Hoag Orthopedic Institute

Total Joint Replacement Guide

Hoag
Orthopedic
Institute.

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At Hoag Orthopedic Institute, We Get You Back to You.

You have selected one of the leading orthopedic care teams for your procedure. Our goal is to restore, improve, and enhance the health and mobility of individuals with musculoskeletal conditions and diseases through excellence in care and outcomes, clinical innovation, research and advocacy.

Hoag Orthopedic Institute (HOI) brings together a comprehensive team of orthopedic surgeons, sports medicine doctors, physiatrists, and other specialists. All our orthopedic surgeons are fellowship-trained in their orthopedic areas of expertise. HOI consistently performs the highest number of joint replacement procedures in the Western Region.

We are a specialty orthopedic institute, founded in partnership with our premier physicians, and dedicated to our patients with orthopedic conditions and sports-related injuries. We are committed to getting you back to your daily activities by restoring mobility through innovative and evidence-based treatment options. Our team provides excellent patient care with superior outcomes.






The information in this booklet is designed as a general guide. Information provided by your physician is specific to your individual needs.

Frequently Used HOI Numbers

Hoag Orthopedic Institute Hospital Main Line
949-727-5010

Pre Admission Screening (PAS)
949-727-5010, option 3
Fax: 949-764-8810

Registration
949-727-5060

Care Management Department
949-727-5439

Hoag Orthopedic Institute Billing
949-764-8404

Financial Assistance
949-764-5564

Hoag Orthopedic Institute – Nursing Floors
Second Floor 949-727-5200
Third Floor 949-727-5300

Website to schedule an Orientation class:
hoagorthopedicinstitute.com/preop-joint

Your electronic medical record is available in MyChart.

Accessing MyChart will provide you with your pre-operative and post-operative information.

You can access your MyChart by visiting: hoagorthopedicinstitute.com and selecting “Patient Portal” on the top navigation.

Physical Therapy Contacts

Physical therapy providers are determined by your insurance plan. Please verify directly with the provider you select to ensure they are contracted by your insurance. The following are two partners of Hoag Orthopedic Institute.

Hoag Hospital Outpatient Physical Therapy

Irvine Location
16300 Sand Canyon Avenue, Suite 100
Irvine, CA 92618
949-557-0630

Newport Beach Location
520 Superior Avenue, Suite 100
Newport Beach, CA 92663
949-764-5645

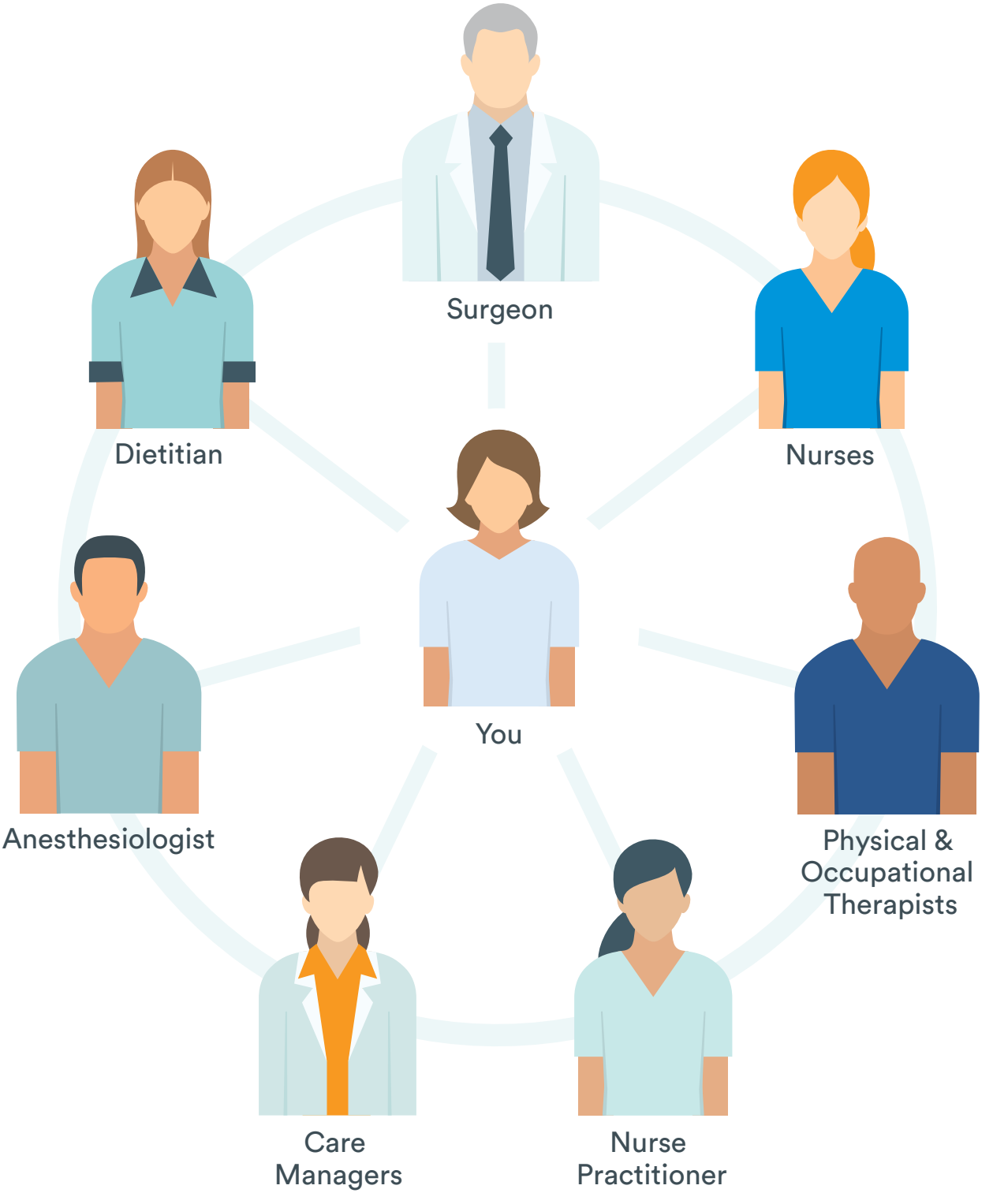
ProSport Physical Therapy and Performance, official partner of Hoag Orthopedic Institute

To see a complete list of locations, visit www.prosportpt.com

Pre-Surgery
Introduction

Patient Centric Care

You are now part of our team of professionals working together to meet your goals.



Medical and Professional Staff Who May Be Caring For You

Anesthesiologist

A physician that is responsible for your anesthesia (putting you to sleep) throughout your surgery.

Orthopedic Surgeon

A physician/surgeon that performs your hip or knee surgery and directs your care. This doctor guides your rehabilitation and follows you through office visits.

Physician Assistant (PA)

A health care professional that works with your physician to prescribe, diagnose, and treat health care problems. Physician assistants often see you before, during, and/or after joint surgery.

Nurse Practitioner (NP)

A registered nurse with advanced skills and education that works with your surgeon to manage your care. An NP can diagnose and treat health care problems, prescribe medications, order, and interpret needed tests. Nurse practitioners often see you before and during your hospital stay.

Registered Nurses (RNs)

Professional nurses that are responsible for managing your care throughout your time at HOI. RNs use the surgeon's instructions to guide your care. RNs provide education to you and your family about your health and safety needs. This includes information before and after surgery and helps you plan for your discharge from the hospital. RNs also provide care and education in your surgeon's office.

Nurse Navigator

A registered nurse that follows prescriptive guidelines to transition the patient through the continuum of care, providing education, care coordination, and pre-optimization to prepare the patient and improve patient outcomes.

Physical Therapist (PT)

A therapist that plans your physical rehabilitation after your joint surgery. This therapist will help you learn to move properly and walk safely. You will learn how to use assistive devices such as a walker or cane, if necessary, which will be needed temporarily after your surgery. Sometimes patients will attend physical therapy after surgery to learn exercises to build strength and flexibility.

Occupational Therapist (OT)

A healthcare professional that is responsible for planning safe ways for you to complete your daily activities, such as bathroom hygiene. The OT may partner with the physical therapist (PT) to complete your exercise routine. The OT offers ideas to assist you in creating a safe home environment. Adaptive equipment is used to simplify self-care tasks and protect your spine while conserving energy.

Care Manager/ Discharge Planner

A registered nurse or social worker who works closely with your surgeon and the other team members to help you make decisions about your discharge plan. This may include home health physical therapy, outpatient therapy, home equipment, and/or any skilled nursing care or Acute Rehabilitation Unit placement if needed. The care manager/discharge planner can also answer your questions about insurance coverage for services and equipment.

Registered Dietitian (RD)

Dietitians are credentialed health professionals who are food and nutrition experts and administer evidence-based medical nutrition therapy. The RD works with the multidisciplinary care team to help patients meet their nutritional goals. Specialized nutrition considerations may be needed for surgery to optimize healing, and the RD is available to provide recommendations and nutrition education after surgery.

Common Causes of Joint Pain and Loss of Function

There are many reasons for joint dysfunction. Osteoarthritis, rheumatoid arthritis, and traumatic arthritis are the most common forms of this disease.

Osteoarthritis usually occurs after age 50 and often in an individual with a family history of arthritis. The cartilage that cushions the bones of the joint softens and wears away. The bones then rub against each other, causing joint pain and stiffness.

Rheumatoid Arthritis is an autoimmune disease. The synovial membrane becomes thickened and inflamed, producing too much synovial fluid, which overfills the joint space. This chronic inflammation can damage the cartilage and eventually cause cartilage loss, pain and stiffness.

Traumatic Arthritis can follow a serious joint injury. A prior fracture or severe trauma to ligaments may damage the articular cartilage over time, causing joint pain and limiting function.

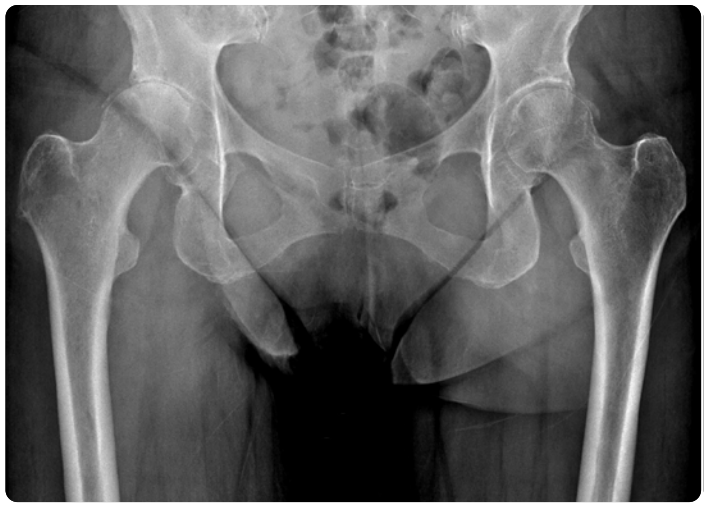


Figure 1a

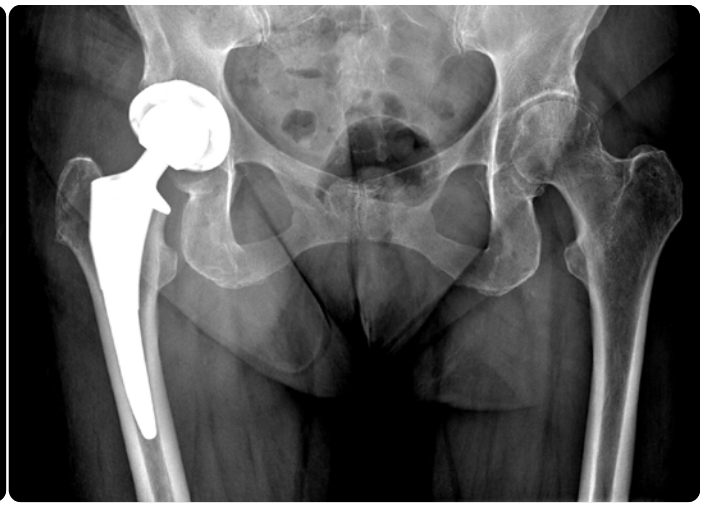


Figure 1b

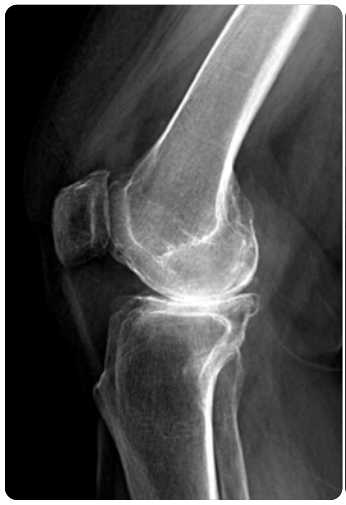


Figure 2a

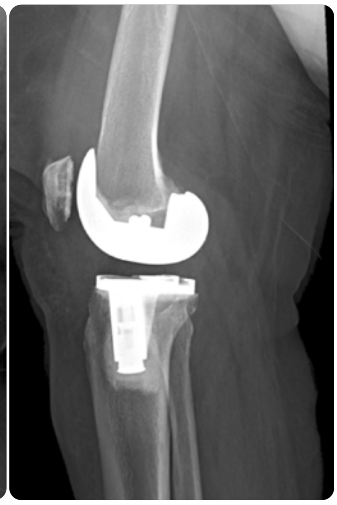


Figure 2b

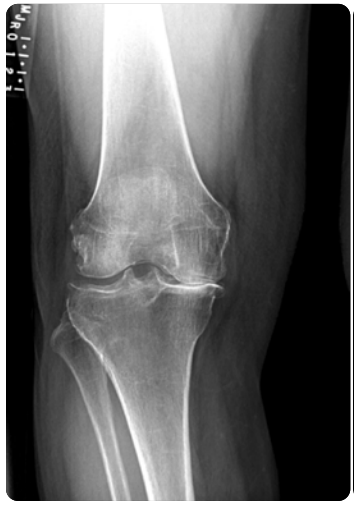


Figure 3a

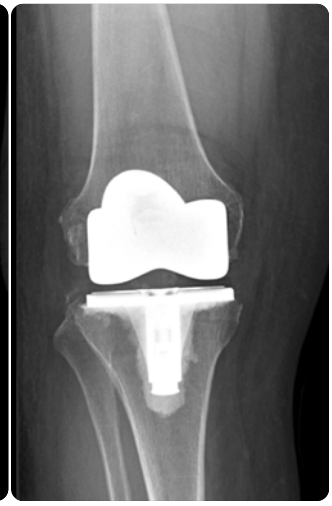
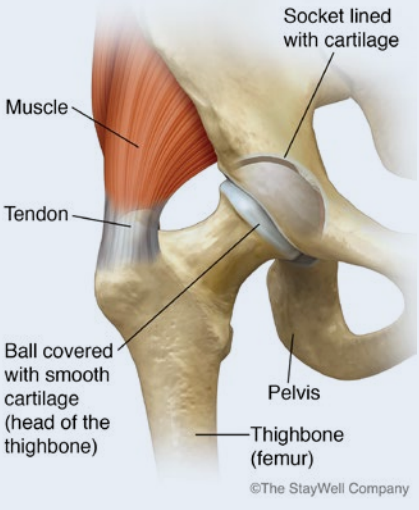


