



Center for Orthopaedics and Sports Medicine

Total Hip Arthroplasty (Replacement)

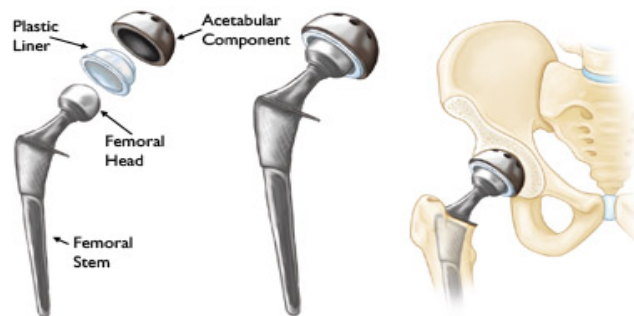
Anatomy

The hip is one of the body's largest joints. It is a ball-and-socket joint. The bone surfaces of the ball and socket are covered with articular cartilage, a smooth tissue that cushions the ends of the bones and enables them to move easily.

Description

In a total hip replacement (also called total hip arthroplasty), the damaged bone and cartilage are removed and replaced with prosthetic components.

- The damaged femoral head is removed and replaced with a metal stem that is placed into the hollow center of the femur. The femoral stem may be either cemented or "press fit" into the bone.
- A metal or ceramic ball is placed on the upper part of the stem. This ball replaces the damaged femoral head that was removed.
- The damaged cartilage surface of the socket (acetabulum) is removed and replaced with a metal socket. Screws are sometimes used to hold the socket in place.
- A plastic liner is inserted between the new ball and the socket to allow for a smooth gliding surface.



(Left) The individual components of a total hip replacement.

(Center) The components merged into an implant.

(Right) The implant as it fits into the hip.

Candidates for Surgery

There are no absolute age or weight restrictions for total hip replacements. Recommendations for surgery are based on a patient's pain and disability, not age.

When Surgery Is Recommended

There are several reasons why your doctor may recommend hip replacement surgery. People who benefit from hip replacement surgery often have:

- Hip pain that limits everyday activities, such as walking or bending
- Hip pain that continues while resting, either day or night
- Stiffness in a hip that limits the ability to move or lift the leg
- Inadequate pain relief from anti-inflammatory drugs, physical therapy, or walking supports

Preparing for Surgery

Medical Evaluation

If you decide to have hip replacement surgery, you may be asked to get a surgical clearance by your primary care doctor before your surgical procedure. Many patients with chronic medical conditions, like heart disease, may also be evaluated by a specialist, such a cardiologist, before the surgery.

Tests

Several tests, such as blood and urine samples, an electrocardiogram (EKG), and a chest x-ray, may be needed to help plan your surgery. This will be set up to be done at the hospital about a week before your surgery. At this appointment the hospital nurse will go over with you what to bring to the hospital including any medications, if needed.

Preparing Your Skin

Your skin should not have any infections, irritations, or open wounds before surgery. If any are present, contact the office for an appointment for the surgeon to examine it prior to surgery.

Medications

Tell us about the medications you are taking. The hospital will advise you which medications you should stop taking and which you can continue to take before surgery, at your pre-op testing appointment. 10 days prior to your surgery stop all medications containing Aspirin, Advil, Ibuprofen, Naproxen, Aleve, Vitamin E, Fish Oil, and St. John's Wort. Pain medication and Tylenol are acceptable to continue if it does not include any ingredients listed above.

Weight Loss

If you are overweight, you may be asked to lose some weight before surgery to minimize the stress on your new hip and possibly decrease the risks of surgery.

Dental Evaluation

Although the incidence of infection after hip replacement is very low, an infection can occur if bacteria enter your bloodstream. To reduce the risk of infection, major dental procedures (such as tooth extractions and periodontal work) should be completed 2 months before your total hip replacement surgery. Once you have a hip arthroplasty, you should use antibiotics on the day of dental procedures, including cleanings.

