Unicompartmental Knee Arthroplasty

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Unicompartmental Knee Replacement

Unicompartmental knee replacement is an option for some patients with osteoarthritis of the knee. Your doctor may recommend partial knee replacement if your arthritis is confined to a single part (compartment) of your knee.

Your knee is divided into three major compartments: The medial compartment (the inside part of the knee), the lateral compartment (the outside part), and the patellofemoral compartment (the front of the knee between the kneecap and thighbone/femur).

In a unicompartmental knee replacement, only the damaged compartment is replaced with metal and plastic. The healthy cartilage and bone in the rest of the knee is left alone.

Anatomy

The knee is the largest joint in the body and having healthy knees is required to perform most everyday activities.

The knee is made up of the lower end of the thighbone (femur), the upper end of the shinbone (tibia), and the kneecap (patella). The ends of these three bones where they touch are covered with articular cartilage, a smooth substance that protects the bones and enables them to move easily.

The menisci are located between the femur and tibia. These C-shaped wedges act as “shock absorbers” that cushion the joint. Large ligaments hold the femur and tibia together and provide stability. The long thigh muscles give the knee strength.

All remaining surfaces of the knee are covered by a thin lining called the synovial membrane. This membrane releases a fluid that lubricates the cartilage, reducing friction to nearly zero in a healthy knee.

Normally, all these components work in harmony. But disease or injury can disrupt this harmony, resulting in pain, muscle weakness, and reduced function.
The most common cause of chronic knee pain and disability is arthritis. Although there are many types of arthritis, most knee pain is caused by just three types: osteoarthritis, rheumatoid arthritis, and post-traumatic arthritis.

- Osteoarthritis. This is an age-related “wear and tear” type of arthritis. It usually occurs in people 50 years of age and older, but may occur in younger people, too. The cartilage that cushions the bones of the knee softens and wears away. The bones then rub against one another, causing knee pain and stiffness.

- Rheumatoid arthritis. This is a disease in which the synovial membrane that surrounds the joint becomes inflamed and thickened. This chronic inflammation can damage the cartilage and eventually cause cartilage loss, pain, and stiffness. Rheumatoid arthritis is the most common form of a group of disorders termed “inflammatory arthritis.”

- Post-traumatic arthritis. This can follow a serious knee injury. Fractures of the bones surrounding the knee or tears of the knee ligaments may damage the articular cartilage over time, causing knee pain and limiting knee function.
Advantages of Partial Knee Replacement
Multiple studies have shown that modern unicompartmental knee replacement performs very well in the vast majority of patients who are appropriate candidates.

The advantages of partial knee replacement over total knee replacement include:

- Quicker recovery
- Less pain after surgery
- Less blood loss

Also, because the bone, cartilage, and ligaments in the healthy parts of the knee are kept, most patients report that a unicompartmental knee replacement feels more "natural" than a total knee replacement. A unicompartmental knee may also bend better.

Disadvantages of Partial Knee Replacement
The disadvantages of partial knee replacement compared with total knee replacement include slightly less predictable pain relief, and the potential need for more surgery. For example, a total knee replacement may be necessary in the future if arthritis develops in the parts of the knee that have not been replaced.
Description of Unicompartmental Arthroplasty using Makoplasty Robotic Assist Technology

A partial knee replacement (also called partial knee arthroplasty) might be more accurately termed a knee “resurfacing” because only the surface of the bones is actually replaced. The following are the basic steps to a partial knee replacement procedure using Makoplasty robotic assist technology.

• The process begins with a CT scan of your joint that is used to generate a 3D virtual model of your unique anatomy. The virtual model is loaded into the Mako system software and is used to create your personalized pre-operative plan.

• In the operating room, Dr. Gerhardt will use the Mako robot to assist in performing your surgery based on your personalized pre-operative plan. The Mako system allows Dr. Gerhardt and his team to make adjustments to your plan during surgery as needed. The first step is to remove damaged cartilage surfaces at the ends of the femur and tibia along with a small amount of underlying bone. When Dr. Gerhardt prepares the bone for the implant, the Mako system guides him within the predefined area and helps prevent him from moving outside of the planned boundaries.