Figure 3b

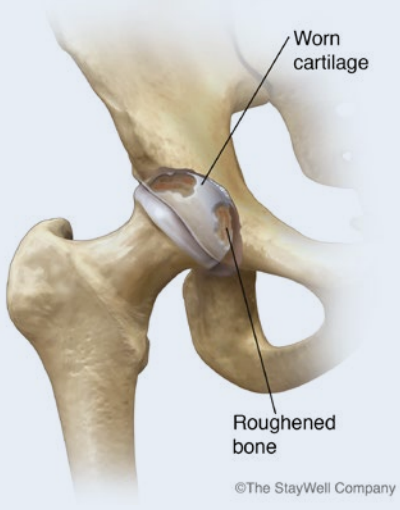
Understanding Hip Replacement

The hip joint is one of the body's largest weight-bearing joints. It is a ball-and-socket joint. This helps the hip remain stable even during twisting and extreme ranges of motion. A healthy hip joint allows you to walk, squat, and turn without pain. But when a hip joint is damaged, it is likely to hurt when you move. When a natural hip must be replaced, a prosthesis is used.



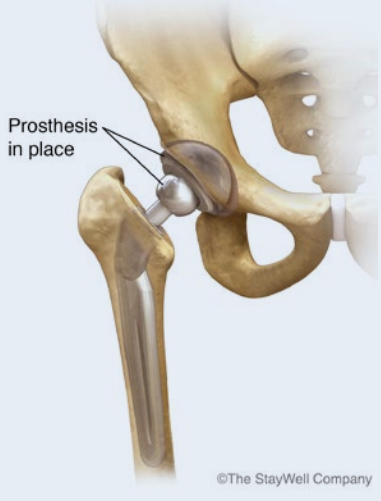
A Healthy Hip

Smooth cartilage covers the ends of the thighbone (femur), as well as the pelvis where it joins the thighbone. This allows the ball to glide easily inside the socket (acetabulum) with little friction. When the surrounding muscles support your weight and the joint moves smoothly, you can walk painlessly.



A Problem Hip

The worn cartilage no longer serves as a cushion. As the roughened bones rub together, they become irregular, with a surface like sandpaper. The ball grinds in the socket when you move your leg, causing pain and stiffness (see page 8, figure 1a).

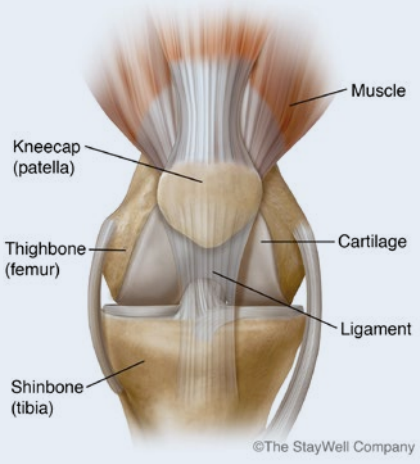


A Hip Prosthesis

An artificial socket is placed inside the worn socket. A plastic liner is placed inside the new socket. An implant (stem) is placed inside the femur bone and the ball is attached to it. The plastic liner creates a smooth surface for the ball to move (see page 8, figure 1b).

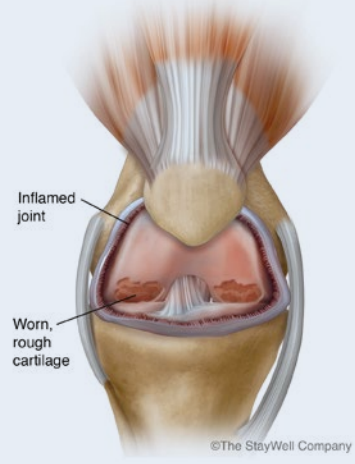
Understanding Knee Replacement

The knee is a hinge-like joint. It is formed where the thighbone (femur), shinbone (tibia), and kneecap (patella) meet. It is supported by muscles, tendons, and ligaments. It is also lined with cushioning cartilage. Over time, cartilage can wear away. As it does, the knee becomes stiff and painful. A knee prosthesis (artificial joint) can replace the painful joint and restore movement.



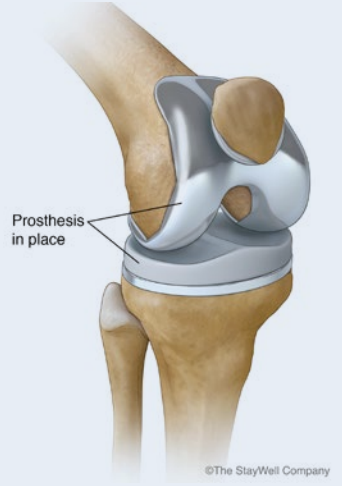
A Healthy Knee

A healthy knee joint bends easily. Cartilage is a smooth tissue. It covers the ends of the thighbone and shinbone and the underside of the kneecap. Healthy cartilage absorbs stress and allows the bones to glide freely over each other. Joint fluid lubricates the cartilage surfaces, making movement even easier. A meniscus sits between two bones and acts like a shock absorber.



A Problem Knee

A problem knee is often stiff and painful. Cartilage cracks or wears away due to usage, inflammation, or injury. Worn, roughened cartilage no longer lets the joint glide freely so, it feels stiff and painful. As more cartilage wears away, exposed bones rub together when the knee bends, causing pain. With time, bone surfaces also become rough, making pain worse (see page 8, figures 2a and 3a).



A Knee Prosthesis

A knee prosthesis lets your knee bend easily again. The roughened ends of the thighbone and shinbone and the underside of the kneecap are replaced with metal and strong plastic parts. With new smooth surfaces, the joint can once again glide freely without pain. A knee prosthesis does have limits. But it can let you walk and move with greater comfort (see page 8, figures 2b and 3b).

Risks of Joint Replacement Surgery

A total joint replacement is a major surgery. Complications are rare but we feel you should be aware of these in order to make an informed decision about your surgery. Some of the more common potential complications are outlined below.

Infection

You are given antibiotics before, during, and sometimes after your surgery to minimize the risk of infection. You will also be encouraged to use antiseptic treatments on your skin before surgery to minimize the risk of infection.

Infection occurs in less than 1% of all total joint replacements but if it does, it can be devastating. This can take the form of a superficial wound infection requiring antibiotics and/or operative exploration and cleansing. A deep infection down to the implants might require implant removal, placement of an antibiotic spacer, wheelchair and walker use, prolonged intravenous antibiotics, and a period of months until another implant can be placed. On very rare occasions, the joint cannot be revised.

Infection is also possible throughout your life, many years after total joint replacement. This is thought to occur by bacteria from a distant site traveling to the implant. Bladder or kidney infections are the most common source of delayed infections, but dental abscesses, infected ingrown toenails, other foot surgery, or bacterial sinus infection can pose a threat. If these infections occur, they should be treated immediately and the surgeon's office should be notified. Also, simple teeth cleaning can cause bacteria from the mouth to get into the bloodstream. This could pose a threat to the implants and, as a precaution, antibiotics should be taken for these procedures for a period of time after joint replacement surgery.

Notify your dentist or other health care provider that you will be having a total joint replacement. If dental surgery, bladder surgery, bowel surgery, rectal surgery, or hemorrhoid surgery is planned after your total joint replacement, the surgeon or dentist should put you on protective antibiotics.

Blood Clots

Blood clots (Deep Vein Thrombosis or a DVT) can form in the veins of your calf, thigh, or pelvis. Clots can break away and travel to your lungs, which is called a pulmonary embolism (PE). A pulmonary embolism can be life threatening. Care is taken to minimize the risk of blood clots with a blood thinning agent. The main risk of blood thinning agents is excessive thinning of the blood, causing bleeding. Early activity has been shown to be the best way to minimize the risk of blood clots. Some blood thinning agents require daily injections in the hospital and at home, while other agents are taken in pill or tablet form. You and your family will be instructed on the appropriate administration of blood thinners prior to discharge.

Bone Fracture

During surgery, your bone can fracture with the insertion of the implant. This would be addressed at the time of surgery with screws or wires and may affect the speed of your recovery.

Nerve Damage

Skin numbness is common after surgery and usually resolves with time. There are also major nerves that cross all major joints. There is a small possibility that one of these nerves can be damaged during surgery or afterwards. If so, this would leave you with weakness or numbness of the lower leg and foot, possibly requiring a permanent brace. The overall risk of nerve injury is 0.1 - 0.8%.

Injury to Blood Vessels

There are major arteries next to the hip and behind the knee. It is extremely rare to injure these vessels during surgery but if they are injured, a repair of the vessels is performed on an emergency basis to save the blood supply to the lower extremity. The risk of vascular damage is 0.09 - 0.13%.

Lack of Pain Relief

A total joint replacement is often done for pain relief. However, the procedure may fail to relieve all of your pain. Following a total knee replacement there is approximately a 20% chance of lack of pain relief. In total hip replacements, 5% of patients may have continued pain following surgery.

Reaction to Materials

Total joint replacements are made of materials foreign to your body. These materials have been thoroughly tested, but a small risk of allergic reaction exists. This risk is not high enough to warrant testing. If you are allergic to metals, let a member of the team know.

Wound Complications

On rare occasion, poor wound healing may occur. Poorly controlled diabetes, smoking and obesity may increase the risk of wound problems after surgery. This may result in delayed healing of the wound, increase risk of deep infection and may require treatment with local wound care or potentially a return to the operating room. For Knee Replacements, if you have one or more previous knee surgical incisions, there is a small risk that the skin across the front of the knee may lose its blood supply after surgery. Very rarely, plastic surgery may be required to repair the skin defects.

Implant Wear and Failure

The implanted component of a total joint replacement are mechanical pieces which can wear out or break. Only proven technology and materials are used. The more high impact activity you engage in, the greater the chance of implant failure. With usual daily and recreational activity, however, your total joint replacement should function well for many years.

Informed Consent

An informed consent is a legal document between you and your health care provider that leads to agreement or permission for care, treatment, or services. Signing an informed consent means that you have received all the information about your treatment options from your health care provider; you understand the information and had a chance to ask questions; you used the information explained to you to decide if you want to receive the recommended treatment; and you agree to receive the treatment option.

Joint Specific Complications

Hip Replacement

Dislocations: This occurs when the ball comes out of the socket. The risk for dislocation is greatest in the first few months after surgery while the tissues are healing. Dislocation is uncommon. If the ball does come out of the socket, it can usually be put back into place without the need for more surgery. Dislocation could require sedation in the emergency department or operating room. In situations where the hip continues to dislocate, further surgery may be necessary.

Leg length discrepancy: Equal leg lengths post-operatively are very important. Stability of your total hip replacement is even more important and is the number one priority. Measurements are taken prior to surgery and during surgery so that every attempt is made to maintain equal leg lengths. In some cases, however, a leg length difference may be evident post-operatively. Although usually not necessary, in some instances leg lengthening is required for implant stability, or a shoe lift may be needed.

Knee Replacement

Tendon and ligament rupture: Although all tissues are protected during surgery, there is a very small risk of rupture of the patellar tendon or fracture of the knee cap after surgery. This may necessitate further surgery or result in weakness of the muscles that straighten the knee. A brace may be required.

On rare occasions, the prosthetic knee may irritate tendons or ligaments in the knee, and may require further treatment or surgery.

Additionally, there is a small risk of injury to stabilizing ligaments on the side of the knee (medial collateral or lateral collateral). If recognized, these need to be repaired. This may result in instability or modification of rehabilitation following surgery.

Limited knee motion: In rare instances, the knee becomes stiff after surgery and does not regain range of motion. Manipulation of the knee under anesthesia is necessary for limited motion. The knee is gently bent to recover necessary joint motion. No open surgery is done to the knee. This can usually be avoided by your cooperation with the outlined physical therapy program. Complications are associated with knee manipulation procedures on rare occasion and can include rupture of ligaments and tendons or fracture of bones. Thus, manipulation should be avoided if possible.

Anesthesia

A general anesthetic is where you go to sleep for the surgery and wake up after the surgery is finished. This type of anesthesia is used for all of our patients.

A spinal anesthetic numbs you from the waist down so you will not feel pain. (A spinal anesthetic may be used in addition to your general anesthesia). Not all patients are candidates for a spinal anesthetic. This will be discussed between you and your anesthesiologist. The spinal does require a needle stick; however, the area will be numbed with local anesthetic prior to the needle stick.

A local (regional) anesthetic block is often used for total and partial knee replacements in addition to your general and spinal anesthetics. It is used for post-operative pain management. It is done prior to surgery and before the general or spinal anesthetic. This requires a needle stick and also uses ultrasound during placement. Once the nerve is located, then local anesthetic medication is injected into the area to help decrease the amount of post-operative pain. This does not take away all of the pain, but can assist in pain management and decrease the amount of opioids or narcotics you need after the surgery.