Home Planning

Several modifications can make your home easier to navigate during your recovery, though are not required. The following items may help with daily activities:

- Securely fastened safety bars or handrails in your shower or bath
- Secure handrails along all stairways
- A stable chair for your early recovery with a firm seat cushion (that allows your knees to remain lower than your hips), a firm back, and two arms
- A raised toilet seat
- A stable shower bench or chair for bathing
- A long-handled sponge and shower hose
- Firm pillows for your chairs, sofas, and car that enable you to sit with your knees lower than your hips
- Removal of all loose carpets and electrical cords from the areas where you walk in your home

The Night Before Your Surgery

The night before your surgery you must not have anything to eat or drink after midnight. To reduce the risk of infection, please shower the night prior to surgery with chlorohexidine gluconate 4% from the neck down (do not use on face and avoid eyes), this soap can be purchased at your local pharmacy.

Doctor's Hospital of Sarasota (DHS) has a program called TLC (Transport, Lodging & Comfort).

For a nominal fee DHS will:

- Arrange transportation for you and a guest to and from the facility the day before surgery.
- Provide a private room for you and your guest, to include a personal computer, movie, popcorn and coffee.
- Dinner in the Concierge Dining Room

Please call (941) 342-3375 for further information or to make arrangements.

Your Surgery

You will be admitted to the hospital on the day of your surgery. Please leave all valuables and jewelry at home. Bring loose comfortable clothing, shoes that are comfortable, easy to put on, and are non-skid. Label any personal belongings that you bring to the hospital (such as your walker).

Anesthesia

After admission, you will be evaluated by a member of the anesthesia team. The most common types of anesthesia are spinal (you are numb from the waist down) and general anesthesia (you are put to sleep). The anesthesia team will determine which type of anesthesia will be best for you.

Procedure

The surgical procedure takes about an hour and a half. During this time, the surgeon will remove the damaged cartilage and bone and then position new metal, plastic, or ceramic implants to restore the alignment and function of your hip.

After surgery, you will be moved to the recovery room where you will remain for about an hour while your recovery from anesthesia is monitored. Once you are recovered from anesthesia, you will be taken to your hospital room.

Your Stay in the Hospital

The average stay in the hospital is between 1 to 2 nights. To protect your hip during early recovery, a positioning splint, such as a foam pillow placed between your legs, may be used for the first night.

A case manager at the hospital will visit you during your stay and to arrange all of your future needs. These may include a home health referral, transfer to a rehab facility, medications and/or equipment.

Pain Management

After surgery, you will feel some pain. Your nurses will provide medication to make you feel as comfortable as possible. Pain management is an important part of your recovery. Movement will begin soon after surgery, and when you feel less pain, you can start moving sooner and get your strength back more quickly. Please let your nurses know if you are having pain or nausea.

Physical Therapy and Rehabilitation

Rehabilitation begins in the recovery room; we will expect you to begin ankle pump exercises in order to enhance the circulation to your legs. You will begin transfers and walking the day of or the morning after your surgery. You will use a walker for the first few days after surgery. The physical therapist will teach you the specific exercises to strengthen your hip and restore movement for walking and other normal daily activities. These exercises will begin in the hospital and will continue at home or in rehab facility.

Recovery

The success of your surgery will depend in large on how well you follow your instructions regarding home care during the first few weeks after surgery. Recovery time differs for every patient but most people are 80%-90% recuperated within 3 months of surgery. Patients do continue to improve for a year afterwards. We require you to stay locally for a minimum of 7 weeks after surgery.

Home Care

You will have a home health nurse and physical therapist prescribed to come to your home after the surgery. The nurse will take care of your incision and make sure you are doing well medically. The therapist will show you how to safely maneuver in your home and teach you exercise to strengthen your new hip.

Wound Care

You will have staples running along your incision. They will be removed approximately 1-2 weeks after surgery by the home health nurse or rehab facility nurse.

