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# Total Hip Replacement

*University Hospital  
Ahuja Medical Center*



# Total Hip Replacement

Whether you have just begun exploring treatment options or have already decided to undergo hip replacement surgery, this information will help you understand the benefits and limitations of total hip replacement. This article describes how a normal hip works, the causes of hip pain, what to expect from hip replacement surgery, and what exercises and activities will help restore your mobility and strength, and enable you to return to everyday activities.

If your hip has been damaged by arthritis, a fracture, or other conditions, common activities such as walking or getting in and out of a chair may be painful and difficult. Your hip may be stiff, and it may be hard to put on your shoes and socks. You may even feel uncomfortable while resting.

If medications, changes in your everyday activities, and the use of walking supports do not adequately help your symptoms, you may consider hip replacement surgery. Hip replacement surgery is a safe and effective procedure that can relieve your pain, increase motion, and help you get back to enjoying normal, everyday activities.

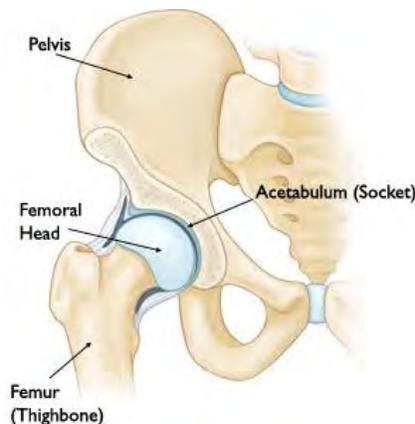
## Anatomy

The hip is one of the body's largest joints. It is a ball-and-socket joint. The socket is formed by the acetabulum, which is part of the large pelvis bone. The ball is the femoral head, which is the upper end of the femur (thighbone).

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.

A thin tissue called synovial membrane surrounds the hip joint. In a healthy hip, this membrane makes a small amount of fluid that lubricates the cartilage and eliminates almost all friction during hip movement.

Bands of tissue called ligaments (the hip capsule) connect the ball to the socket and provide stability to the joint.



Normal hip anatomy.

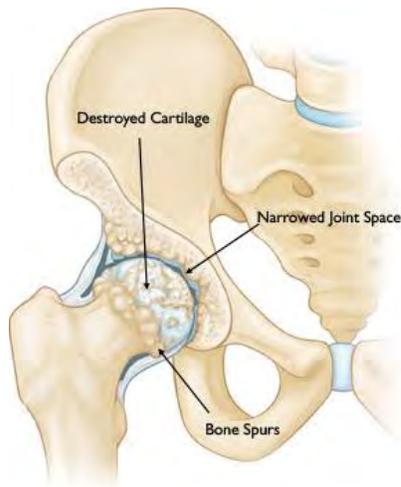
## Common Causes of Hip Pain

The most common cause of chronic hip pain and disability is arthritis. Osteoarthritis, rheumatoid arthritis, and traumatic arthritis are the most common forms of this disease.

- **Osteoarthritis.** This is an age-related "wear and tear" type of arthritis. It usually occurs in people 50 years of age and older and often in individuals with a family history of arthritis.

The cartilage cushioning the bones of the hip wears away. The bones then rub against each other, causing hip pain and stiffness. Osteoarthritis may also be caused or accelerated by subtle irregularities in how the hip developed in childhood.

