KNEE
REPLACEMENT SURGERY NOTEBOOK
THE JOINT CARE CENTER

Your Pre-Operative appointment to meet with your surgeon is scheduled on:

Date: Time:

Prior to surgery, the Pre-Admission Testing (PAT) department needs to spend about 2-3 hours with you to do lab work, an EKG and to get your medical history. Please go to the South Tower Information Desk for your PAT appointment scheduled for:

Date: Time:

Your are scheduled to have your knee replacement at WVU Medicine Camden Clark Medical Center on:

Date:

Please bring this notebook with you and arrive at the Patient Check-in desk 15 minutes before your appointments. Thank you for choosing us!

TOTAL KNEE REPLACEMENT
FIVE-STAR RECIPIENT
2021
healthgrades

HIGHMARK West Virginia
Designated BlueDistinction Center+
Knee and Hip Replacement

Welcome

Thank you for choosing the Joint Care Center at Camden Clark Medical Center. Our goal is to restore you to a higher quality of living with your new prosthetic joint.

Annually over 1 million people undergo total joint replacement surgery. Primary candidates for joint replacement are individuals with chronic joint pain from arthritis that interferes with daily activities, walking, exercise, leisure, recreation and work. The surgery aims to relieve pain, restore your independence and return you to work and other daily activities.

The Joint Care Center at Camden Clark Medical Center has developed a comprehensive planned course of treatment. We believe that you play a key role in ensuring a successful recovery. Our goal is to involve you in your treatment through each step of the program. This patient guide will provide you with the necessary information needed for a safe and successful surgical outcome.

Your team includes physicians, physician assistants, patient care technicians (PCTs), nurses, surgical technicians, physical therapists, occupational therapists, physical therapy assistants and occupational therapy assistants specializing in total joint care. Every detail, from pre-operative teaching to post-operative exercising, is considered and reviewed with you. The Joint Care Team will plan your individual treatment program and guide you through it.

Features of the Joint Care Center program include:

- Nurses and therapists who specialize in the care of joint patients
- Private rooms
- Emphasis on group activities as well as individual care
- Family and friends educated to participate as “coaches” in the recovery process
- A Joint Care Team who coordinates all pre-operative care and discharge planning
- A comprehensive patient guide for you to follow from pre-op until three months post- op and beyond
- Coordinated after-care program

Thank you for choosing WVU Medicine Camden Clark Joint Care Center for you joint replacement.

The Purpose of Your Notebook

Preparation, education, continuity of care and a pre-planned discharge are essential for optimum results in joint surgery. Communication is also essential to this process. Your notebook is a communication and education tool for patients, physicians, physical and occupational therapists, and nurses.

It is designed to educate you so that you know:

What to expect every step of the way.

What you need to do.

How to care for your new joint for life.

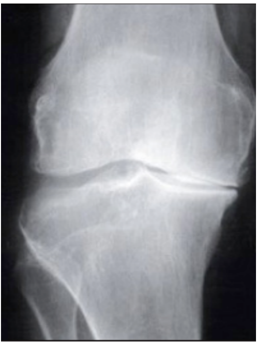
We are pleased that you have chosen The Joint Care Center at WVU Medicine for your joint replacement. The Joint Care Team will strive to provide you with the highest quality of care available.

There are three phases to joint replacement: pre-operative, operative, and recovery. Each phase has important steps. These steps can seem overwhelming, but we think that proper preparation leads to excellent results. Different team members will assist in your care during each phase. The team consists of pre-operative nurses, operative nurses, anesthesiologists, nurse anesthetists, recovery room nurses, floor nurses, patient care technicians (PCTs), physical therapists, occupational therapists, physical therapy assistants and occupational therapy assistants and physicians.

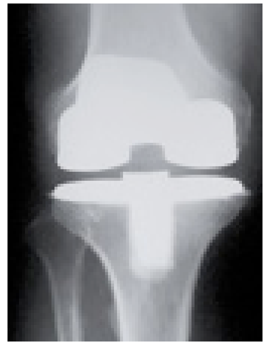
Remember this is a road map to successful joint replacement. Your physician, physician's assistant, nurse or therapist may add to or change recommendations based on your individualized needs. Every patient is unique. Always use their recommendations first and ask questions if you are unsure of any information. Keep your notebook as a handy reference for at least the first year after your surgery. Each person will progress at their own pace, but the common goal for all patients is to improve their quality of life. Again, thank you for your confidence in us.

Answers to Frequently Asked Questions about Total Knee Surgery

We are glad you have chosen the Joint Care Center to care for your knee problem. Below is a list of the most frequently asked questions along with the answers. This notebook provides additional information. If there are any other questions that you need answered, please ask your surgeon or a member of the Joint Care Team. We want you to be completely informed about this procedure.



Before:
Raw bone rubbing on raw bone



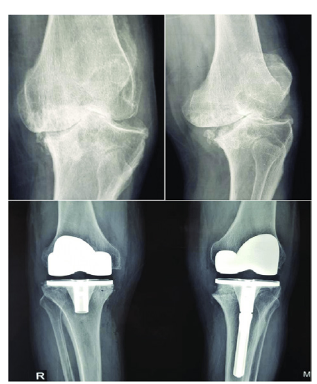
After:
A new surface creates a smooth function

What is arthritis and why does my knee "hurt"?