You may shower as soon as you return home. The dressing applied at the hospital is water resistant. It is best to shower using the same soap given to you prior to your surgery. The nurse will change your bandage as needed. You may get the incision area wet as soon as the incision is sealed and there is no drainage from the incision, after staples are removed.

Diet

Some loss of appetite is common for several weeks after surgery. A balanced diet is important to promote proper tissue healing and restore muscle strength. Be sure to drink plenty of fluids. Try to eat a bowl of All Bran, or similar high fiber cereal, every day to help prevent constipation.

Activity

Exercise is a critical component of home care, particularly during the first few weeks after surgery. You should be able to resume most normal light activities of daily living within 3 to 6 weeks following surgery. Some discomfort with activity and at night is common for several weeks.

Your activity program should include:

- A graduated walking program to slowly increase your mobility, initially in your home and later outside
- Resuming other normal household activities, such as sitting, standing, and climbing stairs
- Specific exercises several times a day to restore movement and strengthen your hip. You probably will be able to perform the exercises without help, but you will have a physical therapist help you at home for the first few weeks after surgery.

Possible Complications of Surgery

The complication rate following hip replacement surgery is low. Serious complications, such as joint infection, occur in less than 2% of patients. Major medical complications, such as heart attack or stroke, occur even less frequently. However, chronic illnesses may increase the potential for complications. Although uncommon, when these complications occur they can prolong or limit full recovery.

Infection

Infection may occur superficially in the wound or deep around the prosthesis. It may happen while in the hospital or after you go home. It may even occur years later.

Minor infections of the wound are generally treated with antibiotics. Major or deep infections occur in less than 2% of cases and may require more surgery and removal of the prosthesis. Any infection in your body can spread to your joint replacement.

Blood Clots

Blood clots in the leg veins or pelvis can occur after hip replacement surgery. These clots can be life-threatening if they break free and travel to your lungs. The prevention program consists of blood thinning medications such as aspirin, ankle pump exercises, elevation of legs higher than the heart, and early mobilization.

Leg-Length Inequality

Sometimes after a hip replacement, one leg may feel longer or shorter than the other. During surgery every effort will be made to make your leg lengths even. It may be necessary to lengthen or shorten your leg slightly in order to maximize the stability and biomechanics of the hip. The leg length discrepancy is usually less than ½ inch. Some patients may feel more comfortable with a shoe lift after surgery.

Dislocation

You will be instructed by the doctor, nursing staff and physical therapist on how to protect your hip from dislocation. Dislocation occurs when the ball comes out of the socket. The risk for dislocation is greatest immediately after surgery while the tissues are healing, it is important that you maintain proper positioning of your leg after surgery. Dislocation is uncommon, but if the ball does come out of the socket, it usually can put it back into place without the need for more surgery. In situations in which the hip continues to dislocate, further surgery may be necessary. The best prevention of dislocation is to always keep your knees apart while seated, especially when on the toilet.

Loosening and Implant Wear-Component Failure

Over years, the hip prosthesis may wear out or loosen. This is most often due to everyday activity. It can also result from a biologic thinning of the bone called osteolysis. If loosening is painful, a second surgery called a revision may be necessary. This is a rare occurrence as materials have improved as well as methods of implantation.

Other Complications

Nerve and blood vessel injury, bleeding, fracture, and stiffness can occur. In a small number of patients, some pain can continue or new pain can occur after surgery.

Avoiding Problems after Surgery

Recognizing the Signs of a Blood Clot

Follow your Orthopaedic surgeon's instructions carefully to reduce the risk of blood clots developing during the first several weeks of your recovery. Notify your doctor immediately if you develop any of the following warning signs.

Warning signs of blood clots in the leg include:

- Pain in your calf and leg that is unrelated to your incision
- Tenderness or redness of your calf
- Swelling of your thigh, calf, ankle, or foot

Warning signs of pulmonary embolism (a blood clot that has traveled to your lung) include:

- Sudden shortness of breath
- Sudden onset of chest pain
- Localized chest pain with coughing

Preventing Infection

A common cause of infection following hip replacement surgery is from bacteria that enter the bloodstream during dental procedures, urinary tract infections, or skin infections.