Risks of Anesthesia

Side effects of some anesthesia can include:

- **Nausea and vomiting** – This very common side effect can occur within the first few hours or days after surgery and can be triggered by a number of factors, such as the medication, motion, and the type of surgery.
- **Sore throat** – If a tube is placed in your throat to help you breathe while you're unconscious, it can leave you with a sore throat after it's removed.
- **Postoperative delirium** – Confusion when regaining consciousness after surgery is common, but for some people — particularly older patients — the confusion can come and go for about a week. HOI anesthesiologists specifically select agents to minimize the risk of postoperative delirium. However, you may feel disoriented and have problems remembering or focusing. This can worsen if you are staying in the hospital for a few days after the procedure, because you are in an unfamiliar place. Having familiar objects such as a loved one, family photos, your glasses, hearing aids, and a clock in your room may help with reorienting you after surgery.
- **Muscle aches** – The medications used to relax your muscles can cause soreness.
- **Itching** – This is a common side effect of narcotics/opioids, one type of pain medication sometimes used with general anesthesia.
- **Chills and shivering (hypothermia)** – This occurs in up to half of patients as they regain consciousness after surgery, and it might be related to body temperature.

Rarely, general anesthesia can cause more serious complications, including:

- **Cognitive dysfunction** – In some cases, confusion and memory loss can last longer than a few hours or days. A condition called postoperative cognitive dysfunction can result in long-term memory and learning problems in certain patients. It's more common in older people and those who have conditions such as heart disease, especially congestive heart failure, Parkinson's disease or Alzheimer's disease. People who have had a stroke in the past are also more at risk. It's important to tell your physician and anesthesiologist if you have any of these conditions.
- **Malignant hyperthermia** – Some people inherit this serious, potentially deadly reaction to anesthesia that can occur during surgery, causing a quick fever and muscle contractions. If you or your family member has ever had heat stroke or suffered from malignant hyperthermia during a previous surgery, be sure to tell the physician anesthesiologist.

Frequently Asked Questions About Surgical Site Infection (SSI)

What is a Surgical Site Infection (SSI)?

A surgical site infection (SSI) can occur after surgery either directly at the site of the incision or in the region of the body where the surgery took place. Microorganisms from your own body or from the environment can enter the body through the incision made by the surgeon during or after the operation. Most patients who have surgery do not develop an infection. Some of the common symptoms of a surgical site infection are:

- Fever
- Redness and pain around the area where you had surgery
- Increased swelling that goes past the wound area and does not go away after five days
- Drainage of cloudy fluid from your surgical wound (It is normal to have a small amount of draining from the wound for the first day or two after surgery.)

Can SSIs be treated?

Most surgical site infections can be treated with antibiotics. The antibiotic prescribed depends on the bacteria causing the infection, since different antibiotics are active against different organisms. A patient's health care team will likely take samples from the infected wound to determine what antibiotic should be used. In some cases, the infection may require additional surgery, particularly if deeper tissue is affected by the infection.

What are some of the things that hospitals are doing to prevent SSIs?

To prevent SSIs doctors and other health care providers must:

- Clean their hands and arms up to their elbows with an antiseptic agent directly before starting the surgery.
- Clean their hands with soap and water or an alcohol-based hand rub before and after caring for each patient.
- If it is necessary to remove hair at the area the surgery is to take place, electric clippers with a disposable head should be used. They should not shave you with a razor.
- Health care professionals must wear special hair covers, masks, gowns and gloves during surgery to keep the surgery area clean.
- Patients are given antibiotics before surgery starts. In most cases, the patient should get antibiotics within 60 minutes before the surgery starts.
- Clean the skin at the site of your surgery with a special soap that kills germs.

What can I do to help prevent an infection?

Before your surgery

- Tell your doctor about other medical problems you may have. Health problems such as allergies, diabetes and obesity could affect your surgery and your treatment. Bring an up-to-date list of all your medications and talk with your surgeon about why you take each medication.
- Patients who smoke are at higher risks for infections. If you smoke, talk to your doctor about quitting before your surgery.
- If possible, any existing infections should be treated prior to undergoing surgery.
- Do not shave near where you will have surgery. Shaving with a razor can irritate your skin and make it easier to develop an infection.

At the time of your surgery

- Speak up if someone tries to shave you with a razor before surgery. Ask why you need to be shaved and talk with your surgeon if you have any concerns.
- Ask if you will get antibiotics before surgery.

After your surgery

- Keep incision dressing clean, dry and intact as instructed.
- Continue post-hospital instructions for decolonization as instructed.
- Wash hands regularly especially before touching dressing or incision area.
- Bathe or shower as instructed.
- Keep away from people that are ill or sick as long as possible.
- Keep your pets away from your incision until it is healed.

Important precautions:

- Make sure that your health care providers clean their hands before and after examining you, with either soap and water or an alcohol-based hand sanitizer.
- Health care providers must take extra precaution when changing and cleaning the wound dressing.
- Family and friends should clean their hands with soap and water or an alcohol-based hand sanitizer before and after visiting you. If you do not see them clean their hands, ask them to clean their hands.
- Family and friends who visit you should not touch the surgical wound or dressings.
- Before you go home, your doctor or nurse should explain how to take care of your wound. Make sure you understand how to care for your wound before you leave the hospital.
- If you have any symptoms of an infection, such as redness and pain at the surgery site, drainage or fever, **call your doctor immediately**.

MRSA Screening Patient Information

What is Methicillin-resistant Staphylococcus aureus (MRSA)?

Staphylococcus aureus, also known as “Staph”, is a germ commonly found on the skin or in the nose of healthy individuals. MRSA is a type of Staph that is resistant to some of the antibiotics used to treat infections. It is a common cause of minor skin infections. It also can cause more serious infection like surgical wound infections, bloodstream infections and pneumonia.

How is the MRSA screening test done?

A small sterile swab, similar to a Q-tip, is used to swab the inside of your nose.

What will happen if the test is positive?

If your MRSA screening is positive, your doctor will prescribe an antibiotic nose ointment and use of a special body wash twice a day for 5 days. Once the 5 day treatment is completed, you will be asked to wait at least 2 days and then return to the lab for retesting.
The retesting will include a swab of your nose, a swab of your axilla (underarm area), and a swab of your groin area. If the retesting is negative for MRSA you will not need any special precautions during your hospital stay.

If your MRSA screening is positive and your doctor proceeds with surgery, you will be placed in contact precautions to prevent the spread of MRSA. Contact precautions mean:

- Supplies needed to keep MRSA from spreading will be stored at the door of your room.
- A sign will be placed on the outside of your hospital door to alert staff and your visitors.
- Hospital staff wear protective gear, such as gloves and a gown when entering your room to provide care.
- All visitors should wear a gown and gloves while in your room; nursing staff will provide assistance if needed.
- When leaving the room, health care providers and visitors remove their gown and gloves and clean their hands.

Am I contagious?

MRSA can be on your hands. It can get there from your nose, a wound, urine or blood. This can be spread by anything you touch, if you do not properly clean your hands. Hands must be washed for 15 seconds with soap and water or alcohol hand sanitizer, rubbing hands together until dry. It is important to clean your hands before eating, after using the toilet, after blowing your nose or covering a cough.

What will happen when I go home?

To prevent the spread of MRSA to others:

- Clean your hands often, especially before and after changing your wound dressing or bandage.
- People who live with you should clean their hands often as well.
- Keep taking any antibiotics prescribed by your doctor. Don't take half-doses or stop before you complete your prescribed course.
- Keep any wounds clean and change bandages as instructed until healed or as instructed.
- Avoid sharing personal items such as towels or razors.
- Wash and dry your clothes and bed linens in the warmest temperatures recommended on the labels.
- Tell your health care providers that you have MRSA. This includes home health nurses and aides, therapists, and personnel in doctors' offices.

What will happen if I return to the hospital?

Individuals with MRSA that come back to the hospital will be placed in contact precautions. Additional tests may be done.

Where can I get more information about MRSA?

For additional information on MRSA, visit the Centers for Disease Control (CDC) and Prevention web site at www.cdc.gov/mrsa.

Universal Decolonization

Universal Decolonization is a strategy used to help prevent health care-associated infections, particularly those caused by methicillin-resistant Staphylococcus aureus (MRSA) and methicillin-sensitive Staphylococcus aureus (MSSA).

The goal of decolonization is to lower the microbial bio-burden on body sites to reduce the risk of infection. Nasal decolonization through the application of a topical antibiotic or antiseptic agent and skin decolonization through the application of an antiseptic during bathing are common methods and frequently are used together.

Your surgeon's office will provide products and instructions on how to perform the decolonization process. If you have any questions or are unable to tolerate or perform the process, please notify the surgeon's office.

Pre-surgery Preparedness

Preparing for Surgery Checklist

This checklist will assist you in completing your pre-surgery preparations. Your physician will decide which diagnostic appointments and tests they would like you to have and when to STOP certain medications, eating and drinking.

- ☐ Attend the Preoperative Hip & Knee Orientation class preferably four weeks prior to my surgery (go to www.hoagorthopedicinstitute.com/preop-joint)
- ☐ Make arrangements for caregiver availability for support and help for surgery and recovery.
- ☐ Name of caregiver _____
- ☐ Make my appointment(s) with other physicians as requested.
- ☐ Start my pre-surgical exercise program, pages 57 - 58.
- ☐ Start my pre-surgical nutritional guidelines, page 30 - 33.
- ☐ If I take opioids/narcotics, I will attempt to reduce amount six weeks prior to my surgery.
- ☐ Stop smoking cigarettes and nicotine products six weeks prior to my surgery.
- ☐ Complete my Pre-admission Screening four weeks prior to my surgery.
- ☐ Complete an Advance Health Care Directive, if needed, two weeks prior to my surgery.
- ☐ My doctor has advised me to STOP taking blood thinners:
  (PLEASE SPECIFY MEDICATIONS) _____
  Date to stop:_____
- ☐ My doctor has advised me to STOP taking anti-inflammatory medications:
  (PLEASE SPECIFY MEDICATIONS) _____
  Date to stop:_____
- ☐ Shower with chlorhexidine gluconate soap and nasal decolonization as instructed, 5 days before surgery.
  First day of shower _____
  First day of nasal swabs and time _____
- ☐ Brush my teeth/oral care before coming to the hospital/prior to surgery.
- ☐ Do NOT eat anything after (DATE)_____ and (TIME)_____ prior to surgery.
- ☐ Do NOT drink anything after (DATE)_____ and (TIME)_____ prior to surgery.
- ☐ Follow hydration instructions if recommended by my surgeon.
- ☐ Sign up for the GetWell Loop App.

Orientation Class

You should attend Hoag Orthopedic Institute's orientation class three to four weeks in advance of your surgery date. The orientation is held regularly for your convenience. A list of class dates will be provided by your surgeon's office or may be viewed at ***hoagorthopedicinstitute.com/preop-joint***. During this important Q&A orientation session, a patient educator nurse will review your pre-admission preparations, hospital stay and plans for your return home.

You may also view additional educational handouts and videos at this link.

Preliminary Tests

Before your surgery, you will need to have preliminary tests such as blood tests, possibly an electrocardiogram (EKG), chest X-ray, urine analysis and nasal swab. It is important that these tests be completed prior to surgery and as soon as possible.

Pre-Admission Screening (PAS)

The pre-admission staff (PAS) at Hoag Orthopedic Institute will call you within days of being scheduled for surgery. During this call, they will confirm your personal information is correct, confirm your dates for pre-admission testing and any medical clearance your physician may require you to have prior to your surgery. The staff at the pre-admission department will assist you in planning appropriate dates for these appointments. You may call them at 949-727-5010, option 3.

Prior to the completion of your PAS phone call, a call time will be assigned for you to speak with a nurse navigator about one week prior to your surgery. Be prepared to review your medication list and medical history with your nurse navigator. Medical clearances are very important to complete if you have been asked to have one. They help the physicians determine your needs for care and if not completed in time, it can result in a cancellation of surgery. Booking an appointment with your primary care physician or specialist as early as possible is vital, as they may be difficult to see you with short notice.

Review Insurance & Financial Planning

Thoroughly review your insurance benefits and/or alternative plans for payment. It may be helpful to find out what your insurance plan or Medicare covers for durable medical equipment (such as walkers), home health services (home physical therapy), inpatient vs. outpatient deductibles and co-payments as well as stays at an inpatient rehab facility.

If you have any questions about your health insurance benefits, please contact the customer service number located on the back of your insurance card. Care Managers may also provide general insurance guidelines and can be reached at 949-727-5439.

Health Care Decisions

An Advance Directive or Advance Health Care Directive is a printed and written document that communicates your wishes about medical treatments if you are no longer able to make decisions for yourself. You may also complete the Advance Directive to name another individual as an agent to act for you now even though you are still capable. If you already have an Advance Directive or a Living Will, please have a copy available for your pre-admission screening appointment and bring a copy to the hospital on the day of your surgery. If you do not have one and wish to complete one, please do so prior to admission date. Hospital staff are unable to serve as witnesses to the document.

Preparing Yourself and Home for After Surgery

It is important that your house be free from hazards that could cause you to fall or lose your balance as a fall can greatly set back your recovery. Use the following checklist to assure that your home is safe for you.

- ☐ Be aware of uneven surfaces inside and outside of your home.
- ☐ Remove throw rugs and secure extension cords out of the way.
- ☐ Have a cordless phone or cell phone that can be kept on your person.
- ☐ Provide a place for your pets to be kept while you are walking around the house.
- ☐ Maintain adequate lighting in all areas.
- ☐ Use night-lights in bathroom and hallways.
- ☐ Safety rails and/or a shower chair may be helpful in the tub/shower.
- ☐ Tubs and showers must have non-skid surfaces or mats.
- ☐ Obtain a raised toilet seat or 3-in-1 commode *if needed*.
- ☐ Select footwear that stays securely on your feet and has non-skid soles.
- ☐ Use firm chairs with arm rests or place a firm cushion or pillow in seat of chair. (It is easiest to stand from a seat that is higher than the back of your knees).
- ☐ If your bed is particularly low or high, explore options to make this easier to get in and out of.
- ☐ Move frequently used items to shelves and counters that are easy to reach.
- ☐ Prepare simple meals ahead and store in small, sealed containers for heating later.
- ☐ Consider water bottles to avoid spills that could be a slip hazard.
- ☐ Be sure there is room for a walker at home in case one is needed after surgery.
- ☐ Arrange for pet care during your recovery.