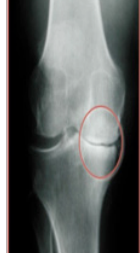
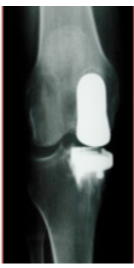
In the knee joint there is a layer of smooth cartilage on the lower end of the femur (thighbone), the upper end of the tibia (shinbone) and the undersurface of the kneecap (patella). This cartilage serves as a cushion and allows for smooth motion of the knee. Arthritis is a wearing away of this smooth cartilage. Eventually it wears down to bone. Rubbing of bone against bone causes discomfort, swelling and stiffness.

What is a total knee replacement?

A total knee replacement is really a cartilage replacement with an artificial surface. The knee itself is not replaced, as is commonly thought, but rather an artificial substitute for the cartilage is inserted on the end of the bones. This is done with a metal Implant on femur/tibial and plastic spacer in between and under the kneecap (patella). This creates a new smooth cushion and a functioning joint that does not hurt.



What is a partial knee replacement?

A partial knee replacement is a resurfacing procedure that replaces only the damaged portion of your knee. You are able to retain the normal, healthy cartilage and ligaments in the rest of your knee. A partial replacement is indicated when the arthritis is limited to a portion of the joint. This can be either medial or lateral.

What are the results of total knee replacement?

Results will vary depending on the quality of the surrounding tissue, the severity of the arthritis at the time of surgery, the patient's activity level, and the patient's adherence to the doctor's orders. Most patients achieve good to excellent results with relief of discomfort and significantly increased activity and mobility.

When should I have this type of surgery?

Your orthopedic surgeon will decide if you are a candidate for the surgery. This will be based on your history, exam, x-rays and response to conservative treatment. The decision will then be yours.

Am I too old for this surgery?

Age is not a problem if you are in reasonable health and have the desire to continue living a productive, active life. You may be asked to see your personal physician for his/her opinion about your general health and readiness for surgery.

How long will my new knee last and can a second replacement be done?

We expect most knees to last more than 15-20 years. However, there is no guarantee and 10 percent may not last that long. A second replacement may be necessary. However, 90 percent of knee replacements last longer than 20 years.

Why do joint replacements fail?

The most common reason for failure is loosening of the artificial surface from the bone. Wearing of the plastic spacer may also result in the need for a new spacer.

What are the possible complications associated with joint replacement?

Complications are uncommon but they can occur during and after surgery. Some complications include infection, blood clots, stiffness, implant breakage, dislocation, and premature wear – any of which may necessitate implant removal/replacement surgery. Other complications include nerve injury, foot drop, and adverse reactions to anesthesia, such as stroke, heart attack, and death. Although joint replacement surgery is extremely successful in most cases, some patients still experience pain and stiffness. No implant will last forever; factors such as a patient's post-surgical activities and weight can affect longevity. Be sure to discuss these and other risks with your surgeon.

Should I exercise before the surgery?
Yes. You should either consult an outpatient physical therapist or follow the exercises listed in your notebook. Exercises should begin as soon as possible.

How long will I be in the hospital?
Most knee replacement patients will be hospitalized for one to two days after their surgery. Some patients may qualify for discharge from the hospital the day of the surgery. Most partial knee replacement patients go home the same day as surgery. There are several goals you must achieve before you can be discharged.

When will I be able to walk?
You should be up walking the same day as your surgery. The nursing staff or rehab therapy staff will assist you in walking. Physical Therapy/Occupational Therapy will work with you to educate you on safe ambulation and basic activities of daily living.

What if I live alone?
You will need help at home the first several days or weeks, depending on your progress. You will need to make arrangements with family/friends to be available to assist with meals and personal needs, as well as to take you to outpatient physical therapy.

Outpatient physical therapy may be ordered after surgery. However, in some cases, your physician might initially recommend continuation of physical therapy through home health, a skilled nursing facility or inpatient rehabilitation. Your post-op progress will determine whether you will qualify for home health, skilled nursing or an inpatient rehabilitation facility and whether your insurance will cover. Case management will be available to assist with these arrangements and guide you through this process.

How long does the surgery take?
We reserve approximately 45 minutes to one-and-a-half hours for surgery. Some of this time is taken by the operating room staff to prepare for the surgery. You will be away from your family for approximately four hours.

Will the surgery be painful?
Yes, you will have discomfort and pain following the surgery. It is our goal to make you as comfortable as possible using appropriate medication. For more information, read “Day of Surgery - What to Expect” in your notebook.

Who will be performing the surgery?
Your orthopedic surgeon will do the surgery. A physician assistant often helps during the surgery.

How long, and where, will my scar be?

The scar will be approximately six inches long. It will be straight down the center of your knee unless you have previous scars, in which case we may use the prior scar. There may be some numbness around the scar. This will not cause any problems.