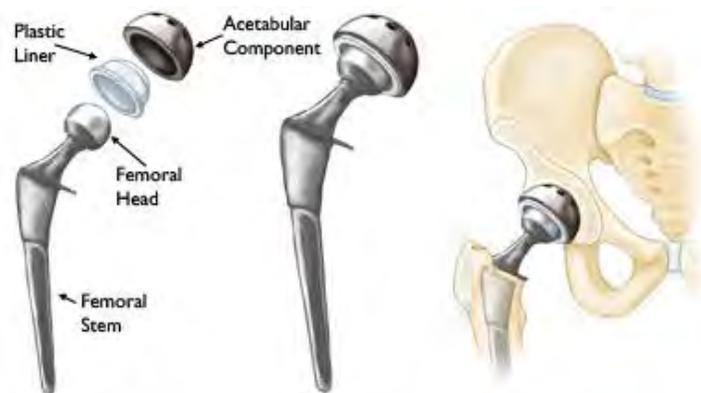
- **Rheumatoid arthritis.** This is an autoimmune disease in which the synovial membrane becomes inflamed and thickened. This chronic inflammation can damage the cartilage, leading to pain and stiffness. Rheumatoid arthritis is the most common type of a group of disorders termed "inflammatory arthritis."
- **Post-traumatic arthritis.** This can follow a serious hip injury or fracture. The cartilage may become damaged and lead to hip pain and stiffness over time.
- **Avascular necrosis.** An injury to the hip, such as a dislocation or fracture, may limit the blood supply to the femoral head. This is called avascular necrosis. The lack of blood may cause the surface of the bone to collapse, and arthritis will result. Some diseases can also cause avascular necrosis.
- **Childhood hip disease.** Some infants and children have hip problems. Even though the problems are successfully treated during childhood, they may still cause arthritis later on in life. This happens because the hip may not grow normally, and the joint surfaces are affected.



## Description

In a total hip replacement (also called total hip arthroplasty), the damaged bone and cartilage is 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 or cement are sometimes used to hold the socket in place.
- A plastic, ceramic, or metal spacer 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.

## Is Hip Replacement Surgery for You?

The decision to have hip replacement surgery should be a cooperative one made by you, your family, and your orthopedic surgeon. The process of making this decision typically begins with a referral by your doctor to an orthopedic surgeon for an initial evaluation.

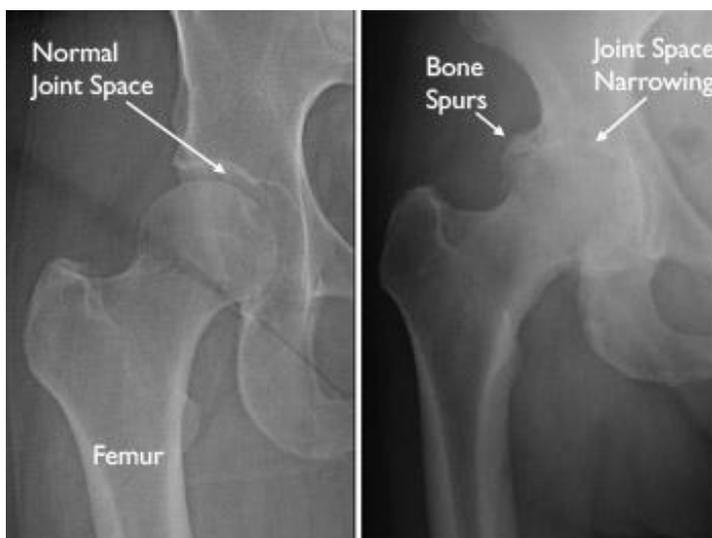
### *Candidates for Surgery*

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. Most patients who undergo total hip replacement are age 50 to 80, but orthopedic surgeons evaluate patients individually. Total hip replacements have been performed successfully at all ages, from the young teenager with juvenile arthritis to the elderly patient with degenerative arthritis.

### *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



# Deciding to Have Hip Replacement Surgery

## ***Realistic Expectations***

An important factor in deciding whether to have hip replacement surgery is understanding what the procedure can and cannot do. Most people who undergo hip replacement surgery experience a dramatic reduction of hip pain and a significant improvement in their ability to perform the common activities of daily living.

With normal use and activity, the material between the head and the socket of every hip replacement implant begins to wear. Excessive activity or being overweight may speed up this normal wear and cause the hip replacement to loosen and become painful. Therefore, most surgeons advise against high-impact activities such as running, jogging, jumping, or other high-impact sports.

Realistic activities following total hip replacement include unlimited walking, swimming, golf, driving, hiking, biking, dancing, and other low-impact sports.

With appropriate activity modification, hip replacements can last for many years.

## ***Possible Complications after Surgery***

The complication rate following total hip replacement is low. Serious complications, such as a joint infection, occur in about 1% of patients. 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 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 in the wound area are generally treated with antibiotics. Major or deep infections 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 are the most common complication of hip replacement surgery. These clots can be life-threatening if they break free and travel to your lungs. Your orthopedic surgeon will outline a prevention program, which may include blood thinning medications, support hose, inflatable leg coverings, ankle pump exercises, and early mobilization.