What to Bring to the Hospital on Day of Surgery

- ■ Photo ID and your insurance card
- ■ Copayment for surgery/hospitalization, if needed
- ■ Loose fitting clothes, including socks and undergarments
- ■ Closed-toe shoes (if you use an orthotic – please bring too)
- ■ Toiletries
- ■ Medications as directed by the Nurse Navigator to bring into the hospital in their original packaging/container.
- ■ CPAP machine, mask, and tubing, if applicable
- ■ Walker (especially if borrowed) to allow for proper fitting

Tips on Home Safety and Fall Prevention After Surgery

It is a good idea to have your home prepared before you return from the hospital. The following guidelines may identify areas in your own home to make changes to decrease the likelihood of a fall:

Flooring

- Be aware of uneven surfaces both inside and outside your home.
- Remove rugs that can be easily tripped on, especially at top and bottom of stairways.
- Make sure rugs have non-skid backings or use double-sides tape so they won't slip.
- Make sure rugs and carpets are free of curled edges, worn spots and rips.
- Eliminate obstacles from pathways both outside and inside the home.
- Have mats at doorways for people to dry their feet on to prevent slipping.

Kitchen

- Move frequently used items to shelves and counters that are within arm's reach. This can minimize unnecessary and unsafe reaching.
- Use adaptive equipment (grabbers) for easier reach.
- Prepare simple meals using stovetop or counter-level appliances to avoid bending.
- Make food ahead of time, store in small containers and place in the freezer for heating later.

Pet Care

- Keep your pets away from your incision until it is healed.
- Provide a place for your pets to be kept while you are walking around the house.
- Keep your pets off your bed to prevent dander.

Bathroom

- Ensure tubs and showers have non-skid surfaces or safety mats inside and outside.
- Use a non-skid rug on the bathroom floor.
- Be cautious of wet floors.
- Make sure grab bars or safety rails are securely anchored over the tub, in the shower and near the toilet.
- A raised toilet seat or commode frame may be necessary.
- Keep toiletries in an easy to reach receptacle.

Lighting

- Maintain adequate lighting in all areas.
- Use night lights in bathrooms or in the hallways.
- Check to make sure light switches are within easy reach.

Furniture

- Sit in chairs with arm rests to help you get in and out of the chair.
- Place firm cushion or pillow on seat of chair or couch if necessary.
- Do not use a step stool to reach items in high cupboards, get help.
- Coil or tape cords and wires next to the wall so you can't trip over them.

Stairs

- Make sure handrails are securely fastened.
- If you have a large flight of stairs separated by a landing, place a chair with arm rests on the landing.

Assistive Devices

- Make sure the equipment is in proper working condition.
- Make sure the rubber tips of the canes and walkers are in good condition.
- Consider the use of a walker bag. Do not try to carry anything in your hands while you are using a walker.

Footwear

- Select closed toed footwear that stays securely on your feet and have non-skid soles.

Personal Precautions

- Be alert for unexpected hazards like out of place furniture, pets, children, and toys.
- Provide a place for your pets to be kept while you are walking around the house.
- Avoid rushing to answer the phone or doorbell.
- Make sure your vision is not obstructed when carrying objects.
- Take time to regain your balance and gait when you change positions, i.e., going from lying down to sitting and sitting to standing.
- Allow yourself extra time to get ready.
- Take several rest breaks and sit when necessary.
- Keep your eyeglass prescription up to date.
- If you live alone, have daily contact with family, friends or neighbors.

Fuel your Recovery with Nutrition

Proper nutrition is important for leading a healthy lifestyle, but it's a must before and after joint replacement surgery. Consider pre-surgery nutrition planning similar to getting ready for a marathon. Surgery causes a stress reaction in the body that elevates the metabolism and increases your need for calories from proper foods.

Pre-Surgery Diet

Your pre-surgery diet should include as many nutrients from healthy food as possible. Start now. Do not wait until few days before the surgery to focus on nutrition goals.

Prepare healthy and balanced meals that include foods from all food groups: protein, whole grains, vegetables, fruits, dairy or non-dairy alternative to help optimize your recovery.

- **Eat enough protein.** At least 1-2 weeks before surgery, make sure to eat enough protein-rich foods every day. Protein provides building blocks for muscles, bones, and immune system. You want to be strong as possible going into surgery. Include high quality protein such as poultry, lean meat, fish, eggs, meat alternatives, beans, legumes, low fat yogurt and cheese, and nuts/seeds to your meals and snacks. Be sure you meet your daily needs (about 6-12 ounces per day) depending on individual needs.
- **Stock up on fruit and vegetables.** Include a wide variety of colorful fruits and vegetables to most meals and snacks. Dark green leafy vegetables are great to repair muscles, bones, and cartilage because they contain loads of vitamins and minerals including vitamin C, K, and magnesium.
- **Include whole grains.** Healthy grains give the body B vitamins it needs to combat stress. Include foods such as barley, brown rice, buckwheat, bulgar, millet, oatmeal, popcorn, and whole wheat bread, pasta, or crackers.
- **Avoid crash dieting.** You need adequate nutrients for energy and recovery. If weight loss is recommended, no more than 1-2 pounds per week is suggested.
- **Cut back on junk food!** Avoid alcohol, added sugars, and excessive salt and caffeine. These can all slow bone healing and deplete your body of nutrients. They are considered empty calories. You want your calories to come from nutrient dense foods. Unless advised otherwise by your physician, try to get your nutrients from food rather than supplements because food helps the body absorb them better.
- **Plan ahead:**

  – Prepare food ahead of time and place in the freezer to be reheated later.

  – Make sure you have plenty of water, juice, milk or other types of healthy drinks available.

  – Stock up on healthy, low preparation foods such as fruit, nuts, cheese, pudding, yogurt, low-fat and low-sodium frozen dinners, and low-sodium canned foods.

  – Have a variety of take-out menus that offer healthy menu choices if you plan to have food delivered to your home.

Reach and Maintain Your Desirable Weight

Potential risks associated with obesity and joint replacement surgery exists. Obesity or a Body Mass Index (BMI) greater than 40 has been linked to surgical complications such as:

- Increase risk of surgical site infections and non-healing wounds
- Hip and knee implant complication such as pain and loosening
- Medical complications such as post-operative pneumonia, heart attacks, strokes, peripheral swelling, blood clots and pulmonary embolism
- Lengthy recovery periods and poor progress in rehabilitation

Your physician may recommend weight loss before and after surgery and active lifestyle. Weight loss can be sustained over time through healthy diet, physical activity, and lifestyle behavior modifications. Check with your doctor before starting a new weight management and exercise program. Aim for a weight-loss goal of 1-2 pounds per week until reaching your desired weight. Weight loss may be recommended to reduce your risk from the surgery. A goal of 5-10% weight loss in 6 months also has shown to improve reductions in triglycerides, blood glucose, and risk of developing Type 2 diabetes.

Advice About Dietary Supplements

Be sure to inform your physician and nurse if you are taking any herbs, vitamins, minerals or other supplements.

Many of these may interfere with medications causing adverse side effects; therefore, your physician may want you to ***STOP*** taking supplements ***2 weeks prior to the surgery*** as instructed.

The Night Before Surgery

Follow your physician guidelines on when to stop eating or drinking before your surgery. If you do not follow the instructions, your surgery may be canceled.

Nutrition and Hydration Instructions for Joint Replacement Surgery

At Least 7-14 Days Before Surgery

Proper nutrition and hydration can help your body prepare for and recover from surgery.

- Consume adequate intake of water and non-alcoholic fluids. Drink at least 64 fl oz (8 cups) of fluid per day. Hydration promotes healing.

The Night Before Surgery

Drink one of these 8-10 hours before your surgery ***if recommended by your surgeon***:

☐ 16 fl oz (2 cups) Gatorade
OR
☐ 2 Bottles Ensure® Pre-Surgery Carbohydrate Clear Nutrition Drink

- Do NOT eat any solid food after midnight unless otherwise instructed by your surgeon

The Day of Surgery

Drink one of these prior to leaving the house to go to the hospital (approximately 2-3 hours before your surgery) ***if recommended by your surgeon***:

☐ 16 fl oz (2 cups) Gatorade
OR
☐ 1 Bottle Ensure® Pre-Surgery Carbohydrate Clear Nutrition Drink

Why should I drink extra carbohydrates before surgery?

Patients have better results when they hydrate and drink extra carbohydrates (carbs) before surgery. Carb loading helps your body handle the stress of surgery.

How does carb loading improve my outcomes?

- You will likely be more comfortable both before and after surgery. You will likely feel less thirsty, less hungry, and less anxious.
- You will likely have better blood sugar control after surgery.
- You may have a shorter hospital stay and a rapid recovery.

What can I drink and NOT drink the morning of surgery?

Please follow instructions carefully or your surgery may be canceled.

ALLOWED	DO NOT CONSUME
Water	Milk or Dairy Products
Apple & Cranberry Juice	Citrus Juices
Gatorade or equivalent carb containing sports drinks	Prune Juice
Ensure® Pre-Surgery Carbohydrate Clear Nutrition Drink	Juices with Pulp
Plain Coffee or Tea. **No milk or creamer.**	Alcoholic Beverages

Nutrition and Hydration To-Do Checklist Before Your Surgery

7 Days Before Your Surgery

- ☐ Focus on Healthy Eating and Hydration
- ☐ Purchase the recommended carbohydrate (carb) containing clear liquid beverages ***if recommended by your surgeon***
- ☐ Drink at least 64 fl oz (~8 cups) of fluid per day.

1 Day Before Your Surgery

- ☐ Do NOT eat any solid food after midnight unless otherwise instructed by your surgeon
- ☐ Drink the recommended carbohdyrate (carb) containing clear liquid beverages the night before your surgery ***if recommended by your surgeon***

Day of Surgery

- ☐ Drink the recommended carbohydrate (carb) containing clear liquid beverages prior to leaving the house ***if recommended by your surgeon***

Medications and Supplements

Daily Prescription Medications

Review your medications with your internist/ family doctor and surgeon. Some medications may need to be changed or stopped before surgery. Your doctor may adjust medications before surgery such as:

- Blood Pressure Medications
- Arthritis medications aspirin, ibuprofen, meloxicam, celecoxib, naproxen, aleve, etc.)
- Diabetic medications (metformin, januvia, glipizide, etc.)
- Pain medications (oxycodone, hydrocodone, norco, tramadol)
- Medications that affect your immune system (remicade, cellcept, etc.)
- Hormone Replacement Therapy or Birth Control
- Stopping glp1 medications for weight loss: Ozempic (semaglutide), Mounjaro (tirzepatide), Byetta (exenatide), Trulicity (dulaglutide)

Your doctor will decide which medications are appropriate for you and give you specific instructions. The nurse who conducts your pre-procedure phone assessment will review your medications with you and explain what to take the morning of your surgery AND which specific medications (if any) to bring with you to the hospital.

Blood Thinners

IF YOU ARE TAKING A BLOOD THINNER, IT IS IMPORTANT TO DISCUSS THIS WITH YOUR SURGEON TO BE SURE WHEN TO STOP TAKING IT PRIOR TO YOUR SURGERY.

The use of blood thinning agents has become more common. Patients are on blood thinners for many reasons: Atrial Fibrillation, heart disease, prior history of blood clots in the legs (Deep Vein Thrombosis or DVT) or the lungs (Pulmonary Embolis or PE). There are many different kinds of blood thinners including Aspirin, Plavix, Coumadin, Xarelto, Eliquis and others. Each one has a different amount of time it stays in the body after you stop taking it. The use of blood thinners prior to surgery may result in excessive bleeding at the time of surgery and potential wound complications following surgery.

Fill out prescriptions as soon as possible before surgery if you have been given one for pain medications.

Over-the-Counter Medications

- Aspirin, ibuprofen (e.g., Motrin, Advil) and naproxen (e.g., Aleve) have the potential to "thin" your blood and are generally stopped two weeks before surgery, unless your doctor advises differently.
- Acetaminophen (e.g., Tylenol) is OK to take until surgery. 3,000 to 4,000 milligrams per day is the maximum amount of acetaminophen you are able to take per day from all sources.
- A multivitamin plus iron, as well as calcium and vitamin D, are safe to continue until surgery.

Herbal and Dietary Supplements

- Some herbal and dietary supplements may interact with your post-operative medication and may have the potential to thin your blood or affect wound healing. Therefore even if you're taking them without problems, some supplements can increase the risk of surgery.
- **STOP** herbal supplements, nutraceuticals and other non-prescription substances at least two weeks before surgery because serious interactions with anesthetic agents and other medications can occur. Examples include: Ephedra, Garlic, Ginkgo Biloba, Ginseng, Kava, St. John's Wort, Valerian, vitamin E, Fish oil, and many others.

Your Hospital Stay

What to Expect On Day of Surgery

Hospital Experience

Pre-op

- Patient registration
- IV inserted for fluids for surgery
- Speak with anesthesiologist and surgeon

Operating Room

- Continuous monitoring of your blood pressure, heart rate and breathing status.
- Surgery performed

PACU/Recovery Room

- Continuously monitor the effects of anesthesia, blood pressure, heart rate, breathing and pain

Post Surgery Care

- Bed exercises and up with staff
- Oral pain medications
- Physical therapy evaluation for safety
- Transition to healthy meals as tolerated
- Able to urinate on own
- Arrangement of home equipment/ care needs

Discharge

- Verbal and written instructions for discharge

The Day of Surgery

Pre-operative Admission Area

- It is important that you arrive at the requested time.
- You will meet with a staff member who will escort you to pre-operative area.
- Your family will wait in the surgical waiting area until you have completed the necessary pre-op steps before surgery.
- Once you are prepared for surgery, a family member may join you until you are taken to the operating room.
- Registration will verify your support person's contact information so your surgeon may call on completion of your surgery.
- Please leave your belongings and valuables with a family member or friend while you're in surgery and have them bring them to you once you are in the post surgery care unit or day of surgery lounge.
- Do not take any medications the day of surgery unless directed to do so by your physician.
- If your surgeon or anesthesiologist has instructed you to take your routine medications, please take them with a small sip of water.
- Only bring medications you are instructed to use by your nurse navigator in an original pharmacy bottle.
- Leave valuables and jewelry at home.
- Bring your dentures, hearing aids and/or eye glasses but note they will likely be removed prior to surgery.
- Remove contact lenses and wear eye glasses if needed.

