



OMNI
PRECISION IN MOBILITY

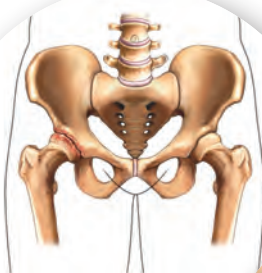


TOTAL HIP REPLACEMENT SURGERY

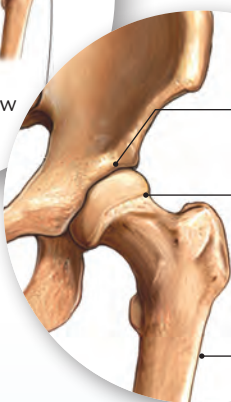
FROM PREPARATION
TO RECOVERY

ABOUT THE HIP JOINT

The hip joint is a ball and socket joint that connects the body to the legs. The leg bone is called the femur. The head of the femur is a round shaped ball that fits into the socket of the pelvis, called the acetabulum. The bones are protected by muscles, ligaments, cartilage and joint fluid that provide a smooth surface for the bones to move. When working properly, the hip joint permits a wide range of motion, and is used in almost every type of physical activity.



Anterior (front) view
of the Pelvis



Acetabulum
(Hip Socket)

Femoral
Head

Femur
(Thigh Bone)

Healthy Hip Function

The femoral head and acetabular “socket” are supposed to be very smooth, with both articulating surfaces covered in a thin layer of articular cartilage. This layer is about an 1/8th of an inch thick and prevents bone-on-bone contact. There is also a protective layer of cartilage around the rim of the acetabulum, called the labrum. If the cartilage is damaged or missing, the resulting bone-on-bone contact can cause pain and/or limit motion.

A large group of muscles surround the hip joint, and appropriate muscle tension is needed to keep the hip stable. These muscles allow the four basic movements: flexion (to bend), extension (to straighten), abduction (move the leg away from the body), and adduction (bring the leg back towards the body). They are divided up into three basic groups, based on location: anterior (front), posterior (back), and medial (middle).

The stability of the hip is also dependant on the strong ligaments that encircle the hip. These ligaments completely envelop the hip joint and form the joint capsule. The iliofemoral ligament, which connects the femur to the acetabulum anteriorly, is the strongest ligament in the body.

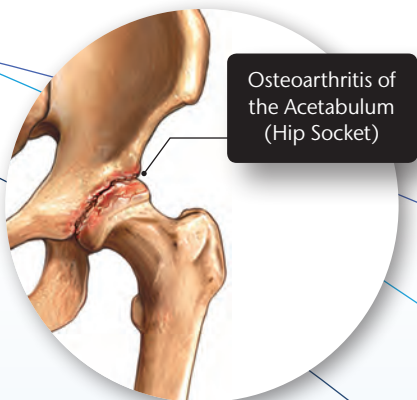
ABOUT HIP PAIN

Hip pain can be debilitating and may significantly affect your daily life. There are many causes of chronic hip pain, but the most common cause is arthritis. Of more than 100 types of arthritis, two occur most frequently:

Osteoarthritis is characterized by the progressive wearing of the cartilage of the hip joint. As the protective cartilage is slowly worn away, the smooth gliding surfaces are worn down, resulting in bone-on-bone contact, producing pain and stiffness.

Rheumatoid arthritis is a systemic disease that may attack any of the joints in the body. This disease causes the body's immune system to attack its own joint capsules, progressively wearing down the protective cartilage and fluids. This can cause pain, swelling, joint damage and loss of mobility.

There is a genetic predisposition to arthritis, meaning the condition tends to run within families. In addition to arthritis, hip pain can also be due to trauma, cartilage damage, ligament injuries, bursitis, and other diseases.



Symptoms of Arthritis

- Pain with activities
- Limited range of motion
- Stiffness of the hip
- Swelling of the joint
- Tenderness of the joint

Treatment Options

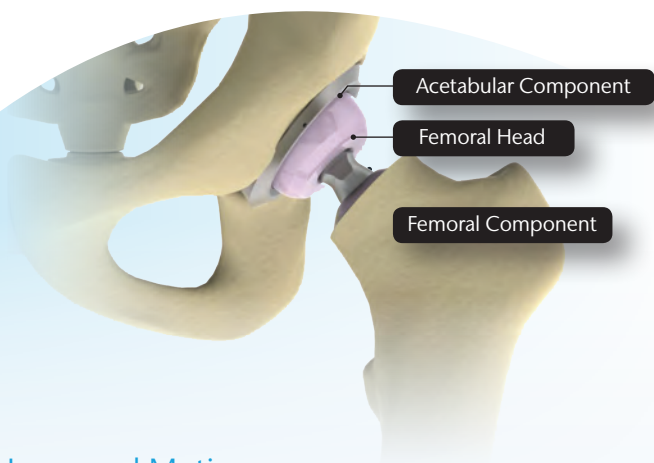
- Weight loss
- Activity modification
- Walking aids
- Physical therapy
- Anti-inflammatory medication
- Cortisone injections
- Hip arthroscopy
- Hip osteotomy
- Hip resurfacing surgery
- Total hip replacement surgery

TOTAL HIP REPLACEMENT

Do Away with the Pain

Total hip replacement implants are designed to replace affected areas with components that re-create healthy hip joint mechanics. The main components of an artificial hip consist of the acetabular component (socket), the femoral component (thigh bone), and the femoral head (ball). The acetabular component is a two piece component with a metal shell that fixes into the pelvis, and a polyethylene (plastic) liner that becomes the articular surface for the metal or ceramic femoral head. The femoral component is made of a combination of medical-grade metal, typically titanium. With each of these components working together, you should be able to regain your hip movement without pain.