• The removed cartilage and bone is replaced with metal components that recreate the surface of the joint. These metal parts are then cemented into the bone. A medical-grade plastic (polyethylene) spacer is inserted between the metal components to create a smooth gliding surface. The Mako system helps provide more accurate placement and alignment of your implant by communicating with Dr. Gerhardt regarding your unique anatomy.
Is Unicompartmental Knee Replacement for You?

The decision to have a unicompartmental knee replacement surgery should be a cooperative one between you, your family, your family physician, and your orthopaedic surgeon.

When Surgery Is Recommended

There are several reasons why your doctor may recommend partial knee replacement surgery.

People who benefit from unicompartmental knee replacement often have:

- Severe knee pain or stiffness that limits your everyday activities, including walking, climbing stairs, and getting in and out of chairs. You may find it hard to walk more than a few blocks without significant pain and you may need to use a cane or walker
- Moderate or severe knee pain while resting, either day or night
- Chronic knee inflammation and swelling that does not improve with rest or medications
- Knee deformity — a bowing in or out of your knee
- Failure to substantially improve with other treatments such as anti-inflammatory medications, cortisone injections, lubricating viscosupplement injections, physical therapy, or other surgeries.

In order to be a candidate for this procedure, your arthritis must be limited to one compartment of your knee. Patients with inflammatory arthritis, significant knee stiffness, or ligament damage may not be ideal candidates. Your surgeon will help you determine if this procedure is suited for you. With proper patient selection, modern unicompartmental knee replacements have demonstrated excellent medium- and long-term results in both younger and older patients.

Orthopaedic Evaluation

An evaluation with an orthopaedic surgeon consists of several components:

- A medical history: Dr. Gerhardt and his team will gather information about your general health and ask you about the extent of your knee pain and your ability to function.
- A physical examination: This will assess knee motion, stability, strength, and overall leg alignment.
- X-rays: These images help to determine the extent of damage and deformity in your knee.
• Other tests. Occasionally blood tests, or advanced imaging such as a magnetic resonance imaging (MRI) scan, may be needed to determine the condition of the bone and soft tissues of your knee.

Dr. Gerhardt and his team will review the results of your evaluation with you and discuss whether unicompartmental knee replacement is the best method to relieve your pain and improve your function. Other treatment options — including medications, cortisone injections, viscosupplement injections, physical therapy, or other types of surgery — will also be considered and discussed. In addition, we will explain the potential risks and complications of unicompartmental knee replacement, including those related to the surgery itself and those that can occur over time after your surgery.

**Deciding to Have Knee Replacement Surgery**

**Realistic Expectations**

An important factor in deciding whether to have unicompartmental knee replacement surgery is understanding what the procedure can and cannot do. More than 90% of people who have partial knee replacement surgery experience a dramatic reduction of knee pain and a significant improvement in the ability to perform common activities of daily living. But a unicompartmental knee replacement will not allow you to do more than you could before you developed arthritis. Realistic activities following a unicompartmental knee replacement include unlimited walking, jogging, skiing, swimming, golf, driving, light hiking, biking, ballroom dancing, and other low-impact sports.

**Possible Complications of Surgery**

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

- Infection may occur in the wound or deep around the prosthesis. It may happen while in the hospital or after you go home. It may even occur years later. Minor infections in the wound area are generally treated with antibiotics. Major or deep infections may require more surgery and removal of the prosthesis. Any infection in your body can spread to your joint replacement.
• Blood clots in the leg veins are one of the most common complications of knee replacement surgery. These clots can be life-threatening if they break free and travel to your lungs. Dr. Gerhardt and his team will outline a prevention program, which may include periodic elevation of your legs, lower leg exercises to increase circulation, support stockings, and medication to thin your blood.

• Although implant designs and materials, as well as surgical techniques, continue to advance, implant surfaces may wear down and the components may loosen. Additionally, although an average of 115° of motion is generally anticipated after surgery, scarring of the knee can occasionally occur, and motion may be more limited, particularly in patients with limited motion before surgery.