Pre-operative Area

- Preparations for your surgery are completed in the pre-op room.
- Your anesthesiologist and or nurse will meet you here to review your chart, complete the physical examination and talk to you about the anesthesia plan and some medications that might be used. They will also discuss any concerns or questions you might have regarding anesthesia.
- An intravenous line will be started and you may receive some sedation.
- You will then be transferred to the Operating Room by a nurse.

Operating Room

When you arrive in the Operating Room you will be given an anesthetic. You will be positioned on a bed that is specially designed for hip or knee surgery, your surgical site will be scrubbed and the surgery will begin. After surgery you will be transferred by bed to the Post Anesthesia Care Unit (PACU).

Post Anesthesia Care Unit (PACU)

After surgery, you will be closely monitored until you are recovered from anesthesia in PACU. You may shiver or feel cool when you first wake up from surgery, this is very normal. You will be medicated for the shivering and warm blankets will be provided. You will be given pain medication as needed. When you are ready to leave the PACU, you will be transferred to the nursing unit or discharged home.

After Your Surgery

When you arrive on the nursing unit, a nurse will take your vital signs (blood pressure, pulse and respirations). These will be monitored until you are discharged from the hospital. Your nurse will check your extremities for numbness or tingling. The circulation in your extremities will also be monitored and you will be instructed to exercise your ankles and feet 10 times every hour while awake. These exercises are very important to help increase circulation and reduce the risk of blood clot formation in your legs. Your physician may also recommend "pump-activated" stockings to help improve your circulation. During your stay, the nurse will also check your surgical dressing.

Breathing Exercises

It is very important to exercise your lungs and you will be asked to perform deep-breathing exercises every hour in the immediate post-operative period. Deep-breathing exercises help to expand your lungs fully and prevent pneumonia and high fevers. You may be given a tool known as an incentive spirometer to help you expand your lungs and take deeper breaths. The spirometer will be placed at your bedside table and a nurse will instruct you in the proper use of this device. We encourage you to use this ten times an hour as instructed while awake.

Pain Management

Some pain is expected with any surgery, but our goal is to minimize your pain within your established goals for your comfort.

Safe and effective pain control

Safe pain control is the use of medication and other therapies to control pain with the least amount of side effects. Your surgical team will work with you to:

- Screen for current opioid use and risk for overuse
- Use alternatives to opioids whenever possible.
- Educate you about using the lowest dose of opioids for the shortest amount of time and safely getting rid of unused opioids

How does pain affect my recovery?

Severe, persistent pain can delay your recovery process. Our goal is to provide balanced pain control so that you can participate in physical therapy and activities that help return you to your best level of function and keep you moving.

What should I tell my doctor and nurse about my pain?

Any time you experience pain, inform your physician or registered nurse (RN) even if they don't ask you. They may ask you to describe how bad your pain is on a scale of 0 (zero) to 10 with 0 being no pain and 10 being the most severe pain you have ever had. They may use a scale, faces or descriptors when asking.

Why is it important to be asked about my pain level so frequently?

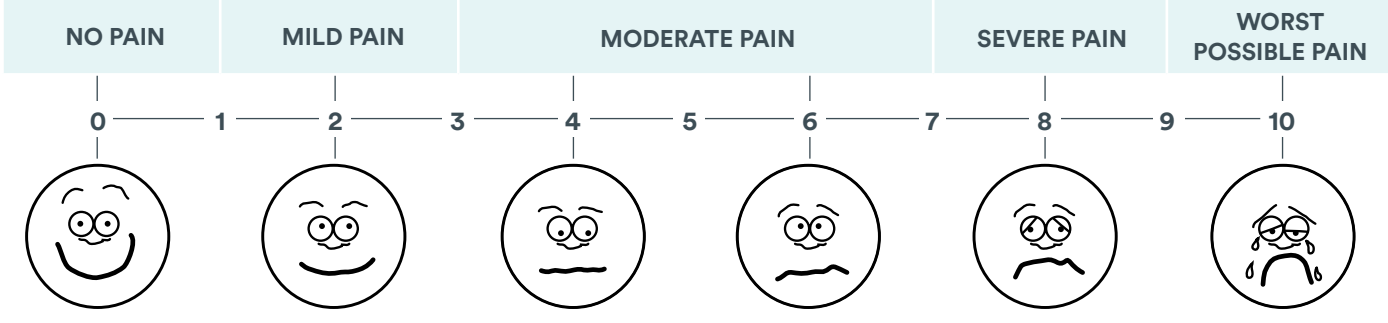
Expect to progress in your activity level. Your pain may change over time. Also, by following different activities, tests or procedures, we may learn that your pain medication may not be working effectively. It is important to report what makes your pain better or worse. The RN and physician will also be monitoring any untoward side effects of the pain medication to make sure you do not get overly sedated.

How can my pain be controlled?

Pain relief options are numerous and include a combination of therapies and medications such as non-opioids, anti-spasmotics, anti-inflammatories, or opioids. This is known as multi-modal pain management. Commonly administered opioids are oxycodone or hydrocodone-acetaminophen (Norco). There are also pain control methods that don't involve medicine, such as distraction, relaxation, repositioning, cold packs or massage.

What if my pain is still not controlled?

Some amount of pain or discomfort is expected after surgery. The RNs and physicians need your help to evaluate how the medicine is working. Inform them if you have pain that is not tolerable and/or in any location other than what you expected. There may be another modality or medication that may work better for you.



Why is there a limit to the number of opioid (narcotic) pain pills that my doctor can prescribe?

Due to the potential for opioid abuse, prescribers, such as surgeons, are required to adopt a safe prescribing practice for opioids. The number of opioid tablets or pills a physician may prescribe to a patient at one time is limited.

How long will I need to take opioids?

A clinical research study performed at Hoag Orthopedic Institute has provided us with insight regarding pain medication use after hip and knee replacement surgery.

Following total hip replacement surgery, the typical patient takes opioid pain medication for 5 - 7 days. The majority discontinue opioid use by two weeks postoperatively. 10% of patients do not take ANY opioid medication after discharge from the hospital.

Following total knee replacement surgery, the typical patient takes opioid pain medication for 17 days and the majority discontinue opioid use by 3 weeks postoperatively. 3% of patients do not take ANY opioid medication after discharge from the hospital.

How do I store opioids?

For the safe storage of opioids:

- Keep out of reach of children or pets
- Hide or lock up medications
- Keep your medication in its original container so you do not take it by mistake
- Keep track of the location and number of pills in the bottle

How to get rid of my leftover opioid medications?

You may receive a drug disposal packet at the time of your discharge. These packets allow patients and caregivers to dispose of opioid medications at home when they are no longer needed to reduce the risk of an adverse drug event. You may also speak to your pharmacist about how to discard your unused opioids or find more information at http://usdoj.gov.

Cold Therapy

Icing and cold therapy are great techniques to use to help control the pain after undergoing surgery.

After a joint replacement, swelling is expected. Swelling can cause increased pain and limit your range of motion, so taking steps to reduce the swelling is important. Continue using ice packs or some form of cold therapy to help reduce swelling.

Always have something light between your skin/dressing/incisional area and the ice pack or cold therapy.

Make sure you continue to use cold therapy throughout your recovery. You may find it especially helpful after working with physical therapy or exercising.

For knee replacement, you may use pillows to elevate; however, it's important to elevate the entire leg, down to the ankle. ***Never*** put a pillow only behind your knee so your knee is in a bent position. Your knee should be straight when elevated.

Fall Prevention Guidelines While in the Hospital

Each year, one out of three older adults in the United States experiences a fall. Hoag Orthopedic Institute (HOI) would like to partner with you to keep you safe during your recovery here and at home.

Unfortunately, many falls result in a serious injury, such as hip fractures and head trauma which may require a surgery to fix the injury. Even if additional surgery is not required, your recovery time may be significantly increased if you suffer a fall.

The increased risk for falls is due to many reasons, such as:

- New medications
- Decreased mobility
- Weakness
- Dizziness
- Confusion that was not expected

While hospitalized and during your recovery, the risk of a slip or fall increases.

Remember: HOI staff members are here to assist you and keep you safe. Let us be of service to you. Please call to have staff assist you to the restroom. If you are deemed unsafe to be left alone in the bathroom, a staff member will stay with you. Your safety is important.

Fall Prevention Education Video

Most falls happen in or on the way to or from the bathroom.

Because most hospital falls are related to toileting, please call staff to assist with going to the restroom, reaching for a urinal, wiping yourself after voiding or using the commode.

We request that even patients who have been released for walking by the physical therapist please use the call button. Let the nursing staff know that you want to get up and allow us to be of assistance to you.

Also, if you have a recommended assistive device such as a walker, cane, or crutches, you should use the device each time you get out of bed, walk in the room or hallway, or transfer to and from a chair or commode and toilet. This will help support you and improve your balance.

Call, Don't Fall Program at HOI

During your recovery, the risk of a slip or fall increases due to the recent surgery and pain medication. We encourage you and your family to watch the educational video on your in-room television to learn more about how to prevent a fall. If you have any questions or comments please let us know.

Discharge
Home

Day of Discharge:
Patient Discharge Checklist

Please review all items below before discharge.

☐ I have my prescriptions for my new home medications.

☐ I understand what my medications are, possible side effects and how to use them safely.

☐ I understand the reason for my anticoagulation (blood thinning) medication.

- Aspirin
- Eliquis
- Coumadin, if taking prior to hospitalization
- Lovenox
- Xarelto
- Other: _____

☐ I understand the signs and symptoms of blood clots and pulmonary embolus.

☐ I understand when I should notify my doctor.

☐ I know when to see the doctor for a follow-up appointment. Date: _____

☐ I know when I can shower.

☐ I know when I can drive.

☐ I know the arrangements for my home equipment.

☐ I know my physical therapy arrangements if needed.

☐ I know how to care for my incision and dressings.

☐ I know my home exercises and level of activity.

☐ I know my hip precautions if needed.

☐ I have collected all of my belongings (Phone chargers, ipads, equipment, home medications).

☐ I have watched the discharge video.

☐ I understand when to resume my regular home medications.

Our Hoag Orthopedic Institute team will work carefully with you to plan for your discharge home. Prior to your discharge from the hospital, the care manager will obtain information from your physician and therapist on your discharge therapy needs. The following are general guidelines. They are helpful suggestions to make your recovery safe and comfortable.

Advantages of Discharge to Home

Studies have found that patients who discharge home following their hospitalizations do better when they return to their own environment to heal. They face lower risks for infection, medical complications, and hospital readmissions. You will be able to rest comfortably and get back into your daily routine quicker.

Planning

You may need some assistance during the first few weeks with cooking, bathing, housekeeping, shopping and running errands. Make arrangements for a caregiver, spouse, friend or family member who can stay with you for at least 3 days. If you do not have any support members available, consider hiring a caregiver privately to assist with these needs. Caregivers are typically not a covered benefit under insurance. For those who live alone, we understand the challenges that come with limited support after surgery. Please contact our department to connect with possible community resources or visit www.hoagorthopedicinstitute.com for further information under Patient Resources.

Physical Therapy

Prior to leaving the hospital, a care manager will visit you to arrange for home physical therapy if needed. Alternatively, you may be referred to outpatient physical therapy at the time of discharge or after you have completed your home therapy. This will provide access to more advanced equipment and activities which will assist you in regaining full strength and mobility. Your surgeon's office can help you coordinate outpatient therapy if needed.

Skilled Nursing Facility

Skilled nursing facilities are not recommended unless it is medically necessary. Your care manager will assist in coordinating a transfer to a contracted facility. Acceptance to a skilled nursing facility is not guaranteed and is subject to insurance authorization as well as bed availability. Please contact the Care Management department for further details if needed.

Equipment

Care Managers may assist with ordering basic medical equipment such as walkers. Other optional equipment such as raised toilet seats, commodes and hospital beds are not readily dispensed upon discharge and may be subject to insurance authorization if needed.

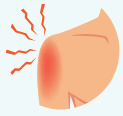
Care Management Department: 949-727-5439

Caregiver Guidelines

As a caregiver, your role is important for helping your family member or friend recover from joint replacement surgery. When at home, there are a variety of things you need to know for their safety, recovery, and comfort. This information will help you with some of the many questions and concerns as you prepare to care for your joint replacement patient.

- View important education material with your family member/friend prior to their surgery.
- Read your family member/friend's discharge instructions to help them follow their recovery guidelines and know when to notify the surgeon.
- Observe physical therapy sessions, be able to safely assist the patient, and support home exercise program.
- Help to organize medications to control pain and inflammation.
- Offer gentle reminders of post-operative precautions.
- Assist with transportation to get to the doctor's office or to physical therapy.
- Prepare meals and help with pet care or other household chores.
- Keep your family member/friend on a strong routine of icing, elevation, light activity, and rest.
- Help them to elevate their surgical leg for short periods throughout the day by lying down and raising the leg above heart level.
- Help with managing an assistive device such as a walker.
- Offer encouragement and motivation to stay focused on the long-term goals and ensure a positive outcome.
- Ensure you are taking care of yourself too. Have other family members or friends stop by, spend time with the patient, or drop off food to give you time to rest.