Will I need a walker, crutches or a cane?

Yes. We do recommend that you use a walker, a cane. or crutches. Typically, most patients graduate from assistive devices over the course of two to six weeks. Your case manager can arrange for them, if necessary.

Will I need any other equipment?

Yes. You may need a raised toilet seat or a three-in-one bedside commode. A tub bench may also be necessary. Grab bars for your shower and handrails for stairways are very helpful; these should be arranged for prior to surgery. **This equipment is typically not covered by most insurances.** Please check with your insurance company about your equipment benefits.

Where will I go after discharge from the hospital?

Most patients are able to go home directly after discharge the day after surgery. Some patients can go home the day of surgery. A few of our patients may transfer to an inpatient rehabilitation center or skilled nursing facility. The Total Joint Team will help you with this decision and make the necessary arrangements.

Will I need help at home?

Yes. The first several days or weeks, depending on your progress, you will need someone to assist you with meal preparation and normal daily activities. If you go directly home from the hospital, we recommend you arrange for family and/or friends to assist you. Preparing ahead of time, before your surgery, can minimize the amount of help needed. Having the laundry done, house cleaned, yard work completed, clean linens put on the bed, and single portion frozen meals will reduce the need for extra help.

Will I need physical therapy when I go home?

Yes, if ordered by your orthopedic physician. You will have either outpatient or in-home physical therapy. Patients are encouraged to utilize outpatient physical therapy. You will be given a prescription for outpatient Physical Therapy and you can then call and schedule your appointments. If you need home Physical Therapy, we will arrange for a physical therapist to provide therapy at your home. Following this, you may go to an outpatient facility three times a week to assist in your rehabilitation. The length of time required for this type of therapy varies with each patient.

How long until I can drive and get back to normal?

The ability to drive will depend on your progress after surgery. Most patients can return to driving in as little as 4 to 6 weeks. Patients need to feel safe and comfortable operating a vehicle and **must no longer be taking narcotic pain medication.** Some patients may require more than 6 weeks before feeling safe operating a motor vehicle. Discuss the return to driving with your surgeon. Consult with your surgeon or therapist for advice on your activity.

When will I be able to get back to work?

We recommend that most people take at least one month or longer off from work. A Physical Therapist can make recommendations for joint protection and energy conservation on the job. Getting back to work depends on your progression.

When can I have sexual intercourse?

The time to resume sexual intercourse should be discussed with your orthopedic physician.

What physical/recreational activities may I participate in after my recovery?

You are encouraged to participate in low impact activities such as walking, dancing, golf, hiking, swimming, bowling and gardening.

How often will I need to be seen by my doctor following the surgery?

Two to three weeks after discharge, you will be seen for your first post-operative office visit. The frequency of follow-up visits will depend on your progress. Many patients are seen at six weeks, three months and then as recommended by your surgeon.

Will I notice anything different about my knee?

Yes. You may have a small area of numbness to the outside of the scar which may last a year or more and is not serious. Kneeling may be uncomfortable for a year or more. Some patients notice some clicking when they move their knee. This is the result of the artificial surfaces coming together and is not serious.

Before Surgery

As soon as you decide to have joint replacement surgery, you can look ahead and start planning for your recovery. It will be your responsibility to pre-plan for your discharge arrangements prior to your arrival for your surgery.

Select a Support Person

We encourage patients to select a reliable support person or coach. It is very important that your support person be available to assist you throughout this experience. They will need to assist with transportation, preparing and assisting with meals, and assisting with mobility around your home.

Advance Directives

The law requires that everyone being admitted to a medical facility have the opportunity to make advance directives concerning decisions regarding their medical care. If you already have advance directives, please bring copies to the hospital on the day of your surgery. If you don't, you can obtain a copy from the hospital and bring it to the hospital for notarization the day of surgery.

Contact Your Insurance Company

Before surgery you should contact your insurance company if you have questions regarding your coverage benefits. Depending on your post-operative needs, you may need skilled nursing care, home health care, outpatient therapy or durable medical equipment. Contact your insurance company or Medicare provider before surgery to find out what benefits are provided with your particular plan and if there are any certain agencies or rehabilitative facilities that you would need to use. Call these preferred agencies to make initial contact and discuss their ability to provide services for you in your area.

To Guide You in Discharge Planning Options

Based on information you have obtained from your insurance company and the assessments by your therapists and doctor, one of the following will be arranged:

1. **Outpatient Physical Therapy**
   - You will be given a prescription for physical therapy. You need to take this prescription to your first rehab visit.
2. **Home Health**
   - If necessary, home health therapy will be arranged for you while you are in the hospital. The case manager will provide you with a list of home health providers.