• A small number of patients continue to have pain after a knee replacement. This complication is rare, however, and the vast majority of patients experience excellent pain relief following knee replacement.

• Neurovascular injury, while rare, injury to the nerves or blood vessels around the knee can occur during surgery

**Preparing for Surgery**

**Surgery Scheduling**

If you decide to proceed with surgery, we will schedule you at the first available date that works with your schedule. The surgery will be performed at **St. John’s Health Center** or **Marina Del Rey Hospital**.

**Pre-Op Medical Clearance**

Once a surgical date and time have been determined, we will ask you to schedule a visit with your internist for “preoperative clearance.” This clearance is required within 30 days of the date of your surgery. Edith, our surgical coordinator will contact your physician’s office to request a complete physical examination, several tests, such as blood and urine samples, and an electrocardiogram, and potentially other clearances. This is needed to make sure you are healthy enough to have the surgery and complete the recovery process. Many patients with chronic medical conditions, like heart disease, may also be evaluated by a specialist, such as a cardiologist, before the surgery.

Please note it takes a great deal of coordination to schedule your surgery so once a date and time have been set, we ask that you do not reschedule unless absolutely necessary.
Hospital Pre-Operative Course for Total Joint Replacement

**St. John’s Health Center** offers a course for patients undergoing total joint replacement. The course is held 2-3 times a month, typically on Tuesdays, 10-11:30 AM, and Wednesdays 5-6:30 PM. An orthopedic nurse, a physical therapist and occupational therapist provide preoperative education for all total joint surgery patients. This includes a variety of postoperative information, including what to expect once your surgery is completed. Issues discussed include general information about your surgery and techniques on how to ensure you and your joint remain stable and healthy.

For more information please call 888-432-5464 or visit: [http://california.providence.org/events/](http://california.providence.org/events/)

**Marina Del Rey hospital** offers a similar total joint replacement pre-op education class the 2nd and 4th Thursday of every month. To register for the class call the orthopedic patient care coordinator at: 310-823-8911 Ext 85229 or email: Valerie.wong@cshs.org. Registration is required.

**Pre-Op Visit with Dr. Gerhardt**

You will be given a scheduled appointment with Dr. Gerhardt or Tanya, our physician assistant, prior to surgery to check to make sure all things are in order. We will give you your final instructions for surgery at that time. We will also arrange for you to have all necessary equipment ready for post-operative use in the hospital and at home. All pre-certification with insurance companies will be performed by our office in advance of this appointment to avoid any undue stress on you or your family. Please **bring any questions** to your pre-operative appointment.

**Medications**

Tell Dr. Gerhardt and his team about the medications you are taking. We will tell you which medications you should stop taking and which you should continue to take before surgery. Depending on the patient we will ask you to stop taking any kind of anti-inflammatory medication such as ibuprofen, Naprosyn, aspirin, and other blood thinners **7 days prior to your surgery.** You must consult your primary care provider prior to stopping any prescription anti-coagulants including, but not limited, to Plavix, Coumadin, Warfarin, Eliquis, Pradaxa, etc. as these may require tapers and/or additional monitoring.
Reducing Infection prior to Surgery

Peri-prosthetic joint infections are one of the most serious complications in joint replacement surgery. We work diligently to lower the incidents of infections around prosthetic joints but despite these efforts, they still occur. While the percentage of prosthetic infections is low, we would like to continue to reduce that number as best as possible.

To help prevent infection, three consecutive days prior to surgery you will be asked to apply an antibacterial ointment called Mupirocin or Bactroban into the nose with a Q-tip. In addition, we would like you to use Hibiclens (an antibacterial soap), in the area of the surgery three consecutive days prior to surgery. A prescription and specific instructions on the use of these items will be given to you at your pre-operative visit. Finally, do not share towels or soaps with other people. It is hoped that these additional steps will continue to decrease infectious rates and decrease the risk of developing a peri-prosthetic infection.