Medications During My Stay

MEDICATION NAME Generic (Brand)	PURPOSE This medication is used...	SIDE EFFECTS Watch for these possible side effects...
PAIN MEDICATIONS		
○ Ultram (Tramadol) ○ Hydrocodone/Acetaminophen (Norco, Vicodin) ○ Hydromorphone (Dilaudid) ○ Ketorolac (Toradol) ○ Morphine (Duramorph, Kadian) ○ Oxycodone (OxyIR, Roxicodone) ○ Oxycodone/Acetaminophen (Percocet) ○ Oxycontin	 For moderate to severe pain	• Drowsiness • Constipation • Nausea/Vomiting • Itching • Confusion
○ Toradol (Ketorolac) ○ Ibuprofen (Motrin, Advil) ○ Meloxicam (Mobic) ○ Celebrex (Celecoxib)	 For mild to moderate pain and to decrease swelling	• Stomach upset • Impaired kidney function
○ Cyclobenzaprine (Flexeril) ○ Baclofen (Lioresal) ○ Methocarbamol (Robaxin) ○ Soma (Carisoprodol) ○ Zanaflex (Tizanidine)	 For muscle relaxation and pain	• Dizziness • Fatigue • Drowsiness • Headache
ANTICOAGULANTS		
○ Apixaban (Eliquis) ○ Aspirin (Bayer Aspirin) ○ Clopidogrel (Plavix) ○ Enoxaparin (Lovenox) ○ Rivaroxoban (Xarelto) ○ Warfarin (Coumadin)	 To thin blood and prevent blood clots	• Risk for bleeding • Bruising • Stomach upset
GASTROINTESTINAL		
○ Bisacodyl (Biscolax, Dulcolax) ○ Docusate sodium (Colace) ○ Polyethylene Glycol 3350 (Miralax) ○ Sennoside (Senna)	 For constipation	• Nausea • Cramping • Gas • Diarrhea
○ Famotidine (Pepcid) ○ Magnesium hydroxide (Milk of Magnesia) ○ Pantoprazole (Protonix) ○ Prilosec (Omeprazde)	 For heartburn or reflux For gas (Simethicone)	• Nausea • Cramping • Diarrhea • Gas
○ Metoclopramide (Reglan) ○ Ondansetron (Zofran) ○ Prochlorperazine (Compazine) ○ Scopalamine Patch	 For nausea	• Drowsiness • Dizziness • Headache

*Before Surgery, your nurse and anesthesiologist will review your pre-operative medication's side effects with you, but because of side effects, you may not remember. Your nurse will review these side effects again at the time of your discharge.

How to Manage Your Pain – Joint

The key to managing your pain is to relax, decrease swelling, and reduce pain by using the following medications if needed. This is a guide to help manage your pain after surgery. Some medications may or may not be prescribed to you. Follow the guide below.

1. Select your pain level
2. Under the level selected, take only prescribed medications as instructed
3. Re-evaluate your pain and adjust the medications as needed

MILD	MODERATE	SEVERE
TYLENOL (acetaminophen)	TYLENOL (acetaminophen)	TYLENOL (acetaminophen)
+	+	+
CELEBREX (celecoxib) **or** TORADOL (ketorolac) **or** MOBIC (meloxicam) **or** _____	CELEBREX (celecoxib) **or** TORADOL (ketorolac) **or** MOBIC (meloxicam) **or** _____	CELEBREX (celecoxib) **or** TORADOL (ketorolac) **or** MOBIC (meloxicam) **or** _____
+	+	+
Comfort Measures	LIORESAL (baclofen) **or** FLEXERIL (cyclobenzaprine hydrochloride) **or** ZANAFLEX (tizanidine) **or** SOMA (carisoprodol) **or** ROBAXIN (methocarbamol)	LIORESAL (baclofen) **or** FLEXERIL (cyclobenzaprine hydrochloride) **or** ZANAFLEX (tizanidine) **or** SOMA (carisoprodol) **or** ROBAXIN (methocarbamol)
	+	+
	ULTRAM (tramadol)	ULTRAM (tramadol) **or** ROXICODONE (oxycodone) **or** PERCOCET (oxycodone with acetaminophen) **or** NORCO (acetaminophen and hydrocodone)
	+	+
	Comfort Measures	Comfort Measures

Comfort Measures:
To support healing and pain management, use these comfort measures to help you explore various ways you can manage your pain.

- Rest
- Ice
- Elevation
- Relaxing Music
- Pray/Meditate
- Walk

Non-Opioid Pain Medications

Depending on your pain level, use these regularly around the clock, and/or all together.

Opioid Pain Medications

- Opioids are effective for treating pain but also have a risk for addiction and abuse.
- A few side effects of opioid use include constipation, over-sedation and nausea/vomiting.
- Use these for moderate to severe pain OR prior to physical therapy.
- Minimize use and stop as soon as you are able.

CAUTION: Over sedation may occur if pain medication, sleep aids and muscle relaxants are taken together. In addition, do not consume alcohol while taking these medications.

How to Manage Nausea and Vomiting

Nausea is the feeling of being queasy or sick to your stomach. It may happen with or without vomiting. Nausea may be caused by your anesthesia or may be a side effect of medication. 30% of patients may still experience symptoms that can last up to 48 hours after surgery.

Treatment Options

The best treatment for nausea or vomiting will depend on what is causing the problem.

- If you have nausea due to anesthesia, you may need to take prescription anti-nausea medication on a certain schedule to control your symptoms and better tolerate meals and specific foods.
- If your nausea is a side effect of medications or supplements, you may feel better when you take it with food instead of on an empty stomach, or when you make other changes to your eating or medication plan.
- If one anti-nausea treatment does not work for you, another one might. Your health care team can help you find a treatment that makes you feel better.

CAUTION: Seek immediate medical care if you cannot take care of yourself, cannot stop vomiting, see blood in your vomit or cannot keep liquids down.

Tips for Managing Nausea and Vomiting

- Having food in your stomach will help lesson stomach irritations. Eat before taking medications!
- Eat small meals throughout the day instead of 3 large meals and stay hydrated.
- Try eating dry, starchy, salty, or bland foods. Avoid fatty, greasy, or spicy foods.
- Suck on hard, tart candies (like sugar-free lemon drops) to relieve nausea and freshen your mouth. Try ginger candies or ginger root tea, which may help to decrease nausea.

Food Choices for Periods of Nausea and Vomiting

Use the list below to choose foods for times when you have nausea and vomiting. This is only a guide.

FOODS	LIQUIDS
Dry toast	Clear, high-calorie, high-protein nutritional drinks
Saltine or soda crackers	Apple, cranberry or grape juice
White rice, potatoes, noodles	Ginger ale
Pretzels	Non-carbonated drinks, such as fruit punch or sports drinks
Bread	Ginger tea or chamomile tea
Bananas	Ice pops, popsicles, or sherbert
Applesauce	Bouillon or broth

Other Common Issues After Surgery

Constipation

Constipation is common after surgery due to many reasons including use of opioids, decreased activity, changes in diet, electrolyte imbalances, and general anesthesia. Constipation treatments should include drinking plenty of water and adding appropriate fiber in your diet. Also, increasing your activity to your tolerance is a way to get your bowels moving after surgery. Lastly, you should also use the stool softener prescribed by your health care provider. This is important to take as long as you are taking opioids. If severe constipation is present, you may need an additional stimulant laxative or suppository to produce a bowel movement.

Low grade temperature

A low grade fever (99 -100.5 degrees F) after surgery is one of the most common complications that patients face. In fact, over half of all surgery patients will have a higher than normal temperature in the days following their procedure, for various reasons. Unless the temperature is over 102°F, you should not be concerned. Seek medical attention if your fever is accompanied by symptoms such as chills, body aches, sudden nausea/vomiting, an unexplained increase in pain, disorientation, shortness of breath, drainage or angry redness around your incision, or any other condition that suggests that your recovery is not going as planned. A fever greater than 102°F in an adult may be high enough to warrant a trip to the emergency room. Notify your surgeon of any high fever with symptoms.

Bruising

Bruising may occur 3 - 5 days after surgery. The slow oozing of blood into the surgical area works its way to the surface causing bruising. The bruising will usually be re-absorbed by the body within two weeks.

Swelling

It is common for your surgical area/leg to become swollen. However, control of the swelling will improve pain management, enhance circulation, and reduce the risk of developing a blood clot. The best method for controlling swelling is the use of ice and elevation of your surgical leg. Apply cold therapy or gel packs in increments of 20 minutes several times a day, and also elevate your surgical extremity higher than heart level in increments of 30 minutes 2-3 times a day.

Frequent urination/difficulty urinating

You may experience frequent urination after you are discharged home. This is common and is just the way your body removes the extra fluids you have accumulated during and after surgery. Male patients are more likely to experience difficulty urinating. If this becomes problematic, contact your physician.

Drainage

You may experience some drainage after the drain is removed in the hospital. The site may ooze or drain some bloody discharge for up to 72 hours after the drain is discontinued. Reinforce or replace the dressing to the drain site after washing your hands, as instructed.

Emotional letdown

It is common to feel a little “down” a few days after surgery. This may last for a few hours or a few days.

Sleep disturbance

Some patients experience disrupted sleep patterns for several weeks after surgery. Pain may seem more intense at night and disturb your sleep. Taking a pain pill before bedtime may help. If you are resting or napping during the daytime hours, you may have a lower sleep requirement at night.

Endurance

A loss of endurance and stamina occurs in almost every patient to some degree. Usually after about two weeks post surgery, you are able to start increasing your activities and walking further distances

Lack of concentration

You may have difficulty concentrating for up to several weeks after surgery. This may be caused by the anesthesia, side effects of medications, or from pain. It is a common occurrence that will subside in time.

Recovery period

It takes most patients three to five months to regain their strength and energy after total joint replacement surgery. You should see continued improvement throughout this period. Refer to your exercise plan and perform the exercises as often as your physician and physical therapist recommend. Your physician may also recommend outpatient physical therapy.

While you’re encouraged to get around as much as you’re able after surgery, walking or other activities are not a substitute for your exercises.

The sooner you become active, the sooner you will get back to normal. But, you also need to protect your new joint so it can heal. Plan rest periods frequently throughout the day.

REMEMBER: DO NOT overdo your activities.

Post Surgery Diet

Your post-surgery diet should include foods that can make it possible for a successful recovery and can help ***You Get Back to You***.

Surgery increases the body's needs for calories and for nutrients needed for healing.

- **Eat balanced meals.** Focus on eating for strength and recovery.
- **Continue to eat enough protein.** Consume high quality protein foods at each meal to help support your muscles, aid in wound healing, and keeps your immune system strong. Protein is found in many food sources: meat, fish, eggs, poultry, nuts, dairy products, soy products, and cooked dried beans. If you have no appetite, try eating small amounts of low fat cheese or cottage cheese, yogurt, and plain baked chicken as these are usually well tolerated in the early days after surgery. Vegetarians can get high quality protein from soy-based foods, beans and legumes.
- **Vitamin C and Zinc helps heal wounds.** While all nutrients are important for healing, vitamin C and zinc are superstars.

  Vitamin C is needed to make a protein called collagen and is needed to repair tendons, ligaments, and healing surgical wounds. Get vitamin C from citrus fruits, green and red peppers, collard greens, broccoli, spinach, strawberries, tomatoes and baked potatoes.

  Zinc is a mineral found mostly in animal foods like meat, fish, poultry, and dairy foods, as well as whole grain bread and cereals, dried beans and legumes, and nuts and seeds.
- **Include fiber and fluids.** Pain medications commonly prescribed after surgery can cause constipation. Whole grains, fruits, vegetables, beans, legumes, nuts and seeds are some examples of fiber-rich foods. Prunes or prune juice (along with drinking plenty of water) have a natural laxative effect that can help alleviate constipation. Drink at least 6-8 cups of fluid per day; however you may need more or less depending on individual needs.
- **Eat enough iron-rich foods.** Because the body loses iron when bleeding, it's important to eat adequate amounts of lean red meat, poultry, fish, iron-fortified cereals, legumes, dark leafy greens and dried fruit. Iron is essential because it supplies oxygen to the muscle of the body. To enhance iron absorption, iron rich foods should be eaten with vitamin C rich foods.
- **Calcium and vitamin D.** Since your surgery involves the bone, be sure to get adequate amounts of calcium and vitamin D.

  Calcium is an important component of bone. It is a mineral that is not made in the body and our bones continuously lose small amounts of it. Dairy foods like milk, cheese, and yogurt are often sources we think of first, but consider calcium-fortified juices, spinach and kale.

  Vitamin D is an important vitamin for the bones. It ensures we can absorb calcium from the food we eat. Several food sources are: fortified orange juice, almond milk, and fatty fish. The sunlight is the best source.
- **Include nutrient-rich drinks/shakes.** You may lose your appetite after surgery and while taking certain medications. Oral nutritional supplements can help you get enough nutrients and calories.

Exercises and Activities

Post-surgical Precautions

Whether you've had hip or knee replacement surgery, the following precautions may be necessary.

Mobility

- You may need to use a walker, cane or crutches for the first 2-12 weeks following surgery.
- For three months after your surgery, be careful about leg movements and how you position your leg. Your physician or therapist will give you guidance about what you can and cannot do.
- When going up stairs, raise the unaffected leg, then the affected leg, and then your crutches/cane.
  (Remember: UP WITH THE GOOD!)
- When going down the stairs, lower the device (crutches/cane) first, then the affected leg, and then the unaffected leg. (Remember: DOWN WITH THE BAD!)
- When traveling by car, have the car seat pushed back before getting in. Use a firm cushion to raise the seat height. Follow the instructions given by your therapist when entering and exiting a car.
- We recommend that you consult with your physician before driving yourself.

Sitting and Lying Down

- Do not sit on low chairs, low stools or low toilet seats. Use a firm cushion as necessary to raise the height of the chair seat.
- Only sit in chairs that have arms. When you get up from a chair, move to the edge and use the chair arms to help you stand up. Place your affected leg in front. Then push up from behind with the good leg, still keeping the affected leg in front as you stand.

In the Bathroom

- A high-rise toilet is suggested for your use.
- A walk-in shower with a rubber non-slip mat and safety-grab bar is highly suggested. Do NOT sit in the tub.
- Use a long-handled sponge and a hand held shower hose to wash and rinse those hard-to-reach places!
- To dry off your feet, use a towel wrapped around a reacher or long-handled shoe horn.

Other

- You may participate in sports activities ONLY after your physician has given approval to do so. Avoid any activity that involves start-stop, twisting or impact stress, excessive bending, lifting or pushing heavy objects.
- Avoid gaining excessive weight.

Exercises: Pre-surgery and Early Stage of Rehab for Hip and Knee

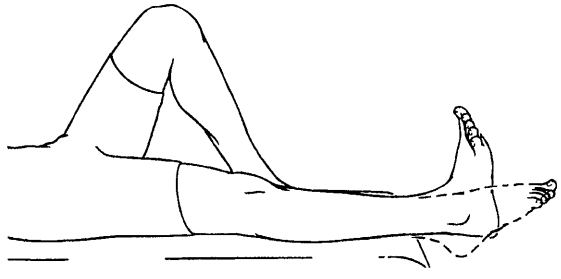
Pre-Operative Exercises: Prior to surgery, initiate exercises as tolerated to prepare for surgery. Practicing exercises prior to surgery will prepare you mentally and physically for the exercises to be done post-surgery.