**Leg Length Inequality:** Sometimes after a hip replacement, one leg may feel longer or shorter than the other. Your orthopedic surgeon will make every effort to make your leg lengths even, but may lengthen or shorten your leg slightly in order to maximize the stability and biomechanics of the hip. Some patients may feel more comfortable with a shoe lift after surgery.

**Dislocation:** This occurs when the ball comes out of the socket. The risk for dislocation is greatest in the first 10 weeks after surgery while the tissues are healing. Dislocation is uncommon. If the ball does come out of the socket, a closed reduction 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.

**Loosening or Implant Wear:** 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.

**Continued Pain:** A small number of patients continue to have pain after a hip replacement. This complication is rare, however, and the vast majority of patients experience excellent pain relief following hip replacement.

# Preparing for Surgery

## **Medical Evaluation**

If you decide to have hip replacement surgery, your orthopedic surgeon will ask you to have a complete physical examination through pre-admission testing before your surgical procedure. This is needed to make sure you are healthy enough to have the surgery and complete the recovery process. 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 chest x-rays, may be needed to help plan your surgery.

## **Medications**

Please bring a list of all the medications you are currently taking to your pre-admission testing appointment. There will be some medications that you will need to stop prior to your surgery date and they will be able to advise you how to correctly do this. Discontinue the following medications 7-10 days before your surgery:

- Any aspirin products including baby aspirin (**unless you have been advised otherwise by your cardiologist or staff during your pre-admission testing appointment**).
- Non-Steroidal anti inflammatory medications (includes prescription and over the counter medications such as Motrin, Advil, Aleve, and Ibuprofen)
- All Herbal supplements
- Vitamin E
- If you are on warfarin or Plavix, you will receive specific instructions at your pre-admission testing appointment about when to discontinue these medications.

## **Dental Evaluation**

Although infections after hip replacement are not common, an infection can occur if bacteria enter your bloodstream. Because bacteria can enter the bloodstream during dental procedures, major dental procedures (such as tooth extractions and periodontal work) should be completed **before** your hip replacement surgery. Routine cleaning of your teeth should be delayed for **three months** after surgery.

## **Weight Loss**

If you are overweight, your doctor may ask you to lose some weight before surgery to minimize the stress on your new hip and possibly decrease the risks of surgery. Being overweight can increase your complications after surgery. Any weight loss that can be achieved before or after surgery would be very beneficial in your recovery. Maintaining a healthy weight will put less stress on your joints, which in turn can cause less pain. You should look to maintain a **BMI of <40** before proceeding with joint replacement.

Losing weight can make a difference when it comes to joint pain. In fact, for every pound you lose, you remove about 4 pounds of stress from your knees. Following a balanced diet while exercising regularly can help you lose weight and reduce stress on your joints.

Staying active can help keep your joints flexible, reduce pain, and improve your ability to move. Low-impact activities like swimming or water aerobics can be good options because they put less stress on your joints. Stretching exercises, strength training, and aerobic exercise may also help to ease joint pain.

## ***Discharge Planning***

A social worker will work with you during your hospital stay to set up your discharge planning. The majority of patients will go home with home care services which typically includes physical therapy

## ***Home Planning***

Several modifications can make your home easier to navigate during your recovery. 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
- A dressing stick, a sock aid, and a long-handled shoe horn for putting on and taking off shoes and socks without excessively bending your new hip
- A reacher that will allow you to grab objects without excessive bending of your hips
- Firm pillows for your chairs, sofas, and car that enable you to sit with your knees lower than your hips

## **Your Surgery**

You will be admitted to the hospital on the morning of your surgery.

### ***Anesthesia***

After admission, a member of the anesthesia team will evaluate you. The most common types of anesthesia are general anesthesia (you are put to sleep) or spinal, epidural, or regional nerve block anesthesia (you are awake but your body is numb from the waist down). The majority of patients will receive a spinal anesthetic for total hip replacement, but the anesthesia team, with your input, will determine which type of anesthesia will be best for you.

### ***Procedure***

The surgical procedure takes about an hour. Your orthopedic 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.