Dental Evaluation

Although the incidence of infection after knee replacement is very low, an infection can occur if bacteria enter your bloodstream. To reduce the risk of infection, major dental procedures (such as tooth extractions and periodontal work) should be completed at least 30 days before your unicondylar knee replacement surgery. You should not go to the dentist for 3 months after surgery.

Social Planning

Although you will be able to walk on crutches, a cane, or a walker soon after surgery, you will need help for several weeks with such tasks as cooking, shopping, bathing, and doing laundry. If you live alone, Dr. Gerhardt’s team, a social worker, or a discharge planner at the hospital can help you make advance arrangements to have someone assist you at home.

Home Planning

Several modifications can make your home easier to navigate during your recovery. The following items may help with daily activities:

- Prepare food ahead of time.
- Remove loose throw rugs and cords so that you will not trip.
- Make necessary arrangements for pet and child care.
- Place grip strips in the shower stall or tub so you will not slip.
- Safety bars or a secure handrail in your shower, bath, and stairways.
- A stable chair for your early recovery with a firm seat cushion and back, two arms, and a footstool for intermittent leg elevation
- A toilet seat riser with arms, if you have a low toilet
- A stable shower bench or chair for bathing
- A temporary living space on the same floor because walking up or down stairs will be more difficult during your early recovery

**Surgical time**

Edith will call you about 2-3 days prior to surgery to verify your scheduled time of surgery. You should plan on being at St. John’s Health Center or Marina Del Rey hospital **two hours prior to the scheduled surgery time**.

**The Night prior to Surgery**

Bathe or shower (including Hibiclens) in your normal routine. You should be **NPO (no food or drink) after midnight the night prior** as food in your stomach may cause anesthetic complications. Occasionally your doctor will advise you to take your normal medications the morning of surgery with just a sip of water.

**What to bring to the hospital**

Pack a small bag for your hospital stay. This should include: **non-slip shoes** (e.g. tennis shoes or loafers) and one pair of loose fitting, comfortable clothing (e.g. shorts/sweats).

The hospital can provide you with the **basic toiletries**, but you may bring your own (i.e. razor, make-up, shampoo, toothbrush etc). All rooms are private and equipped with a television and telephone. Cell phones are allowed in the hospital.

* Do not bring medications, jewelry, credit cards, or large amounts of money with you

**Your Surgery**

**Anesthesia**

After admission, you will be evaluated by a member of the anesthesia team. The most common types of anesthesia are general or spinal anesthesia. The anesthesia team, with your input, will determine which type of anesthesia will be best for you.
Procedure

The procedure itself takes approximately 1 to 2 hours. Dr. Gerhardt will remove the damaged cartilage and bone, and then position the new metal and plastic implants to restore the alignment and function of your knee. After surgery, you will be moved to the recovery room, where you will remain for several hours while your recovery from anesthesia is monitored. After you wake up, you will be taken to your hospital room. Some patients may be allowed to leave the day of surgery which is considered an outpatient surgery. You must have adequate pain control and have approval from your surgical team, the hospital medial internist, and the hospital physical therapist prior to leaving the recovery room directly to home. We will discuss at your pre-op visit whether or not you will most likely be a candidate to go home the same day.

At the Hospital

An Orthopedic Nurse Coordinator will...
Perform your pre-operative nursing assessment.
Be actively involved in your care and treatment during your hospital stay.

An Orthopedic Nurse and Certified Nursing Assistant will...
Help keep your pain under control and help make you as comfortable as possible. Help you get in and out of the bed, transfer to a chair, assist with daily bathing activities, and walk to the bathroom. Watch for any changes in your condition and coordinate your care during your hospital stay. Act as a liaison between you and your physician.

A Physical Therapist (PT) will...
Teach you how to get in/out of bed, walk with the appropriate ambulatory device, get into/out of a chair, and negotiate stairs.
Teach you the movement precautions and weight bearing restrictions if any.
Teach you exercises to increase knee motion and strength.
Recommend and order the appropriate equipment for ambulation.
Educate and instruct family or caregivers that may be assisting you after discharge.