After examining your hip damage, your physician will determine what procedure is necessary to get you back to a normal, active life.



Increased Motion

Although an artificial hip may not function better than a healthy hip, it should allow you to resume most everyday activities without pain. This may take anywhere from weeks to months. In some cases, the replacement hip may allow you to return to active sports or heavy labor, under guidance of a physician.

Implanting the Prosthesis

Your surgeon will make an incision alongside the affected hip, and carefully move the muscles connected to the hip joint to expose the bone. Any damaged bone is then cleared away and the surface of the bone is shaped to hold the prosthesis. Each hip component is put into place and tested for proper fitting, stability, and range of motion. After your surgeon determines the best component size selection, he or she will implant the final total hip replacement. The surgery should take from 60 to 90 minutes. Your orthopedic surgeon will discuss the specifics of the surgery with you prior to the surgery.

PREPARING FOR SURGERY

Once the decision is made to undergo a total hip replacement, you should maintain good physical health. Any strenuous or unusual activities should be cleared by your operating physician.

Blood Transfusions

For some, a blood transfusion is required after hip surgery. Many patients choose to do an autologous blood donation, where they donate pints of blood beforehand, to ensure they can receive their own blood. The first donation must be given within six weeks of the surgery date. The latest time period to donate is a week before the surgery. In order to donate, you must be in good health, free from cold, flu or infections.

Anesthesia

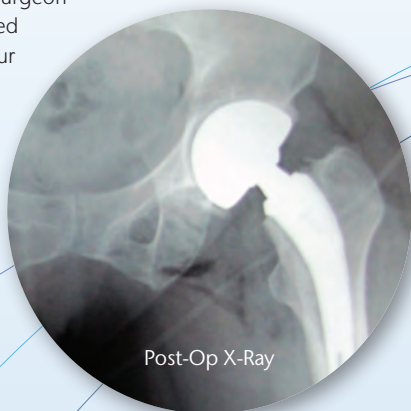
An anesthesiologist will begin the procedure by administering anesthesia. The most common types are general (you are put to sleep), spinal, epidural, or regional nerve block (you are awake but the body is numb from the waist down). The anesthesia team, with your input, will determine which type of anesthesia is best for you.

Medication and Diet

Be sure to discuss all medications you take, including over the counter medicine, with your physician. There are some medications that should not be taken with anesthesia. Common medications such as aspirin and ibuprofen act as blood thinners, which in most cases will be discontinued in the days leading up to surgery. The day before surgery, you should not eat or drink after midnight. On the day of the surgery, you may brush your teeth and use mouth wash, as long as you do not swallow the water.

Creating a Safe Environment at Home

Since the first couple of weeks after surgery your activity may be limited, you may want to rearrange items in your home so that they are more accessible. Keep in mind that going up and down stairs will be difficult, and rearranging furniture into more convenient locations may be a good idea prior to surgery. Your surgeon may provide some suggested guidelines for preparing your home.



RECOVERY

First Day Post Operation

While in the recovery room the nurses will closely observe your blood pressure, pulse, respiration, temperature, and circulation in the legs and feet. It is important to notify someone on staff if numbness, pain or tingling is felt in the lower extremities. After the surgery the operative site will be bandaged to absorb fluid and keep out bacteria. During this time, you will still be hooked up to an IV (intravenous tube), until you are able to take fluids well on your own. You may also have a sterile tube called a catheter inserted into your bladder to provide a clear urinary passageway.

Food Intake

Anesthesia is known to cause nausea and vomiting in some patients. If this is the case, you may be given some anti-nausea medication. Ice chips and clear liquids are recommended before moving to solid foods.

Physical Therapy

Physical therapy should begin within one to two days after surgery. Therapy is critical to get the hip joint fully functional, and to get you closer to the goal of relieving hip pain. To begin, the therapist will help you walk with your new joint. Assistive devices such as a walker, crutches, or cane will be used. How much weight put on your hip is determined by your surgeon and physical therapy team.

Before you are released from the hospital, you should be given examples of exercises to be done at home, and also referred to a physical therapist who will help further the recovery process.

Possible Risks of Total Hip Replacement

- Blood clots
- Urinary tract infection
- Excessive bleeding
- Weakened or stiff hip joint
- Damage to blood vessels, nerves or bones
- Breakage or loosening of hip replacement components
- Wound infection
- Infection of hip replacement early or later in life

Please consult your physician for a complete list of possible adverse effects.

FREQUENTLY ASKED QUESTIONS

Q: How do I know if I need a hip replacement?

A: People with daily hip pain that restricts regular activities, chronic stiffness of the hip joint, constant hip instability, or severe deformity are good candidates for a total hip replacement. Please consult your physician to determine what treatment options are best for you.

Q: What will a hip replacement enable me to do?

A: The goal of total hip replacement is to enable you to move your hip freely and with no pain. Increasing motion makes it possible to resume regular daily activities, including some sports and exercise.

Q: Will my recovery from hip replacement surgery be painful?

A: As with most surgeries, there will be a considerable amount of tenderness in the repaired area. Pain medication will be given to you during the hospital stay and the pain should ease over several weeks.

Q: When can I resume regular activities after surgery?

A: You should be able to stand and walk with assistance within a few hours after surgery. Physical therapy will begin as soon as you feel ready, generally one to two days after surgery. Getting back to regular activities varies between patients. This may take several weeks to months.