## Your Hospital Stay

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

### ***Pain Management***

After surgery, you will be in some pain, but your surgeon and nurses will provide medication to make you feel as comfortable as possible. Pain management is an important part of your recovery. Movement will begin the same day of surgery, and when you feel less pain, you can start moving more and get your strength back more quickly. Talk with your surgeon if postoperative pain becomes a problem.

### ***Blood Clot Prevention***

Your orthopedic surgeon may prescribe one or more measures to prevent blood clots and decrease leg swelling. These may include special support hose, inflatable leg coverings (compression boots), and blood thinners (lovenox, Coumadin, or aspirin).

Foot and ankle movement also is encouraged immediately following surgery to increase blood flow in your leg muscles to help prevent leg swelling and blood clots.

### ***Physical Therapy***

Walking and light activity are important to your recovery and will begin the day of or the day after your surgery. Most patients who undergo total hip replacement begin standing and walking with the help of a walking support and a physical therapist the day after surgery. The physical therapist will teach you specific exercises to strengthen your hip and restore movement for walking and other normal daily activities.

### ***Preventing Pneumonia***

It is common for patients to have shallow breathing in the early postoperative period. This is usually due to the effects of anesthesia, pain medications, and increased time spent in bed. This shallow breathing can lead to a partial collapse of the lungs (termed "atelectasis") which can make patients susceptible to pneumonia. To help prevent this, it is important to take frequent deep breaths. Your nurse may provide a simple breathing apparatus called a spirometer to encourage you to take deep breaths.

## Your Recovery at Home

The success of your surgery will depend largely on how well you follow your orthopedic surgeon's instructions at home during the first few weeks after surgery.

### ***Wound Care***

You will have staples or sutures that run along your incision site. If staples are present, they will be removed 10-14 days after surgery. If sutures are present they will not require removal and will absorb on their own.

An Aquacel dressing will be applied to your incision site prior to discharge from the hospital. This dressing will stay in place for 7 days. You may shower with this dressing in place but do not soak in water. This dressing will be removed in Dr. Petersilge's office unless otherwise directed. You may keep an ace wrap over this dressing for comfort but it is not required.

### ***Diet***

Some loss of appetite is common for several weeks after surgery. A balanced diet, often with an

iron supplement, is important to promote proper tissue healing and restore muscle strength. Be sure to drink plenty of fluids.

## **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 **pain** 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 may have a physical therapist help you at home or in a therapy center the first few weeks after surgery

## **Avoiding Problems After Surgery**

### **Recognizing the Signs of a Blood Clot**

Follow your orthopedic surgeon's instructions carefully to reduce the risk of blood clots developing during the first several weeks of your recovery. He or she may recommend that you continue taking the blood thinning medication you started in the hospital. Notify your doctor immediately if you develop any of the following warning signs.

**Warning signs of blood clots.** The warning signs of possible blood clot in your leg include:

- Tenderness or redness of your calf
- Swelling of your thigh, calf, ankle, or foot

**Warning signs of pulmonary embolism.** The warning signs that a blood clot 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 total hip replacement surgery is from bacteria that enter the bloodstream during dental procedures, urinary tract infections, or skin infections. These bacteria can lodge around your hip replacement and cause an infection.

After your hip replacement, you must take preventive antibiotics before dental or surgical procedures that could allow bacteria to enter your bloodstream.

**Warning signs of infection:** Notify your doctor immediately if you develop any of the following signs of a possible hip replacement infection:

- Persistent fever (higher than 101°F orally)
- Shaking chills
- Increasing redness, tenderness, or swelling of the hip wound
- Drainage from your incision site that persists for more than 5 days after surgery
- Increasing hip pain with both activity and rest

## ***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

## ***Dislocation Precautions***

To assure proper recovery and prevent dislocation of your implant, you may be asked to take special precautions — usually for the first 10 weeks after the surgery

- Do not cross your legs
- Do not bend your hips more than a right angle (90°)
- Do not turn your feet excessively inward or outward
- Use a pillow between your legs at night when sleeping until you are advised by your orthopedic surgeon that you can remove it

Your surgeon and physical therapist will give you more instructions prior to your discharge from the hospital.