An Occupational Therapist (OT) will...
Teach you safe techniques for dressing and bathing activities. Teach you how to transfer in/out of the shower stall or bath tub. Teach you how to transfer on/off the toilet or commode.
Recommend and order the appropriate equipment to perform your self-care activities. Educate and instruct family or caregivers that may be assisting you after discharge.
A Case Manager will…
Arrange home health services as ordered by the physician. Work with your insurance company or workers compensation insurance to obtain authorization for services and/or equipment ordered by the physician.

Hospital Stay
Most patients prefer to leave the day after surgery.

Pain Management
After surgery, you will feel some pain, but your surgeon and nurses will provide medication to make you feel as comfortable as possible. Pain management is an important part of your recovery. Walking and knee movement will begin soon after surgery, and when you feel less pain, you can start moving sooner and get your strength back more quickly. Talk with us if postoperative pain becomes a problem.

Blood Clot Prevention
Dr. Gerhardt and his team may prescribe one or more measures to prevent blood clots and decrease leg swelling. These may include special support hose (TED hose), inflatable leg coverings (compression boots), and anticoagulant medication.

- **Anticoagulant medication**: typically, coated Aspirin 325mg daily x 3 weeks is prescribed. This medication is used to thin your blood and reduce the risk of blood clots. If you have a personal history of a blood clot or cancer you will be placed on a different blood thinning medication, Xarelto or Eliquis. If you have an Aspirin allergy you will be placed on Persantine. Ideally you will have this medication filled and ready for your arrival back home.

- If you are placed on Aspirin, you may also be prescribed a proton pump inhibitor (**PPI** *medication*) such as Protonix, to protect your stomach from the aspirin. If the PPI prescribed is expensive under your prescription plan, Prilosec over the counter is a good alternative.

- **TED hose and Pneumatic Compression Device**: While in the hospital you will be wearing thigh high “TED hose” or **white compression stockings**. When you are discharged to home you will continue to wear the compression stockings during the day x 2 weeks. You may take the compression stockings off at night. If you have continued swelling after two weeks continue to wear the compression stockings an additional week. We also recommend the use of TED hose on flights longer than 3 hours within the first 3 months post-op.
- **Pneumatic compression device** is a wrap that is placed around both calves which squeezes the calf muscle intermittently and is placed during your hospital stay.

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

**Physical Therapy**

Most patients begin exercising their knee the day of surgery. Most patients sit and stand by the edge of the bed on the day of surgery and will take a few steps with the nurse or therapist. As the days continue, you will progress to walking around the room to walking down the hall allowing **full weight bearing**. A physical therapist will teach you how to use a walking aid, teach you specific exercises to strengthen your leg and restore knee movement, and they will instruct you in **climbing stairs**.

- As an option, to further assist in restoring movement in your knee, we recommend using a continuous passive motion (CPM) exercise machine. This device acts as a knee support that slowly moves your knee while you are in bed. Some insurance companies do not cover this device and therefore this device is not mandatory. If you will use the CPM, start at 0-60 degrees, increase 10 degrees every other day up to a full range of 0-110 degrees. Use the CPM 30min-1hr at a time, 3-4x/day, x 1 week.

- **Assistive Devices**: Most patients will be **discharged with a walker** but may progress to a cane or crutches. The walker offers support and protections, especially when in public, and aids the patient with balance and distribution of weight. Some patients use crutches if they prefer. The use of a cane for support and protection from falling or losing balance is also common. The physical therapist will advise you on which assistive devices will be best for you. The therapist will provide the ambulatory aid to you prior to your discharge and they will then bill your insurance. You do not need to obtain the walking aid prior to surgery. However, you are welcome to bring your own device with you to the hospital if you already own one.

**Preventing Pneumonia**

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

Elevated bedside commode may be requested but is not necessary.

Recovery at Home

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

What to watch for

If you notice any of these signs or symptoms, please call our office or your primary doctor.

- **Infection**: Signs include fever, red streaking from incision, large increases in amount of pain and/or drainage from incision.
- **Blood Clots**: Signs include increased pain, swelling or redness of your lower leg.
- **Incision**: Look for drainage from the incision, areas of the incision that are not sealed over, red pimply areas on or near the incision, redness along the incision.