Warning signs of infection. Notify your visiting nurse immediately if you develop any of the following signs of a possible hip replacement infection:

- Persistent fever (higher than 100°F orally)
- Shaking chills
- Increasing redness, tenderness, or swelling of the hip wound
- Increased Drainage from the hip wound
- Increasing hip pain with both activity and rest

Dental Evaluation

Although infections after hip replacement are not common, an infection can occur if bacteria enter your bloodstream. We recommend you wait 2-3 months after surgery before having routine dental procedures performed. The American Academy of Orthopaedic Surgeons (AAOS) recommends taking preventative antibiotics before dental work (including cleanings). This prescription can be provided by our office or the dentist, this recommendation is indefinite.

Avoiding Falls

A fall during the first few weeks after surgery can damage your new hip and may result in a need for more surgery. Stairs are a particular hazard until your hip is strong and mobile. You should use a cane, crutches, a walker, or handrails or have someone help you until you improve your balance, flexibility, and strength. Your physical therapist will help you decide which assistive aides will be required following surgery, and when those aides can safely be discontinued.

Other Precautions

To assure proper recovery and prevent dislocation of the prosthesis, you may be asked to take special precautions — usually for the first 6 weeks after the surgery:

- Keep your knees apart while seated
- Use a pillow between your knees at night when sleeping after surgery.

You may sleep on your side on the opposite side from your surgery with a pillow between your knees. You may sleep on the side of the surgery 3 months after the surgery.

Outcomes

How Your New Hip Is Different

You may feel some numbness in the skin around your incision. You also may feel some stiffness, particularly with excessive bending. These differences often diminish with time, and most patients find these are minor compared with the pain and limited function they experienced prior to surgery.

Your new hip may activate metal detectors required for security in airports and some buildings. Tell the security agent about your hip replacement if the alarm is activated. There are no documents that will let you bypass the TSA.

Protecting Your Hip Replacement

There are many things you can do to protect your hip replacement and extend the life of your hip implant.

- Participate in a regular light exercise program to maintain proper strength and mobility of your new hip.
- Take special precautions to avoid falls and injuries. If you break a bone in your leg, you may require more surgery.
- Make sure your dentist knows that you have a hip replacement. You will need to take antibiotics before any dental procedure.

Frequently Asked Questions

Q: I have heard that the anterior hip approach is better. Which approach will I have?

A: Dr. Jaquith and Dr. Mehserle have used several different approaches to include, anterior, lateral, two-incision and posterior approaches to the hip joint. Their experience has shown that the posterior approach gives the best access to the hip joint and the best possibility of getting the components in the best position. There has been a higher incidence of poor positioning of the components from the anterior approach.

Q: How long will I need to use a walker?

A: You will need a walker until you have developed sufficient leg strength, balance and coordination to walk with a cane. This interval is usually between 1 to 2 weeks. You will need to use a cane until you develop sufficient strength, balance and coordination to walk safely without it.

Q: When may I drive after surgery?

A: You may drive between 3 and 6 weeks after surgery depending on your progress and following your surgeon's recommendation.

Q: I am having itching, nausea, vomiting and constipation and I am concerned that I am having an allergic reaction?

A: These are common side effects of anesthesia and pain medication. There are medications that can be given to help relieve these symptoms, please notify the nurse or surgeon should you have any of these symptoms.

Q: When may I swim?

A: You may enter the pool 24 hours after the surgical staples have been removed from your incision. Initially, we recommend that you only use a pool that has steps and a railing so that you can safely enter and exit the pool. We discourage swimming and kicking until about 4 weeks after surgery. You may, however, walk in the pool in water that is between the waist and chest depth. Walking back and forth in the pool is an excellent way to exercise your hip in a safe way. You should avoid the "frog kick" and "scissor kick" for 3 months after surgery.

For further questions visit our website @ www.veniceorthopaedics.com or call (941) 497-2663.