## **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.

### ***Protecting Your Hip Replacement***

Currently, more than 90% of total hip replacements are still functioning well 20 years after the surgery. 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.
- Avoid high-impact activities
- Maintain a healthy weight
- Make sure your dentist knows that you have a hip replacement. You will need to take antibiotics before any dental procedure.

## **Managing Pain With Medications After Total Hip Replacement**

After surgery, your doctors and nurses will make every effort to control your pain. While you should expect to feel some discomfort, advancements in pain control now make it easier for your doctor to manage and relieve pain.

In order to effectively manage your pain, your surgeon will take into account several factors that are unique to you and your situation. That is why it is important for you to openly discuss your fears and expectations, as well as your past experiences with pain control, with your doctors and nurses.

## Opioid Analgesics

Opioids are the most effective medicines for moderate to severe pain, especially for managing short-term pain after surgery.

### *Types of Opioids*

Most patients will be started on some sort of opioid for pain control during their hospital stay. Most commonly, Percocet, Vicodin, and tramadol are used. You will also be sent home with a prescription for pain medication.

Possible side effects of these medications include:

- **Drowsiness:** You may feel drowsy or sleep more at first. Most people find that this side effect goes away in 2 to 3 days as the body adapts to the medicine and dosage. When you go home, you must be careful. You may not be allowed to drive or use heavy equipment.
- **Constipation:** This will likely happen when medicines are used on a steady basis. Drink plenty of fluids and eat a diet high in fiber. Take a laxative and/or stool softener each day.
- **Nausea:** You may have nausea at first. It may cause you to vomit. This side effect should pass in 2 to 3 days as your body adapts.

## Medications

Your usual medications will be ordered after surgery. We will also order a number of medications that are standard after joint replacement surgery.

**Antibiotics:** You will receive a dose of antibiotics in your IV prior to the start of your surgery. You will also receive two doses of antibiotics after your surgery.

**Multivitamin:** Will be given daily. This supplement helps to boost your nutritional stores while you are recovering.

**Iron Tablets:** Will be given once a day. This helps to replace your iron stores that have been lowered with surgery. Most patients remain on iron tablets for about 4 weeks after surgery. Some people may experience a stomachache or constipation with this medication.

**Stool Softener:** You will receive a stool softener capsule twice a day. After surgery, pain medication and a decrease in activities and diet may cause constipation. These can be purchased over the counter at any pharmacy at discharge, but a prescription will be provided if needed.

**Anticoagulation:** If you were previously on a blood thinner prior to your surgery you will most likely be started back on that medication following surgery. If you were not on a blood thinner before surgery you will be started on Lovenox or aspirin after your surgery.

**Lovenox:** Is started the day after your surgery and is continued for a total of 7 days once discharged. After this is finished, you will need to start a 325mg aspirin daily for 6 weeks.

-or-

**Aspirin:** 325mg of aspirin twice a day will be started the day after your surgery and continued for 6 weeks.

# Home going Instructions

## *How do I care for my Incision?*

- You will have an aquacel dressing in place. Unless gross drainage is noted please do not remove dressing until seen in the office. Once bandage is removed you may leave your incision site open to air.

## *When can I shower?*

- You may shower with your aquacel dressing in place but do not soak in water.
- Do not soak in a tub for 4 weeks

## *What can I do about swelling?*

- Some swelling is normal after surgery. The amount varies from patient to patient and can sometimes last for several months. The swelling may decrease if you:
  - Keep your legs propped up when you are sitting
  - Wear TED hose during the day
  - Do not sit for long periods of time. If you are sitting for longer than 30 minutes, do your ankle pumps.

## *When can I travel?*

- You may ride in the car as soon as you feel comfortable
- We suggest you start with short trips to places you are familiar with
- Most people resume driving 4-6 weeks from surgery

## *When do I see my doctor again?*

- You should have a follow up appointment with your physician in 4 weeks. This appointment should be scheduled for you. If it is not, please call to schedule as soon as possible. 216-202-6300.