Recovery Timeline

The first 2 weeks is the most difficult timeframe where you will likely need narcotic pain meds. After the 2 week mark, swelling and pain improve progressively. At 3-4 weeks, you will no longer use a walking aid and may only need an over the counter pain med such as Tylenol as needed. You will likely still feel stiff especially when first getting up out of a chair/car to walk. By 3 months post-op most patients are able to participate in their desired activities without thinking too much about their replacement. However, in some cases the knee may remain swollen, warm and stiff up to 6 months. This is a normal surgical phenomenon. You may have numbness over the knee for up to one year until skin nerves regenerate.

Ice/Heat

Icing is especially important the first 2 weeks post-op. We recommend use of an ice machine if your insurance will cover the expense. You may apply ice with the ice machine or regular ice pack for 20-30 minutes 3-4 times per day, particularly after exercising.

Pain Medications

- **Non-narcotic pain medications**: Typically prescribed are: Tylenol (x 2 weeks), Celebrex (x 2 weeks), and Gabapentin (x 5 days).
- **Narcotic pain medications**: such as Oxycodone, are only to be taken as needed. You are encouraged to utilize the non-narcotic pain medications and only take the Oxycodone if the non-narcotic meds are not enough to completely manage the pain.
- Over the counter stool softeners may be used to prevent constipation which is a common side-effect of narcotics.
Wound Care

**Waterproof bandage**: You will have absorbable sutures beneath your skin and a surgical glue on top of the incision. The incision will be covered with a waterproof dressing, Mepilex. You will also have a wrap over this bandage. Upon discharge the nurse will provide you with 2 additional Mepilex bandages. Keep your original bandage in place. A home health nurse will be arranged to come to your home to remove the surgical bandage and check on the mepilex. If dry, the original mepilex may remain in place x 4-5 days, then change the Mepilex every 4-5 days (for a total of 2 bandage changes). Remove the bandage completely after 2 weeks.

**Surgical glue**: When removing your bandage, you may notice the surgical glue along the incision. It has a purplish cast to it, and sometimes wrinkles. **Do not put any ointment, alcohol, peroxide, or Betadine on the surgical glue/incision** as it will breakdown the glue before intended. After 2 weeks the glue will start to peel or flake off on its own. Do not pick this off.

**Showering**: Once the surgical wrap is removed, **showering is allowed so long as a water-proof dressing is being utilized**. Do not scrub the surgical site. Allow the water to gently roll over the incision area with the waterproof bandage in place and pat dry. After two weeks you can shower without a dressing on the wound.

**No soaking**: **the incision in a bath, pool, hot tub/jacuzzi for 3 weeks**! Once you are 3 weeks post-op you may begin to swim or participate in pool therapy if you can enter safely (handrails, ramp, steps etc). **Wait until the incision is well healed before entering the pool**. Limit the time in the pool to 10 - 15 minutes in order to monitor your response and incision healing.

Scar Treatment
Do no place any product on the incision site x 1 month. After 1 month, you may use a scar treatment of your choice. Products with silicone work best. Silicone scar sheets work well under clothing.

Bruising
Some bruising of the lower leg is common after surgery and may take several weeks to resolve.

Diet
There are **no diet restrictions**. Eat a normal diet as you did before surgery. Make sure you eat plenty of fruits and vegetables and drink 6 - 8 glasses of water a day. This will help prevent constipation.
Driving
You may drive when you are no longer taking any pain medicine. This guideline is for your personal safety. If you had surgery on your right knee, you must have good control of your leg to work the gas and brake pedals.

Handicap Parking
You can obtain an application for a handicap-parking placard from the medical assistant at our office. Your doctor or PA will sign the form. You must fill out your portion of the form, and then take it to either the DMV or AAA. Temporary handicap-parking placards are issued for either 3 or 6 months.