Early Stage of Rehab: The goal is to reduce pain and swelling. Gentle contraction of muscles will increase circulation to remove waste products and bring in healthy nutrients to repair tissue. Decreased pain and swelling will improve muscle control and increase mobility.

1 ANKLE PUMPS

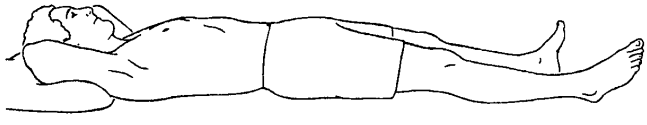
Gently flex and extend ankle through full range of motion.

Perform 10 repetitions per hour during waking hours.



2 GLUTEAL SQUEEZE

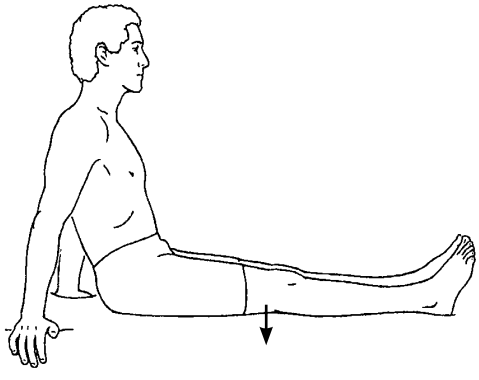
Tighten buttock muscles gently and hold 5 seconds. Perform 3 sets of 10 repetitions per day (i.e., 10 repetitions after breakfast, lunch and dinner).



3 QUAD SET

Gently tighten muscles on top of thigh by pushing knee down into surface. Hold 5 seconds.

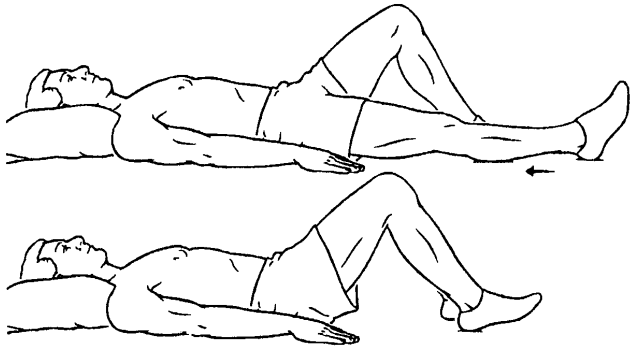
Perform 3 sets of 10 repetitions per day (i.e., 10 repetitions after breakfast, lunch and dinner).



4 HEEL SLIDE

Gently slide heel toward buttocks without causing increased pain. Return to starting position and repeat.

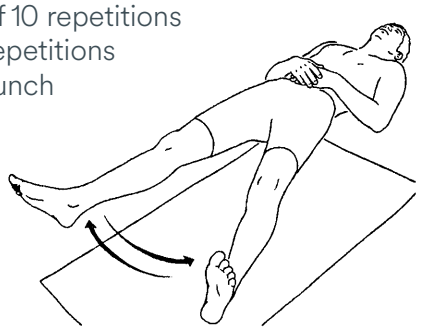
Perform 3 sets of 10 repetitions per day (i.e., 10 repetitions after breakfast, lunch and dinner).



5 HIP ABDUCTION AND ADDUCTION

With knee straight, gently bring surgical leg out to side and return to starting midline position.

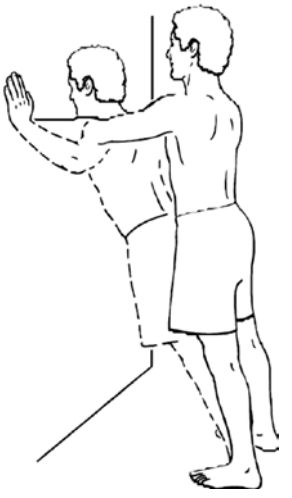
Perform 3 sets of 10 repetitions per day (i.e., 10 repetitions after breakfast, lunch and dinner).



6 WALL PUSH-UP

Gently lean on wall with arms slightly wider apart than shoulder width. Position feet comfortable distance from wall. Gently lean into wall. Then push-up away from wall.

Perform 10 repetitions 3 sets per day (i.e., 10 repetitions after breakfast, lunch and dinner) for 2-3 sets per week.

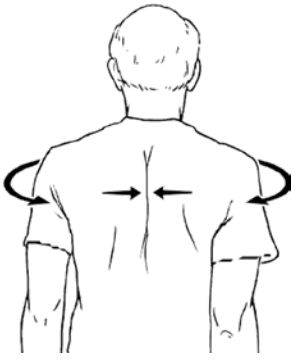


7 SHOULDER BLADE PINCH

Pull arms back, pinching shoulder blades together. Hold 5 seconds.

Relax.

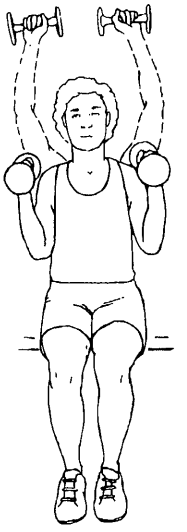
Perform 10 repetitions 3 sets per day (i.e., 10 repetitions after breakfast, lunch and dinner).



8 SHOULDER PRESS

Reach arms overhead straightening elbows (perform holding comfortable weight without causing pain). Return to starting position and repeat. You may substitute bottle of water or soup cans for weights.

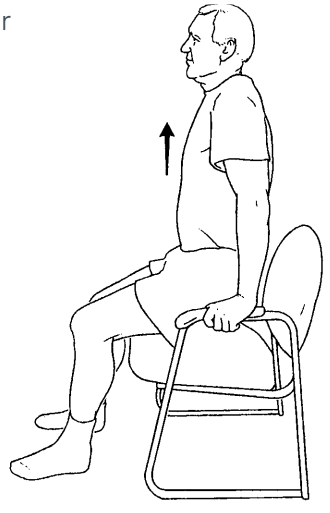
Perform 10 repetitions 3 sets per day (i.e., 10 repetitions after breakfast, lunch and dinner) for 2-3 sets per week.



9 ARM CHAIR PUSH-UP

Put hands on arms of chair and push body up out of chair. Return to starting position.

Perform 10 repetitions 3 sets per day (i.e., 10 repetitions after breakfast, lunch and dinner) for 2-3 times per week.



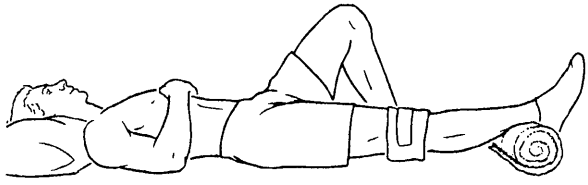
Exercises: Additional Progression for Total Knee Replacement

Goal: to increase range of motion and improve muscle control through the entire range of the joint.

A home exercise program is beneficial after total knee replacement when pain is managed and activities do not cause prolonged increased pain or swelling from baseline (i.e., use pain and swelling as your guide).

1 KNEE EXTENSION MOBILIZATION WITH TOWEL PROP

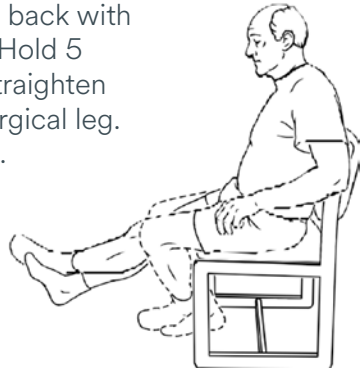
When resting in bed, place rolled towel under the ankle. When sitting, elevate and maintain straight knee (i.e., rest lower extremity on coffee table or ottoman).



2 ASSISTED KNEE FLEXION AND EXTENSION

Gently push surgical leg back with non-surgical leg. Relax. Hold 5 seconds. Then, gently straighten surgical leg with non-surgical leg. Hold 5 seconds. Repeat.

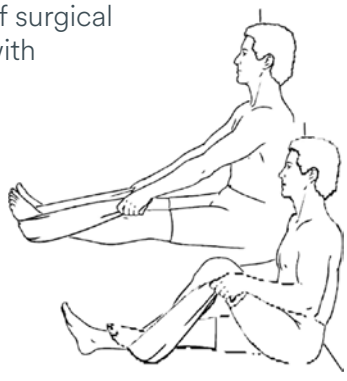
Perform 3 sets of 10 repetitions per day (i.e.,10 repetitions after breakfast, lunch and dinner).



3 ASSISTED KNEE FLEXION

With towel around foot of surgical leg, gently pull knee up with towel until gentle stretch is felt. Hold 5 seconds. Return to starting position and repeat.

Perform 10 repetitions 3 times per day (i.e., 10 repetitions after breakfast, lunch and dinner).



4 HAMSTRING STRETCH

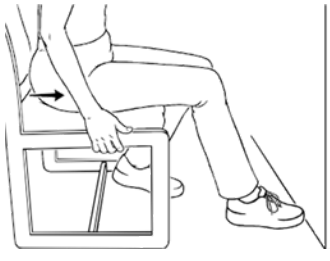
Grasp surgical leg behind thigh and slowly straighten knee until gentle stretch is felt behind thigh. Hold 60 seconds.

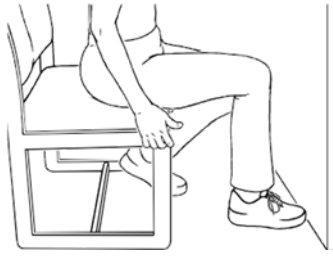
Perform 3 times per day (i.e., after breakfast, lunch and dinner).

5 KNEE FLEXION

Sit in chair and bend surgical knee until gentle stretch is felt. Keep foot in place and scoot buttock forward to increase stretch as tolerated. Hold 5 seconds. Return to starting position and repeat.

Perform 3 sets of 10 repetitions per day (i.e., 10 repetitions after breakfast, lunch and dinner).





Exercises: Advanced Stage of Rehab for Hip and Knee

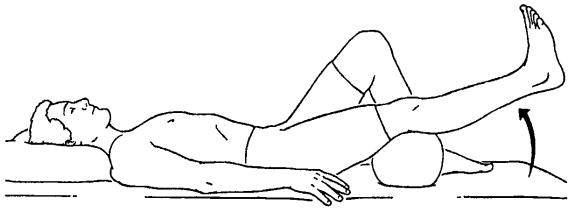
Goal: to improve muscle control, muscle strength and flexibility.

Progress your home exercise program to the advanced stage of rehab when appropriate. Increased strength and flexibility will improve your ability to perform recreational activities and activities of daily living.

1 KNEE EXTENSION

With surgical leg: rest leg over bolster, straighten knee by tightening muscles on top of thigh. Keep back of knee on the bolster. Return to starting position and repeat.

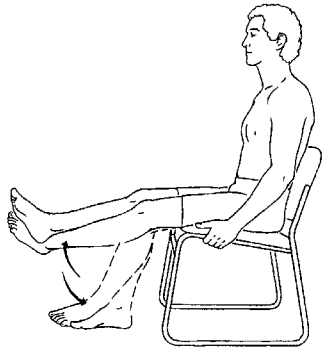
Perform 3 sets of 10 repetitions per day (i.e., 10 repetitions after breakfast, lunch and dinner).



2 LONG ARC QUAD

Straighten surgical leg and hold it 5 seconds. Return to starting position and repeat.

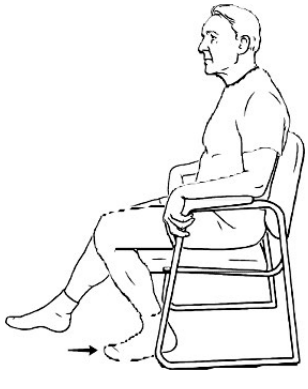
Perform 3 sets of 10 repetitions per day (i.e., 10 repetitions after breakfast, lunch and dinner) for 2-3 times per week.



3 KNEE FLEXION

Keeping feet on floor, slide foot of surgical leg back, bending knee until gentle stretch is felt and hold 5 seconds. Return to starting position and repeat.

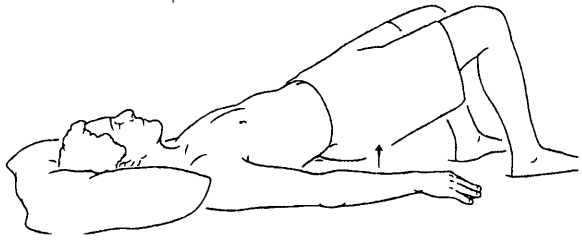
Perform 3 sets of 10 repetitions per day (i.e., 10 repetitions after breakfast, lunch and dinner).



4 BRIDGING

Slowly raise buttocks from floor, keeping stomach tight. Return to starting positioning and repeat.

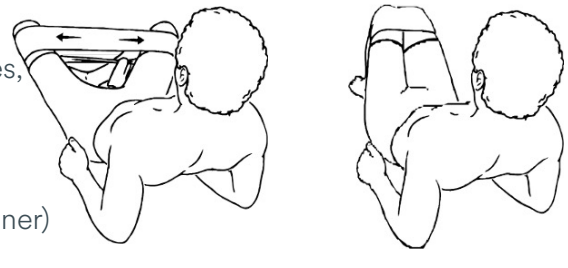
Perform 3 sets of 10 repetitions per day (i.e., 10 repetitions after breakfast, lunch and dinner) for 2-3 times per week.



5 RESISTED HIP ABDUCTION

With band looped around both legs above knees, push thighs apart. Return to starting position and repeat.

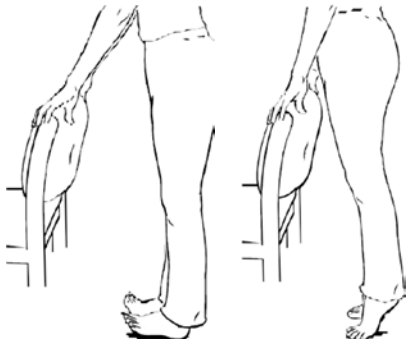
Perform 3 sets of 10 repetitions per day (i.e., 10 repetitions after breakfast, lunch and dinner) for 2-3 times per week.