# Total Joint Replacement Education

## *Ahuja Joint Replacement Class*

- **What:** Pre-op teaching class that will include information from our nurses, physical therapists and other medical professionals
- **When:** Classes will be held on the **first and third Thursday** of every month
- **Time:** 2-4pm
- **Where:** The Rosenberg Conference Center, first floor of the Ahuja Medical Center
- **RSVP:** Please call 216-285-4068 to reserve a spot for the class

# Total Joint Replacement Timeline

1. Schedule your surgery
2. Please obtain dental clearance as well as any other clearance necessary such as the cardiologist, pulmonologist etc.
3. Attend Pre-admission Testing
  - a. Be sure to bring a list of all your medications to this appointment
  - b. The PAT department should contact you within a couple weeks of your surgery to set up an appointment. If it is one week prior to your surgery and have not heard

from them, please contact them directly.

4. Attend the joint replacement class. You will need to attend the class at the facility your having your procedure at.
5. If you need paperwork filled out prior to your surgery, please fax them to Dr. Petersilge's office at 844-785-6337
6. Someone will contact you the day before your surgery to let you know what time to be here the day of your surgery.
7. Surgery Day
8. Expect to stay in the hospital 1-2 nights
9. During your hospital stay, the physical therapist and the social worker will work with you to arrange homecare services.
10. After hospital discharge, if you need a medication refill, contact Dr. Petersilge's office directly (216-202-6300). Please allow a 48 hour notice for all medication refills.
11. Your first post op visit will be one week after surgery with Dr. Petersilge's physician assistant. This appointment should be scheduled for you.
12. Your second post op visit will be six weeks after surgery with Dr. Petersilge.

## Total Hip Replacement Exercise Guide

Regular exercises to restore your normal hip motion and strength and a gradual return to everyday activities are important for your full recovery. Your orthopedic surgeon and physical therapist may recommend that you exercise 20 to 30 minutes 2 or 3 times a day during your early recovery. They may suggest some of the following exercises.

### Early Postoperative Exercises

These exercises are important for increasing circulation to your legs and feet to prevent blood clots. They also are important to strengthen muscles and to improve your hip movement. You may begin these exercises in the recovery room shortly after surgery. It may feel uncomfortable at first, but these exercises will speed your recovery and reduce your postoperative pain. These exercises should be done as you lie on your back with your legs spread slightly apart

### Ankle Pumps

Slowly push your foot up and down. Do this exercise several times as often as every 5 or 10 minutes. This exercise can begin immediately after surgery and continue until you are fully recovered.



### Ankle Rotations



Move your ankle inward toward your other foot and then outward away from your other foot. Repeat 5 times in each direction 3 or 4 times a day.

## Bed-Supported Knee Bends



Slide your heel toward your buttocks, bending your knee and keeping your heel on the bed. Do not let your knee roll inward. Repeat 10 times 3 or 4 times a day

## Buttock Contractions



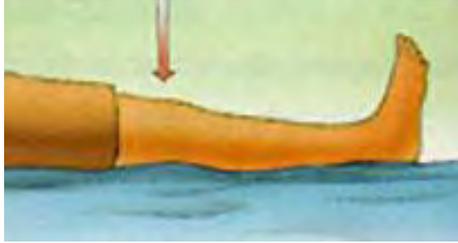
Tighten buttock muscles and hold to a count of 5. Repeat 10 times 3 or 4 times a day

## Abduction Exercise



Slide your leg out to the side as far as you can and then back. Repeat 10 times 3 or 4 times a day

## Quadriceps Set



Tighten your thigh muscle. Try to straighten your knee. Hold for 5 to 10 seconds. Repeat this exercise 10 times during a 10-minute period.

## Straight Leg Raises



Tighten your thigh muscle with your knee fully straightened on the bed. As your thigh muscle tightens, lift your leg several inches off the bed. Hold for 5 to 10 seconds. Slowly lower. Repeat until your thigh feels fatigued.

## Standing Exercises

Soon after your surgery, you will be out of bed and able to stand. You will require help since you may become dizzy the first several times you stand. As you regain your strength, you will be able to stand independently. While doing these standing exercises, make sure you are holding on to a firm surface such as a bar attached to your bed or a wall.