Travel
You may get out of the house as soon as you feel up to it. Use the handicap bathroom stall. If you are in a hotel, request a handicap accessible room. If you must fly, request bulkhead seating or first-class seating if possible.
There is a small theoretically increased risk of blood clot in the first few weeks after surgery when flying, but you will already be on a blood thinner which will help protect against the development of a blood clot. However, please be sure to stretch frequently on your flight and consider wearing your compression stockings on the flight. If you do go on a long flight (5 hours or longer) within the first 3 months post-op and you are no longer taking the anti-coagulant, do take a full aspirin the day of the departure and return flight.

Sexual Activities
You may resume sexual activities as soon as you feel able. Your therapist or doctor can answer other questions you may have.

Physical therapy
During your hospital stay, the physical therapist will instruct and provide you with a home exercise program. This will include guidelines on how to safely progress your activity level. **Walking is the best exercise in the early post-op period.** Try Gradually increase your walking daily with the goal of walking one mile anywhere within the first 2 - 4 weeks. However, it is important not to over exert yourself. If you have increased soreness or swelling, decrease your activity and ice and elevate your leg above your heart. If pain persists or increases, stop exercising and contact the office immediately. Mild discomfort is acceptable and expected.

Once you are discharged from the hospital, you will start in-home PT. If you go home directly from the recovery room as an outpatient, you will also be set up with in-home PT. **You will have in-home PT x 2 weeks, 2-3x/week.**
At the 2 week mark you may start outpatient physical therapy. We recommend PT x 4-6 weeks or longer should you desire. A good goal is to no longer need the cane 3 or 4 weeks from your surgery date.

If you are discharged to a Skilled Nursing Facility (SNF), you will have therapy while you are an inpatient there. Once discharged to home, you may start outpatient therapy starting at 2 weeks post-op as well.

Your insurance carrier determines which physical therapist you will be able to see. The physical therapy office you wish to go to will let you know if they accept your insurance. Our office can give recommendations for physical therapy sites if you need. It is best to choose a site that is easy for you to drive to and that takes your insurance.

Leg muscles are often very weak due to underuse both prior to and after the surgery. Therefore, it is important to strengthen the quadriceps and surrounding muscles. Walking and exercises such as the stationary bicycle or elliptical machine are excellent for rehabilitation.

Use of Pillows
Pillows can be utilized to improve your comfort but they are NOT necessary. If you are noticing swelling in the knee area it can be helpful to elevate the leg on several pillows while at rest, especially the first two weeks post-op. Placing pillows at the ankle only will aid in increasing your knee extension range of motion.

Prophylactic Antibiotics
Although the incidence of infection after knee replacement is very low, an infection can occur if bacteria enter your bloodstream. To reduce the risk of infection, you will be asked to refrain from any non-urgent dental work, including cleanings, x 3 months following surgery. We no longer require prophylactic antibiotics prior to dental procedures, urologic, or GI procedures based on the current guidelines from the American Academy of Orthopedic Surgeons. It is only necessary if required by the treating dentist or MD for that treatment. For example, if you do have an urgent issue within the first 3 months, such as a dental abscess, this should be treated with antibiotics per the dentist’s recommendation. Major dental procedures (such as tooth extractions and periodontal work) should be completed at least 30 days before your unicompartmental knee replacement surgery.

Follow-Up Visits
Your post-operative visits, in general, will be scheduled as follows:
1) 2 weeks from the date of surgery (DOS): most often with the physician assistant
2) 6 weeks from DOS with Dr. Gerhardt
3) 1 year from DOS.
4) 2 years from DOS.
Your progression, ambulation, range of motion and any complications will be discussed at that time. X-rays of your knee will be taken at your first post-operative visit and then again at 1 year out from your surgery to track the healing progress.

* The timing of these visits is a guideline; we may ask to see you sooner or more frequently depending on your individual recovery and circumstances.

**Outcomes**

**How Your New Knee Is Different**

Improvement of knee motion is a goal of unicompartmental knee replacement, but restoration of full motion is uncommon. The motion of your knee replacement after surgery can be predicted by the range of motion you have in your knee before surgery.