3. **Rehabilitative Services**
   Occasionally, a stay in a rehabilitation facility is helpful for your recovery. If this is the case, you will be given a choice of appropriate facilities based on your specific needs. A care manager will discuss these options with you while you are in the hospital. There are two levels of rehabilitation care:

- Skilled Nursing Rehab – This provides a less aggressive program. Insurance approval is required for admission.
- Inpatient Rehab – This requires you to be able to participate in three hours of intense daily therapies. You must meet insurance criteria

Pre-Admission Testing

Approximately two to three weeks before your scheduled surgery date, you will be asked to come to the hospital for your final workup before surgery. This will take approximately two to three hours to complete. During this time, you will be seen by a nurse who will obtain a general medical history on you. This nurse will be asking you for a complete list of your current medications. This list needs to include all prescription medications and any over-the- counter or herbal medications which you are taking. You will be seen by a Nurse Practitioner or Anesthesiologist that will review your medical history and evaluate you for anesthesia.

You will have blood work drawn, you will have an electrocardiogram (EKG) to check your heart and a chest x-ray to check your lungs.

During your visit, you will participate in an education session. This education session will be facilitated by a member of the Joint Care Team. This session will provide you with information regarding what to expect on the day of surgery through discharge from the hospital, as well as discussion regarding outpatient rehab.

You will be asked questions about your home and what your plans are after discharge. There will be an opportunity for you ask questions about your surgery and your recovery.

Obtaining Equipment

After having your total knee joint replacement, you will need certain equipment to help with your recovery. The most important piece of equipment will be your walker. It is recommended that you have a front-wheeled walker to begin your therapy. If you do not have a walker, you will be provided with a prescription for one at your pre-surgery clinic visit.

There are some items/equipment you may need to help you be as independent as possible in your self-care. There are three primary pieces of equipment you will likely need: a reacher, a sock aid and a long-handled sponge. A reacher will help you to be able to put on underwear and pants with great ease. A sock aid will help you to put on your socks without having to bend over. The long-handled sponge allows you to bathe below your knees easier when reaching down may be difficult. If this equipment is needed, this will be provided to you by occupational therapy.

There are some other pieces of equipment that you may find helpful at home to increase your safety and independence. They include a tub seat or transfer tub bench, a raised toilet seat, a long-handled shoehorn, elastic shoelaces, and a grab bar in the tub/shower. Often this equipment is not covered by your medical insurance. Most of these items can be purchased at home medical supply stores. Case Management will help you obtain the necessary equipment you will need at home.

Anesthesia & You

Who are the anesthesia care providers?

Anesthesia care is provided in the CCMC Operating Room, Post Anesthesia Care Unit (PACU) and Intensive Care Units by Board Certified and Board Eligible physician anesthesiologists and certified registered nurse anesthetists (CRNA).

What types of anesthesia are available?

Decisions regarding your anesthesia are tailored to your personal needs. The types available for you are:

- General Anesthesia medicine is administered by a physician anesthesiologist through a mask or an IV. While anesthesia is working you will be unconscious.
- Regional Anesthesia involves the injection of a local anesthetic to provide numbness, loss of pain or loss of sensation to a large region of the body. Regional anesthetic techniques include spinal blocks, epidural blocks, and arm and leg blocks. Medications may be given through an IV to make you drowsy and blur your memory with these types.

Will I have any side effects?

Your anesthesiologist and CRNA will discuss the risks and benefits associated with the different anesthetic options, as well as any complications or side effects that can occur with each type of anesthetic. Nausea or vomiting may be related to anesthesia or the type of surgical procedure. Although less of a problem today because of improved anesthetic agents and techniques, these side effects continue to occur for some patients.

Medications to prevent nausea and vomiting will be given. The amount of discomfort you experience will depend on several factors, especially the type of surgery. You will receive additional information at your Pre-Admission testing visit.

What will happen before my surgery?

You will meet your anesthesiologist and CRNA immediately before your surgery. Your anesthesia team will review all information needed to evaluate your general health. This will include your medical history, laboratory test results, allergies and current medications. With this information, together you will determine the type of anesthesia best suited for you. He or she will also answer any further questions you may have.

You will also meet your surgical nurses. Intravenous (IV) fluids will be started and pre-operative medications may be given, if needed. Once in the operating room, monitoring devices will be attached such as a blood pressure cuff, EKG and other devices for your safety. At this point, you will be ready for anesthesia.

Anesthesia & You *continued*

During surgery, what does my anesthesiologist and CRNA do?

Your anesthesiologist and CRNA are responsible for your comfort and well-being before, during and immediately after your surgical procedure. In the operating room, the anesthesia team will manage vital functions, including heart rate and rhythm, blood pressure, body temperature and breathing. The anesthesia team is also responsible for fluid and blood replacement when necessary.

What can I expect after the operation?

After surgery, you will be taken to the Post Anesthesia Care Unit (PACU). You will be watched closely by specially trained nurses. During this period, you may be given extra oxygen and your breathing and heart functions will be observed closely. An anesthesiologist and/or CRNA is available to provide care as needed for your safe recovery.

Preparing for Surgery: What to Do

2 WEEKS BEFORE SURGERY

Stop Medications that Increase Bleeding

Your physician will give you instructions to stop vitamins and herbs two weeks before your surgery, and NSAIDs and aspirin one week before surgery. Stop all medications such as anti-inflammatory medications, aspirin, Motrin, Naproxen, Vitamin E, vitamins and herbs, etc. If you are on Coumadin, Plavix or other blood thinners, you will receive special instructions.