## Standing Knee Raises



Lift your operated leg toward your chest. Do not lift your knee higher than your waist. Hold for 2 or 3 counts and put your leg down. Repeat 10 times 3 or 4 times a day

## Standing Hip Abduction



Be sure your hip, knee and foot are pointing straight forward. Keep your body straight. With your knee straight, lift your leg out to the side. Slowly lower your leg so your foot is back on the floor. Repeat 10 times 3 or 4 times a day

## Standing Hip Extensions



Lift your operated leg backward slowly. Try to keep your back straight. Hold for 2 or 3 counts. Return your foot to the floor. Repeat 10 times 3 or 4 times a day

## Walking and Early Activity

Soon after surgery, you will begin to walk short distances in your hospital room and perform light everyday activities. This early activity helps your recovery by helping your hip muscles regain strength and movement.

## Walking with Walker, Full Weight-bearing

Stand comfortably and erect with your weight evenly balanced on your walker or crutches. Move your walker or crutches forward a short distance. Then move forward, lifting your operated leg so that the heel of your foot will touch the floor first. As you move, your knee and ankle will bend and your entire foot will rest evenly on the floor. As you complete the step allow your toe to lift off the floor. Move the walker again and your knee and hip will again reach forward for your next step. Remember, touch your heel first, then flatten your foot, then lift your toes off the floor. Try to walk as smoothly as you can. Don't hurry. As your muscle strength and endurance improve, you may spend more time walking. Gradually, you will put more and more weight on your leg.

## Walking with Cane or Crutch

A walker is often used for the first several weeks to help your balance and to avoid falls. A cane or a crutch is then used for several more weeks until your full strength and balance skills have returned. Use the cane or crutch in the hand opposite the operated hip. You are ready to use a cane or single crutch when you can stand and balance without your walker, when your weight is

placed fully on both feet, and when you are no longer leaning on your hands while using your walker.

## Stair Climbing and Descending



The ability to go up and down stairs requires both flexibility and strength. At first, you will need a handrail for support and you will only be able to go one step at a time. Always lead up the stairs with your good leg and down the stairs with your operated leg. Remember "up with the good" and "down with the bad." You may want to have someone help you until you have regained most of your strength and mobility. Stair climbing is an excellent strengthening and endurance activity. Do not try to climb steps higher than those of the standard height of seven inches and always use the handrail for balance.

## Advanced Exercises and Activities

A full recovery will take many months. The pain from your problem hip before your surgery and the pain and swelling after surgery have weakened your hip muscles. The following exercises and activities will help your hip muscles recover fully.

These exercises should be done in 10 repetitions four times a day with one end of the tubing around the ankle of your operated leg and the opposite end of the tubing attached to a stationary object such as a locked door or heavy furniture. Hold on to a chair or bar for balance.

## Elastic Tube Exercises *Resistive Hip Flexion*



Stand with your feet slightly apart. Bring your operated leg forward keeping the knee straight. Allow your leg to return to its previous position.

## ***Resistive Hip Abduction***



Stand sideways from the door and extend your operated leg out to the side. Allow your leg to return to its previous position.

## ***Resistive Hip Extensions***



Face the door or heavy object to which the tubing is attached and pull your leg straight back. Allow your leg to return to its previous position.

## **Exercycling**

Exercycling is an excellent activity to help you regain muscle strength and hip mobility. Adjust the seat height so that the bottom of your foot just touches the pedal with your knee almost straight. Pedal backwards at first. Pedal forward only after comfortable cycling motion is possible backwards. As you become stronger (at about 4 to 6 weeks) slowly increase the tension on the exercycle. Exercycle forward 10 to 15 minutes twice a day, gradually building up to 20 to 30 minutes 3 to 4 times a week.

## **Walking**

Take a cane with you until you have regained your balance skills. In the beginning, walk 5 or 10 minutes 3 or 4 times a day. As your strength and endurance improves, you can walk for 20 or 30 minutes 2 or 3 times a day. Once you have fully recovered, regular walks, 20 or 30 minutes 3 or 4 times a week, will help maintain your strength.

## **Numbers You Need to Know:**

Dr. Petersilge's Office:

Phone Number: 216-202-6300

Fax Number: 844-785-6337

Appointment Line: 216-202-6300

Ahuja Pre-admission Testing: 216-593-1595

Home Care: 216-844-4663

You can visit our website at [www.williampetersilgemd.com](http://www.williampetersilgemd.com)