacement technology

Some questions you are probably thinking about are: what kind of implant device you will be receiving, what is it made of, and why is your surgeon using a particular kind of device? If you haven't discussed this with your surgeon, you should, because not all hip implant devices are made of the same material.

Due to significant advancements in technology, there is a new material for hip implant devices called OXINIUM^o Oxidized Zirconium that is a superior metal for use in hip implants. This is due to its hardness, smoothness and resistance to scratching and abrasion. It also exhibits superior performance characteristics over the alternative material options of cobalt chrome and ceramic. Ask your orthopaedic surgeon about OXINIUM^o and if it is the right implant option for you.

The hip implant is comprised of four parts that work together to restore the original function of your ball-and-socket joint:

- A metal hip stem that is inserted into the top of your thighbone
- A metal cup which holds the cup liner
- A cup liner which holds the femoral head

• The femoral head or ball which is attached to the hip stem and inserted into the liner to form the ball-and-socket joint

Hip implants are not one-size-fits-all, therefore your orthopaedic surgeon will choose the right hip implant for your body. Your surgeon will determine which design options will work best together to restore accurate leg length, while minimizing risks of dislocation and premature implant wear.

Before Hip Replacement Surgery

How do you prepare for surgery?

Successful surgery is always a cooperative effort between you, the orthopaedic surgeon and the people who help you recover from surgery. You have a very important role in preparing for your hip replacement surgery. Ask your orthopaedic surgeon if there is a Joint Replacement Class available in your area. This class will teach you how to care for your new joint and what to expect while you are in the hospital. You will also learn about the equipment you will be using after surgery and safe methods for walking and getting in and out of bed. It is very helpful to have a family member or friend attend the class with you.

Prior to your hip replacement surgery be sure to ask about all of the following:

- Pre-operative procedure
- Getting your house ready before your surgery
- Help at home
- Preparation for the hospital
- Days before surgery
- Day of surgery

Pre-operative procedure

Before surgery you will have an initial surgical consultation with your orthopaedic surgeon. This appointment includes X-rays, a complete medical and surgical history, physical examination and a review of your medications and allergies. During this visit, your surgeon will also review your hip replacement procedure and answer any questions. Your orthopaedic surgeon may require that you have a complete physical examination by your internist or family physician as you will need to be cleared medically before undergoing this extensive procedure. Your surgeon may also suggest that you donate your own blood in case you need it during surgery or post-operatively.

In addition, you may be asked to consult with a physical therapist to discuss recovery, hip rehabilitation and important precautions you must take after your surgery. The physical therapist may give you exercises you can begin prior to your surgery in order to aid with recovery.

Finally, your orthopaedic surgeon and the hospital may require that you visit the admissions department prior to surgery to pre-certify your hip replacement procedure with your insurance company.

Getting your house ready before your surgery

It is also important to get your house ready for after you come home from the hospital. At first it will be harder for you to move around, so arrange your furniture and household items ahead of time to make it easier for you during your rehabilitation.

- Remove all your throw rugs or anything on the floor that may cause you to trip.
- Move phone and electrical cords close to the walls.
- Add pillows or cushions to the chairs you will be using after surgery to make sure that your hip is above the level of your knees when you are seated. This will lessen the risk of dislocation of your new hip.
- Arrange to have an elevated toilet seat or support bars fitted to your bathroom before you leave the hospital.
- Move necessary personal items you need to reach to shelves and tables that are above your waist level. You should not be bending past 90 degrees during rehabilitation.

Help at home

The nurse assisting you and your family can offer home healthcare or alternative living sources and information. Plan time to visit the facilities in your area to find one that best suits your needs if the discharge plan is to spend a week or so in an extended care facility.

Preparation for the hospital

Here are a few things to keep in mind while packing and preparing for the hospital.

Clothing:

Getting dressed in the morning helps you feel better, so be sure to bring comfortable clothing to the hospital.

- Loose pants or shorts
- Loose tops or T-shirts
- Underwear and socks
- Short robe or pajamas
- Toiletries

Shoes:

It's vital to bring the right shoes to the hospital. You may want to buy a new pair of shoes so that your walking is not influenced by the wear patterns on your old shoes (inspect the soles of your shoes for these patterns). When deciding what shoes to bring, consider the following:

- The foot on your operated leg may be swollen after surgery. Bring a shoe that accommodates that increased size. The shoe can be slip-on or laced.
- Choose a shoe with a low heel of less than one inch. Gym shoes and walking shoes are fine.

Walking aids

If you are already using one, please bring your walking aid (walker, cane, wheelchair or crutches) with you to the hospital.

Days before surgery

In the days before surgery follow your regular diet and try to get long, restful nights of sleep. In the days leading up to your surgery, your doctor will provide a list of instructions

regarding medication use. In some cases, a blood thinner may be ordered a few days before surgery. Aspirin and non-steroidal anti-inflammatory medications should generally not be taken seven days prior to surgery.

The night before surgery, do not eat or drink after midnight. You may have a few sips of water, if needed, to take medications. On the morning of surgery, you may brush your teeth and rinse your mouth, but don't swallow any water.

Day of surgery

Once admitted to the hospital on the day of surgery, you will be taken to the appropriate presurgical area where the nursing staff will take your vital signs and administer medications as needed.

You will then be asked to change into a hospital gown and remove all jewelry, contacts, glasses, dentures and even nail polish. Then you'll be placed on a stretcher and be transported to the operating room area. The anesthesiologist will meet you there and review the medications and procedures to be used during surgery. An IV will be inserted and final preparations for your surgery are made.

After Hip Replacement Surgery

What do you do after surgery?