2 DAYS BEFORE SURGERY

You will need to shower with anti-bacterial soap once a day for two nights prior to surgery and the morning of surgery (see instructions below). Smokers are highly encouraged to stop smoking for at least 48 hours prior to surgery.

SHOWER PREP PRIOR TO SURGERY

Take a shower using anti-microbial soap once a day starting two nights before surgery, the night before surgery, and the day of surgery. For example, if your surgery is on Monday, take a shower with the special soap on Saturday night, Sunday night and the Monday morning before surgery.

Directions:

1. Pour the special soap on a wash cloth.
2. Wash all areas of your body, except face and genital/vaginal area, with the special soap.
3. Wash the area thoroughly where you are going to have surgery.
4. Rinse as usual. Dress as usual.
5. Do not apply powder or lotion the day of surgery.

Your surgeon recommends this special soap to reduce the amount of germs on your skin prior to surgery.

DAY BEFORE SURGERY

Find out your Arrival Time at Hospital

The hospital will call you on the day before the surgery (or on Friday if your surgery is on Monday) to tell you what time to arrive for your procedure. You will be asked to come to the hospital two hours before the scheduled surgery to give the nursing staff sufficient time to start IVs, prep and answer questions. It is important that you arrive on time to the hospital because sometimes the surgical time is moved up at the last minute and your surgery could start earlier. If you are late, it may create a significant issue with starting your surgery on time. In some cases lateness could result in moving your surgery to a much later time.

Preparing for Surgery: What to Do

PREPARE YOUR HOME FOR YOUR RETURN FROM THE HOSPITAL

Have your house ready for your arrival back home.
Clean. Do the laundry and put it away. Put clean linens on the bed. Prepare meals and freeze them in single serving containers. Cut the grass, tend to the garden and other yard work. Pick up throw rugs and tack down loose carpeting. Remove electrical cords and other obstructions from walkways. Install nightlights in bathrooms, bedrooms and hallways. Arrange to have someone collect your mail and take care of pets or loved-ones, if necessary. Place frequently used items in the refrigerator and cabinets at waist level or higher to avoid bending and stretching to reach for them after surgery.

THE NIGHT BEFORE SURGERY

Do Not Eat or Drink
Do not eat or drink anything after midnight, EVEN WATER, unless otherwise instructed to do so. No chewing gum. You may be given a special drink at your PAT appointment, follow the instructions given.

WHAT TO BRING TO THE HOSPITAL

Personal hygiene items (toothbrush, powder, deodorant, battery operated razor, etc.); watch or wind-up clock; loose fitting pants, tops, well-fitted slippers, flat shoes or tennis shoes. Bring any equipment obtained to assist with bathing and dressing. For safety reasons DO NOT bring electrical items. You may bring battery-operated items.

Please bring the following to the hospital:

- This patient notebook
- A copy of your Advance Directives
- Your insurance card, driver's license or photo I.D.
- Bring front-wheeled walker
- Please **leave** jewelry, valuables, and large amounts of money at **home**

Special Instructions for People with Diabetes

DO NOT take medication for diabetes on the day of surgery **unless instructed to do so by your doctor.** If you take insulin, discuss with your doctor the dose to take on the day of surgery.

Hospital Care/Post-Op Care

DAY OF SURGERY

Check-In

You will check in, at your arrival time, to the Same Day Surgery check-in desk. This is the area where the staff will help you get ready for surgery.

Before Surgery

Once you arrive in Same Day Surgery Unit an IV will be inserted, blood will be obtained for necessary labs, pre-op medications may be given, hair removed if needed, and operative site will be cleaned with Chlorohexidine. You will then be taken to pre-op holding where you will speak with your operating room nurse and a member of your anesthesia team. The anesthesiologist will administer a nerve block that will help control pain after surgery. Your surgeon will mark the operative site and answer last minute questions.

Surgery and the Recovery Room

Your surgery will take about one hour to one-and-a-half hours. After your surgery is completed you will be taken to our recovery room (PACU). In the recovery room the nurses will closely monitor your heart rate, blood pressure, respirations, temperature and your pulse oximetry (Vital Signs). You will notice a large dressing on your knee that will start at your mid-thigh to your toes; this dressing can be restrictive. You will also have sequential compression devices on your non-operative leg or both legs after surgery. Sequential compression device (SCD) is a garment that will be applied to your calf or feet that will fill with air. This compression helps to send the blood back to your heart so that the blood does not stagnate in your lower extremities, therefore, preventing blood clots. You will frequently be asked to rate your pain on a scale of 0-10, with 1 being the least amount of pain you have ever experienced and 10 the most pain you have experienced. The recovery nurses will give you IV pain medication to control your pain. After you have been in recovery for about one hour or two hours and you are ready to go to the Orthopedic unit, you will be transferred to your room.