Kneeling is sometimes uncomfortable, but it is not harmful. Most people feel some numbness in the skin around your incision. You also may feel some stiffness, particularly with excessive bending activities.

Most people also feel or hear some clicking of the metal and plastic with knee bending or walking. This is normal. These differences often diminish with time and most patients find them to be tolerable when compared with the pain and limited function they experienced prior to surgery.

Your new knee may activate metal detectors required for security in airports and some buildings. Tell the security agent about your knee replacement if the alarm is activated.

**Protecting Your Knee Replacement**

After surgery, make sure you also do the following:

• Participate in regular light exercise programs to maintain proper strength and mobility of your new knee.

• Take special precautions to avoid falls and injuries. If you break a bone in your leg, you may require more surgery.

• Make sure your dentist knows that you have a knee replacement.
• See your orthopaedic surgeon periodically for a routine follow-up examination and x-rays, usually once a year.

**Extending the Life of Your Knee Implant**

Currently, more than 90% of modern unicompartmental knee replacements are still functioning well 15 years after the surgery. Following Dr. Gerhardt’s instructions after surgery and taking care to protect your knee replacement and your general health are important ways you can contribute to the final success of your surgery.

**Your Healthcare Team**

A Physician Assistant (PA-C) (Tanya Cariveau, PA-C) or Orthopedic Fellow will…

* Assist with your surgical procedure.
* See you on daily rounds.
* Change your dressing and check your incision.
* Help manage your hospital care.
* See you in the clinic for the follow-up visits, as directed by Dr. Gerhardt.

**Clinical Assistant (Edith) 310-829-2663 ext. 45043**

* Coordinate scheduling of your surgery.
* Arrange for you to have paperwork and all necessary forms filled prior to your surgery.
* Arrange your prescription for post-operative medications.
* Help with obtaining necessary equipment and handicap placard.
* Answer questions relating to office visits and general post-operative issues.

**Administrative Assistant (Desiree) 310-829-2663 ext. 45035**

* Scheduling of pre- and post-operative appointments
* Answer questions relating to office visits and occasionally general post-operative issues.

**Administrative Assistant (Yesenia) 310-829-2663 ext. 45034**

* Answer questions relating to office visits and occasionally general post-operative issues.
* Assist with disability paperwork.

**Important Numbers**

* Main Line (answering service after hours) (310) 829-2663
**Appointments**
New patients ____________________________ (310) 829-2663
Follow-up Visits _________________________ (310) 315-2007

**Medical Staff**
Tanya Cariveau, PA-C (Physician Assistant) ______________________ (310) 829-2663
Desiree Walstrom (Administrative Assistant) ________________ (310) 829-2663, ext 45035
Edith Rodriguez (Medical Assistant) ____________________________ (310) 829-2663, ext 45043
Yesenia Rodriguez (Administrative Assistant) ________________ (310) 829-2663, ext 45034

**Medication Refills**
Edith Rodriguez (Medical Assistant) ____________________________ (310) 829-2663, ext 45043

**Billing and Insurance**
Main Line (ask for Billing Dept). ____________________________ (310) 829-2663

**Disability Forms**
These forms may be obtained online or from your employer. Please fill out the forms completely and then turn them in at the concierge’s desk for Yesenia. Online filing is also an option and can be completed at edd.ca.gov. If filing online, be sure to provide Yesenia with the receipt number so that she can complete your claim. It typically takes 24-48 hours for claim completion once our office receives the necessary paperwork/receipt number.

**Information for St. John’s Health Center**
2121 Santa Monica Blvd. Santa Monica, CA 90404.
The Orthopedic unit is located on the 3rd floor. The telephone number is 310-829-5511.
The hospital does not validate parking. The maximum daily rate is $13.00. The main entrance is located on Santa Monica Boulevard, between 20th and 23rd Streets. All parking is by valet only, no self-park lots are available. There is also metered street parking on adjacent neighboring streets.

**Information for Marina Del Rey Hospital**
4650 Lincoln Blvd
Marina Del Rey, CA 90292
(310) 823-8911