In this section we will discuss a few things you need to know in regard to surgery and recovery. We will cover some common hospital protocols as well as precautions your doctor and staff will be taking to avoid complications which can result from surgery.

- Surgery and recovery
- Post-operative care and precautions
- Rehabilitation after hip replacement surgery
- Hospital discharge and home instructions
- Life after hip replacement surgery

Surgery and recovery

After surgery, you will be taken to the recovery room for a period of observation. The staff will monitor your blood pressure, heart rate, respiration and body temperature. Special attention will be given to your circulation and sensation in your feet and legs. When you awaken and your condition is stabilized you will be transferred to your room.

While protocols differ from hospital to hospital, here is a list of things you may see when you wake up:

- A large dressing applied to the surgical area
- A drain tube leading into the surgical area
- An IV will continue to be used to provide adequate fluids and administer antibiotics and other medication
- A catheter may have been inserted into your bladder as the side effects of medication often make it difficult to urinate
- A V-shaped wedge pillow may be inserted between your legs to keep your new hip in the best position
- A patient-controlled analgesia (PCA) device connected to your IV for pain relief

Post-operative care and precautions

As with any major surgical procedure, hip complications can occur following hip replacement surgery. The following is a list of some of the complications with a brief description of each.

Deep vein thrombosis

Deep vein thrombosis occurs when blood clots are formed in the larger veins of the legs. In some cases, these clots may dislodge from the veins, travel through the circulatory system and become stuck in critical arteries of the lungs. The following precautionary steps may be taken by you and your physician to prevent deep vein thrombosis:

- Blood thinning medication, such as aspirin or anticoagulants
- Support stockings (TED hose)
- Foot elevation to prevent swelling
- Pneumatic devices placed on the feet to improve circulation

Infection

In a small percentage of patients undergoing hip replacement surgery infection can occur. Your physician will be able to minimize the risk of infection by closely monitoring the incision and looking for any signs of redness, swelling or other indications. Always remember to wash your hands after any contact to the incision site, especially when the sutures are still in place.

Pneumonia

A possible side effect of surgery is the development of pneumonia. The following steps may help minimize this risk.

Deep breathing exercises: A simple analogy to illustrate proper deep breathing is to "Smell a Rose and Blow Out the Candles." In other words, inhale slowly and deeply through your nose and exhale slowly through your mouth at a slow and controlled rate. A simple rule of thumb may be to perform these deep breathing exercises eight to 10 times every hour.

Coughing: This activity helps to loosen the secretions in your lungs and excrete them from your pulmonary system.

Incentive spirometer: This simple device provides visual feedback while performing deep breathing exercises. Your nurse or respiratory therapist will demonstrate the proper technique.

Rehabilitation after hip replacement surgery

Your own diligence regarding physical rehabilitation is one of the most critical factors in achieving successful hip replacement surgery. You must actively participate in the rehabilitation process, working on your own as well as with your physical therapist to achieve optimal results.

The physical therapists will begin working with you as early as a day or two after surgery. They will teach you simple exercises that can be performed in bed to strengthen the muscles in the hip and lower extremity. These exercises may include:

- Gluteal sets: Tighten and relax the buttock muscles
- Quadricep sets: Tighten and relax the thigh muscles
- Ankle pumps: Flex and extend the ankles

Your physical therapist will also teach you the following proper techniques. Although these activities may seem simple, you must learn to do them safely so that the hip does not dislocate or suffer other injury.

- Moving up and down in bed
- Going from lying to sitting and vice versa
- Going from sitting to standing and vice versa

Another important goal for early physical therapy is for you to learn to walk safely with your walker, crutches or other assistive device. Your orthopaedic surgeon will determine how much weight you can bear on your new hip and the therapist will teach you the proper techniques for walking on level surfaces and stairs with your assistive device. Improper use of the assistive device increases the chance for injury or an accident.

An occupational therapist will teach you how to safely perform activities needed in daily life and will also provide you with a list of hip precautions that are designed to protect your new hip during the first eight to 12 weeks following hip surgery. The occupational therapist will also instruct you in the proper use of various long-handled devices that will assist you in your daily life activities. These devices may include the following:

- A reacher to dress and pick things up off the floor
- A sock-aid to assist in putting on socks
- A long-handled sponge to wash your legs and feet
- A leg-lifting device to move the operated leg in and out of the car or bed
- An elevated toilet seat for using the bathroom
- An elevated bathtub chair to fit in the shower or tub

Hospital discharge and home instructions

Before leaving the hospital, your doctor and staff will help you adjust to recovery in every way possible. They will show you safe techniques of simple activities like getting in and out of bed, bathing, going to the bathroom, managing steps at home and getting in and out of a car.

Progress varies from patient to patient, so discharge instructions may also vary. You will receive specific precautions from your orthopedic surgeon, nurse and physical therapist.

- You will be using a walker or crutches to assist with walking. Ask your surgeon how much weight you can put on your operated leg.
- Wear your TED hose.
- Your surgeon will talk to you about when you can drive; generally it is four to six weeks after surgery.
- Continue the exercise program you learned while in the hospital. Walking is the most important exercise you can participate in.

Life after hip replacement surgery

You should have a near-normal range of motion and adequate strength in your hip to perform most daily activities after completing the post-operative hip rehabilitation process. After hip replacement surgery, patients have effectively returned to walking, driving, swimming, golf, doubles tennis, stationary cycling and gardening.

However, care should always be taken. You should generally avoid high-impact activities such as running, vigorous walking and downhill skiing. Remember to listen to what your body tells you. If you begin to have pain or swelling, contact your physician for advice.