Nursing Unit (Orthopedic Floor)/Or Same Day Care Unit

You will then be taken to a room on the Orthopedic Unit. If you are going home the same day of surgery you will go back to Same Day Surgery. On the day of surgery, you will receive IV antibiotics. This is to help prevent post-op infection. You will be assisted out of bed and start walking shortly after your arrival to the unit. Your pain will be assessed and pain medications will be given as ordered by the physician. Most pain medication will be administered on an as

needed basis and can be given about every 4 hours per patient request. It is important to remember that you will not be pain free; our goal is to help you have controlled or tolerable pain. When you arrive to the unit, you and your nurse will discuss the plan for pain management.

You need to be mentally prepared to "work" and participate in your care by doing things such as getting out of bed for your meals and participating in physical and occupational therapy. It is a good idea to request pain medication forty-five minutes to one hour before going to therapy sessions. You will be seated in a comfortable recliner whenever you are not in therapy.

DAY 1 AFTER SURGERY

Your surgeon or an advanced practice provider will be visiting you early in the morning on the day after surgery. The physical and occupational therapist will evaluate you and work with you as needed to make sure you're safe to return home.

You, your surgeon, nursing team, physical/occupational therapist and case manager will determine when it is safe for you to be discharged from the hospital. Most of our patients are discharged home within 1 to 2 days after surgery. Some patients will qualify to go home the day of surgery. Sometimes patients may require a further stay in a rehabilitation facility. Every attempt will be made to have this decision finalized in advance, but it may be delayed until day of discharge.

On the day of discharge, you will need to have someone drive you home. You will receive written discharge instructions concerning medications, physical therapy, activity etc. `If your surgeon wants you to have physical therapy after discharge you will be given a prescription for outpatient physical therapy with your discharge instructions, please take this prescription with you to your first appointment.

If You are Going Directly Home

You will need transportation. You will receive written discharge instructions concerning medications, physical therapy, activity, etc. Take this notebook with you to your physical therapy appointment. An appointment should be made as soon as possible after discharge.

Hospital Care/Post-Op Care *continued*

If You are Going to an In-patient Rehabilitation/Skilled Nursing Facility

The decision to go home or to an in-patient rehab/skilled nursing will be made collectively by you, the case manager, your surgeon, physical therapist, and your insurance company. Every attempt will be made to have this decision finalized in advance but may be delayed until the day of discharge. Transfer papers will be completed by nursing staff. A physician from the in- patient rehab/skilled nursing facility will be caring for you in consultation with your surgeon.
Your hospital stay will be based upon your progress. Upon discharge, home instructions will be given to you by the inpatient rehab/skilled nursing staff. Take this notebook with you.

Please remember that in-patient rehab/skilled nursing stays must be approved by your insurance company. A patient's stay in an in-patient rehab/skilled nursing facility must be done in accordance with the guidelines established by Medicare/Insurance. Although you may desire to go to in-patient rehab/skilled nursing facility when you are discharged, your progress will be monitored by your insurance company while you are in the hospital. Upon evaluation of your progress, you will either meet the criteria to benefit from in-patient rehab/skilled nursing, or your insurance company may recommend that you return home with other care arrangements. Therefore, it is important that you make alternative plans preoperatively for care at home.

Please keep in mind that the majority of our patients do so well they don't meet the guidelines to qualify for in-patient rehab/skilled nursing. Also keep in mind that insurance companies do not become involved in "social issues" such as lack of caregiver, animals, etc. These are issues you will have to address before admission.

Discharge Instructions

General Information

- Recuperation takes six to twelve weeks; you may feel weak and sore during this time
- You may have a low-grade fever (below 100.5°F)
- No alcohol or driving with pain medication
- Do not drive until given permission by your doctor – usually at four to six weeks
- Do not smoke or use nicotine – it slows healing and increases your chance of infection
- Walk with your walker or crutches until given permission by your doctor to stop
- You may hear some clicking noises in your knee with movement
- Your new knee may cause metal detectors to go off. You may be given a joint replacement wallet card at your post-op appointment.

Pain

- You will be given prescription pain medication at the time of discharge.
- For mild pain you may use 2 regular strength Tylenol. For moderate pain take 1 prescription pain pill and for more severe pain take 2 prescription pain pills. Do not exceed recommended daily dose of Tylenol.
- ONLY ONE pain medication prescription will be provided after surgery.
- Take pain medication as ordered, before activity and exercise.
- Ice and elevate your knee for fifteen to twenty minutes after exercise periods to reduce pain and swelling.
- You could have occasional swelling for up to nine months

Exercises

- The first three weeks following surgery are critical to achieving full flexion (bending) and extension (straightening) of your knee
- Do your exercises three times a day, every day
- Walk every hour and change positions frequently
- No high-impact, repetitive exercise, such as jumping or running

Incision

- If you have staples or sutures, they will be removed during your post-operative appointment. If skin glue is used, no sutures will need removed.
- It is normal to have some numbness around your incision
- Expect soreness, swelling, and bruising which should improve over four to six weeks

Medication

- You will be given a prescription and instructions for pain medication before you leave the hospital. Use these as directed by your physician.