6 HEEL RAISES AND TOE RAISES

Holding stable surface for safety. Gently raise heels rising up on toes, then roll back on heels and lift toes.

Perform 3 sets of 10 repetitions per day (rest at least 1 minute between sets) for 2-3 times per week.



7 HIP EXTENSION

(DO NOT PERFORM AFTER ANTERIOR TOTAL HIP REPLACEMENT)

Hold onto stable surface for safety. Stand up tall and slowly extend one leg back, keeping knee straight. Do not lean forward.

Repeat other leg.

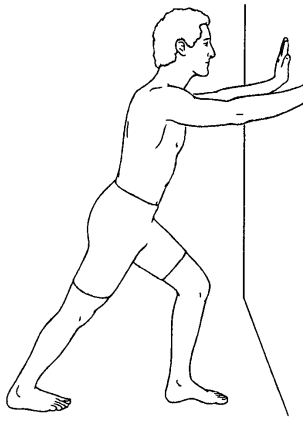
Perform 3 sets of 10 repetitions per day (rest at least 1 minute between sets) for 2-3 times per week.

8 CALF STRETCH

Hold onto stable surface for safety. Place one leg forward with knee bent, other leg behind and straight.

Shift body weight to front leg, keeping back heel flat, until gentle stretch is felt in calf. Hold 30 seconds.

Perform 3 times per day (i.e., after breakfast, lunch and dinner).



9 HIP ABDUCTION

Hold onto stable surface for safety. Stand up tall and lift leg out to side. Donot lean to side. Return to starting position and repeat.

Perform 3 sets of 10 repetitions per day (i.e., 10 repetitions after breakfast, lunch and dinner) for 2-3 times per week.

10 ALTERNATING STEP

Hold onto stable surface for safety. Stand up tall and take alternating steps.

Perform 3 sets of 10 repetitions per day (rest at least 1 minute between sets) for 2-3 times per week.

11 SQUATS

Hold onto stable surface for safety. Keeping feet flat on floor, shoulder width apart, squat as low as is comfortable.

Perform 3 sets of 10 repetitions per day (i.e., 10 repetitions after breakfast, lunch and dinner) for 2-3 times per week.

Home Activities

The purpose of these exercises and activity training is to teach you to change your clothing and get in and out of chairs, showers and commodes safely while your hip or knee is sore or less able to bend.

Slacks and Underwear

Keep clothing loose and comfortable. It may be easier to use slip on shoes. Dress the surgical leg first. If you can't reach – a reacher may make it easier. Stand with walker and pull pants over hips.

When undressing, stand with the walker in front of you and pull down pants and underwear. Sit in a chair and use a reacher to remove pants from legs if needed. Remove non-surgical leg first.

For Posterior Hip Precautions Only: Keep legs apart and do not bend past 90 degrees.

Socks

If you are unable or instructed not to reach to your feet to put on socks, you may use a sock aid to put on socks. Slide the sock on the sock aid. Make sure the heel is at the bottom of the device and the toe is tight up against the end. The top of the sock should not come over the top of the plastic piece. Holding onto the cords, swing the sock aid out in front of the foot of the operative leg. Slip your foot into the sock aid, pull up on the cord, sliding sock onto foot. You may put the sock on your non-surgical leg in your usual manner. To take the socks off, use the pin at the end of the reacher to hook the back of the heel and push the sock off you.

Shoes

Wear closed-toed slip-on shoes or use elastic shoelaces so you won't have to bend over to put the shoes on or tie the laces. Use a long-handled shoehorn to put on your shoes if needed.

Sitting on Chair/Toilet

When sitting down, slowly back up to the chair or toilet until you feel the back of your legs against it. Slide your surgical leg forward, then reach back for the chair one hand at a time. Slowly lower yourself onto the chair while looking in front of you and keeping the surgical leg outstretched in front of you. Do not hold onto the walker while lowering yourself.

For Posterior Hip Precautions Only: Keep legs apart and do not bend past 90 degrees.

Home/Work Management

Slide objects along the countertop rather than carrying them. Use a reacher to reach objects on the floor. If you cannot use adaptive aids (long reachers, long-handled mop, long-handled dustpan, etc.) have someone else do chores for you. Consider using a bag/tray to manage carrying items with a front wheel walker safely.

For patients with posterior hip precautions: You must always maintain the 90-degree forward bend precaution. Do not bend down to pick up objects.

Shower Transfer

If you cannot safely stand in a shower or have to climb into a tub in order to shower, please consult your therapist. Sidestep into shower, holding onto wall for support. Be sure you are stepping onto a non-slip surface (i.e., bath mat, non slip strips, etc.). Reach back with one hand for the back of the shower chair. Sit down on the shower chair. Use a long-handled sponge and a shower hose to wash. You may bathe or shower as soon as your physician gives you permission.

Recovery Timeline After a Joint Replacement Surgery

TIMELINE	GOAL	WHAT TO EXPECT AT THIS STAGE
Day 1	Most patients are discharged home on the same day as their surgery. Some patients may stay overnight in the hospital if necessary.	• Rehabilitation may begin shortly after you wake up from surgery. • A physical therapist will provide education on standing/walking with an assistive device, getting in/out of bed and a car, navigating stairs, home exercises, and activity restrictions. • An occupational therapist may help you with tasks such as dressing, bathing, and toileting if appropriate. • Taking pain medications as directed. • Using ice packs and elevating your leg regularly. • May experience loss of appetite. Eat frequent small portions and drink plenty of fluids.
Week 1	Your daily routine will include exercises at home focusing on restoring normal walking pattern, range of motion, and strength of operative leg(s).	• Gait training to restore your walking pattern. • Progression to a cane or no assistive device. • Increasing your range of motion. • Starting to regain strength. • Navigating stairs. • Increase activity level with periods of rest. • Taking pain medications as directed. • Using ice packs and elevating your leg regularly. • Showering and dressing with minimal to no assistance. • Supplementing your diet with oral nutrition supplements if you experience a loss of appetite and drinking plenty of fluids. • Strictly following your bowel regimen (stool softeners) to avoid constipation.
Weeks 2-3	You will continue doing exercises to improve your mobility and range of motion.	• Progress frequency and duration of walking/activity. • Progression to cane or no assistive device. • Showering and dressing without assistance. • Reduction of pain medication. • May stop stool softener if no longer taking opioids.
Weeks 4-6	You will continue regaining your independence and returning to daily activities.	• Continuing rehab to increase strength, improve mobility, and progress endurance training. • Progress duration of walks. • Return to daily activities like work, driving, travel, and household tasks. • Notice diminished swelling and inflammation. • Continue taking acetaminophen as directed. • May stop taking stool softeners.

Sex After Joint Replacement

By having joint replacement surgery, you're one step closer to a life with less pain and more freedom. Many activities will be easier – including sex. With your new hip or knee, sex may be more comfortable and enjoyable. But until your new joint has fully healed, you need to protect it.

After joint replacement surgery, certain positions will be more comfortable and safer than others. If you had a hip replaced, you may need to take special care not to dislocate (pop out) your new joint. Your surgeon may have given you movement precautions. If so, follow these during sex. No matter which joint you had replaced, share this information with your partner.

Don't have sex until your surgeon says it's okay. Many people are told to wait at least 4 to 6 weeks after surgery. When the time comes, sex may take a bit more planning than before. Here are some tips:

- Choose a time when neither of you are tired nor stressed. Try to stay relaxed, and keep a sense of humor if things don't go exactly as planned.
- Don't be embarrassed to tell your partner if a certain position doesn't feel good. As your body heals, sex will get easier.
- Keep in mind that there is more to sex than intercourse. If intercourse isn't working right away, explore other ways to be close to your partner.
- Bring extra pillows or rolled-up towels into the room. You can use these for your body support as you try different positions.
- Do a few easy stretches to help your muscles be ready. (You can ask your partner to help). If your surgeon has given you movement guidelines to follow, only do stretches that meet these restrictions.
- Remember that your body is still healing from major surgery. Don't push yourself to do anything you don't feel ready for. Always let your partner take the active role at first.

Protect Your New Joint

Until fully healed, and with permission from your surgeon, people who had joint replacement should follow these general safety precautions during sex:

- Resume sexual intercourse initially with YOU on your back.
- Initially you should assume a more passive role.
- Avoid extremes of motion or positions.

If you have a new knee

Any position where you lie on your back or stand up should safe. Listen to your body and avoid painful movements. Also:

- When lying on your side, put a pillow between your legs to support your new knee joint.
- Avoid kneeling or squatting positions.
- Try not to twist your operated knee.

If you have a new hip (posterior approach)

Unless your surgeon says otherwise, use these precautions:

- Don't turn your operated leg inward or let it cross the center of your body.
- Don't bend at the waist more than 90 degrees. Also, don't raise your knee past hip level.
- Don't turn your knees inward. Prevent this by putting pillows between your legs when kneeling or side lying.
- Don't plant your foot and twist your upper body outward over the hip.

If you have a new hip (anterior approach)

Unless your surgeon otherwise, use these precautions:

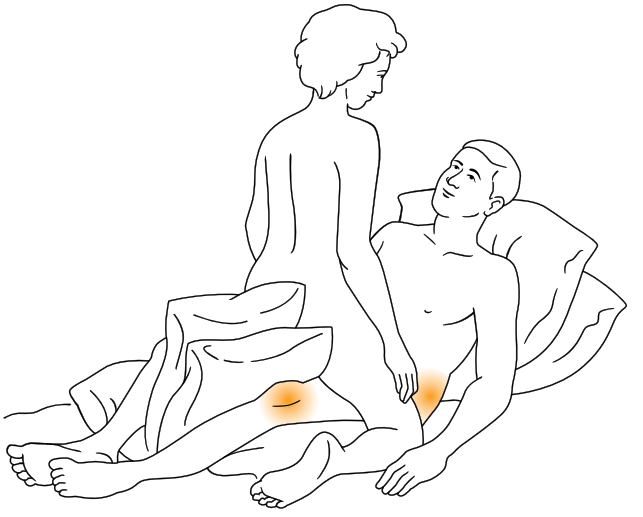
- Don't extend your leg backwards and rotate your toes out.

Safe Positions

Men and women can try these positions after either hip or knee surgery. The shaded areas indicate that the position is safe for that joint.

FACE-TO-FACE

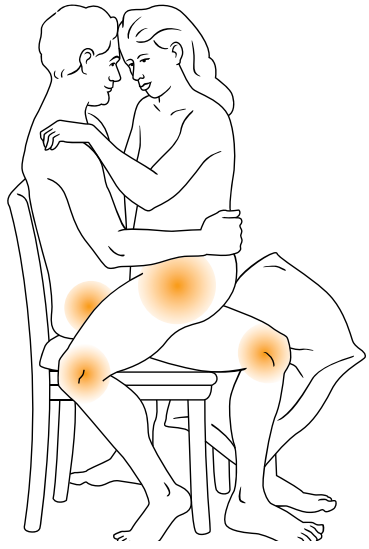
- You should be on the bottom. (The picture shows a man, but this position works with a woman on the bottom, too.)
- Keep your legs apart and turned out slightly. Place pillows outside and inside your legs as support.
- You can prop up your back with pillows or lie flat. Do what is most comfortable.



SITTING IN A CHAIR

Whether you're a man or a woman, this position works after either hip or knee surgery:

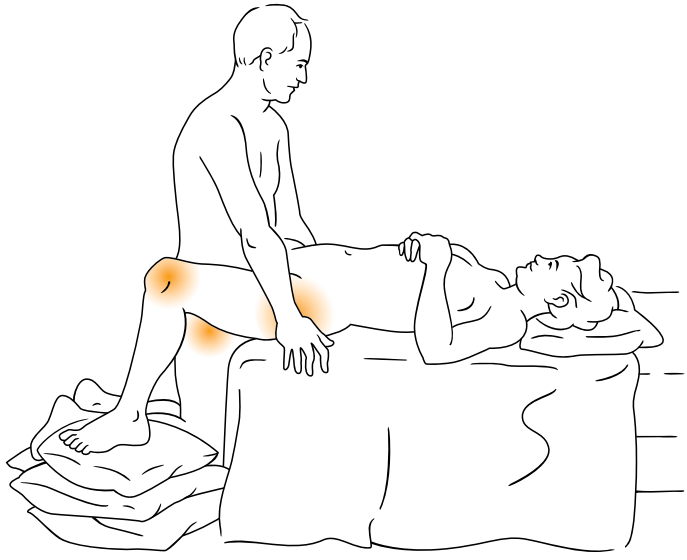
- The man sits on a straight chair with his feet supported or flat on the floor. Use pillows for support.
- The woman sits on his lap, facing him.



WOMAN LYING AND MAN KNEELING

This works for a woman with a new knee or hip, or for a man with a new hip:

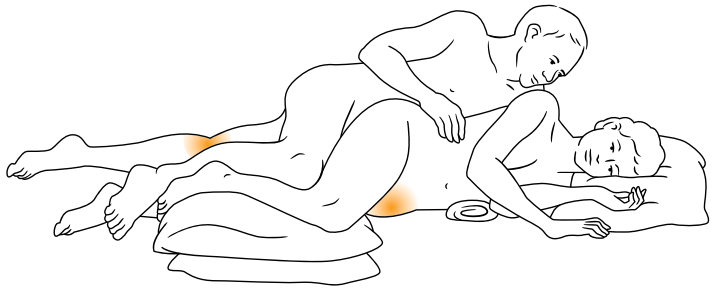
- The woman lies on her back with her buttocks near the edge of the bed. Both feet should be supported or flat on the floor.
- The man kneels in front of the bed and places his hands on either side of his partner's body.



SIDE-LYING POSITION

This works for a woman with a new knee or hip, or for a man with a new knee:

- Both people lie on their sides, with the man behind the woman. The new joint should be on the bottom.
- Use pillows for support.



Notes

Hoag Orthopedic Institute

16250 Sand Canyon Avenue
Irvine, CA 92618
hoagorthopedicinstitute.com

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