Discharge Instructions *continued*

Showering

- Typically you can shower the day after your surgery. Keep dressing clean and intact. After showering, pat dry – do not rub incision area.
- DO NOT shower if you feel weak, dizzy, or are unsteady on your feet.
- Have someone close by when you shower in case you need assistance.

Miscellaneous Precautions:

Signs and Symptoms of Infection

- Redness at incision or incision is hot to the touch
- Increased pain and tightness around the knee
- Drainage or pus in or around the incision
- Swelling that does not go down after ice and/or elevation
- Fever of 100.5°F or higher three days after surgery

Signs and Symptoms of a Blood Clot

- Red, swollen, painful leg, especially in the calf area
- Shortness of breath
- Swelling that does not go down after ice and elevation

Prevention of a Blood Clot

- Wear elastic stockings on both legs or home SCDs as instructed by your doctor on your discharge orders.
- Walk every hour and change positions frequently
- Take your blood thinner as directed

Prevention of Constipation

- Walk every hour
- Drink extra water and fluids
- Eat fruits and vegetables daily
- Use laxatives or stool softeners daily while taking pain medications. These can be purchased over the counter.

Miscellaneous

- Do not take tub baths or soak incision
- Do not have sex until you are comfortable

Prevention of Infection During Future Procedures

Discuss antibiotic treatment with your doctor or dentist BEFORE any medical procedures including:

- Any dental procedure – including cleaning of teeth
- Sigmoidoscopy
- Any biopsy or endoscopic procedure
- Any infection, any surgery

CALL YOUR DOCTOR IF YOU HAVE:

- Signs and symptoms of infection
- Signs and symptoms of a blood clot
- Pain that is not relieved by pain medication
- Any questions, remember to call during office hours, whenever possible

Pre/Post-Operative Exercises, Goals and Activity Guidelines

Exercising Before Surgery

It is important to be as fit as possible before undergoing joint replacement surgery. Research indicates that pre-operative rehab is an important factor in post-operative recovery. The exercises indicated below, followed by written and picture instruction, will be most beneficial prior to and immediately following your surgery. You should be able to do them in 15-20 minutes and it is recommended that you complete all of them twice a day. Consider this a minimum amount of exercise prior to surgery. You will initiate outpatient or home health therapy upon discharge from the acute care or inpatient rehabilitation setting. Your therapist will progress your exercises as indicated at that time individualized to your specific needs.

Stop doing any exercise that causes severe pain

Pre/Post Surgery Exercises

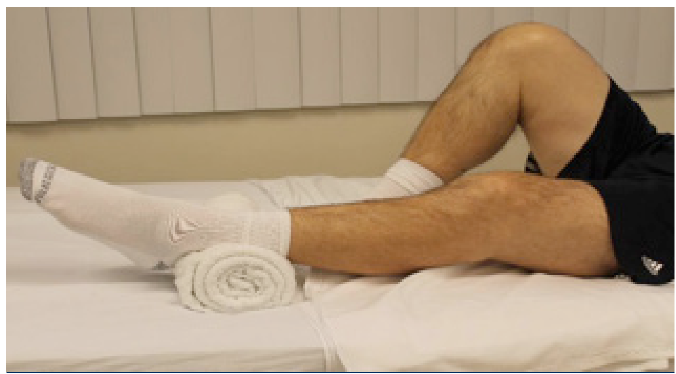
See the following pages for pictures and descriptions:

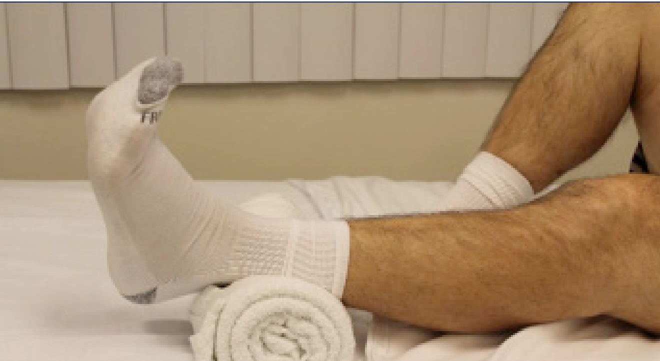
1. **Ankle Pumps**
2. **Quad sets (knee push-downs)**
3. **Gluteal sets (buttocks squeezes)**
4. **Abduction and Adduction slides (side to side heel slides)**
5. **Assisted heel slides (slide heel to and from buttocks)**
6. **Short arc quad (small kicks ups)**
7. **Straight leg raise**
8. **Hamstring stretch (Back of thigh)**
9. **Gastroc stretch (Back or calf)**
10. **Long arc quad (full knee kicks)**
11. **Seated heel slide (knee bends)**
12. **Knee extension stretch (Commercial stretch)**

1. ANKLE PUMP

Move your ankle up and down as far as possible 20 times slowly. Move your ankle through as much range of motion as possible.

This exercise is important to promote circulation, reduce swelling, and prevent blood clots post operatively.



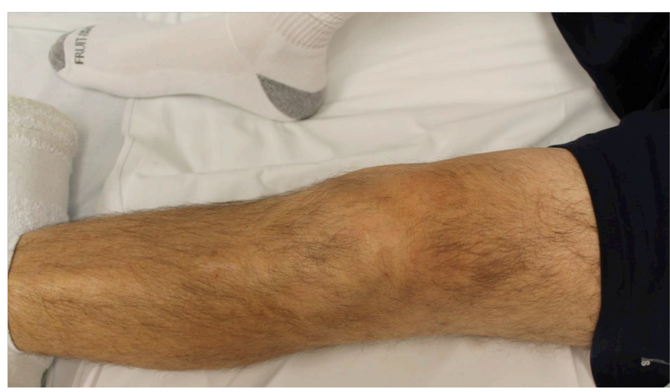


2. QUAD SETS (KNEE PUSH DOWNS)

Lie on your back or recline comfortably. Press the back of your knee into the surface you are on, tightening the muscle on the front (top) of the thigh. Hold this position for 3-5 seconds. (Do not hold your breath.) Relax the thigh fully. Repeat 10-20 times.

Do not increase the number or seconds that you hold the position and the number of repetitions at this same time. Either hold the contraction longer, or do more repetitions.

This exercise promotes a straight knee, improves circulation, and strengthens the thigh.

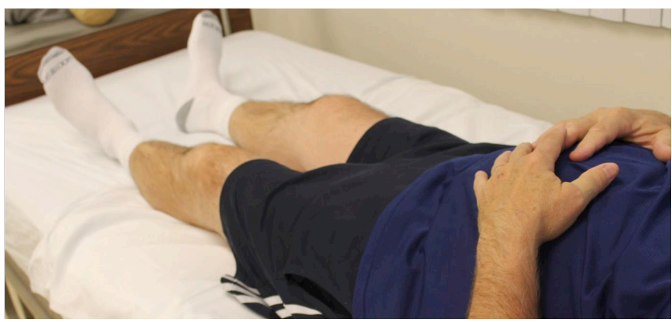


3. GLUTEAL SETS (BUTTOCKS SQUEEZES)

Lie on your back or recline comfortably. Tighten the cheeks of your buttocks on both sides. Hold this position for 3-5 seconds. (Do not hold your breath.) Relax the buttocks fully. Repeat 10-20 times.

Do not increase the number or seconds that you hold the position and the number of repetitions at this same time. Either hold the contraction longer, or do more repetitions.

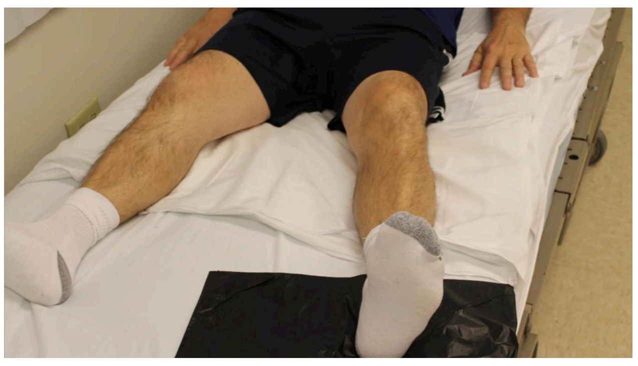
This exercise promotes circulation and strengthens the buttocks muscles which are important in standing up from sitting and climbing steps.



4. ABDUCTION AND ADDUCTION SLIDES (SIDE TO SIDE HEELSLIDES)

Lie on your back or recline comfortably. Place a plastic bag under your lower leg to prevent friction immediately post operatively or if weakness prevents you from completing the exercise prior to surgery. Keep your toes pointed toward the ceiling and your knee straight. Slide your leg out to the side and then back to the starting point. Do not allow your leg to roll in and out. Repeat 20 times.

This exercise strengthens the inner and outer thigh muscles and is important for helping you get in and out of bed.

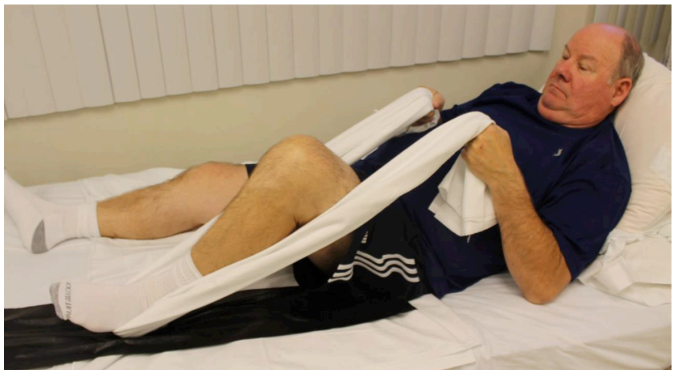


5. ASSISTED HEEL SLIDES (HEEL TO AND FROM BUTTOCKS)

Lie on your back or recline comfortably. Place a plastic bag under your foot and a sheet or long strap around the arch of your foot. Slide your heel toward your buttock using your arms to assist in bending your hip and knee as far as possible while keeping your heel on the surface.

Slowly straighten your leg returning to the starting position. Do not hold your breath. Repeat 20 times.

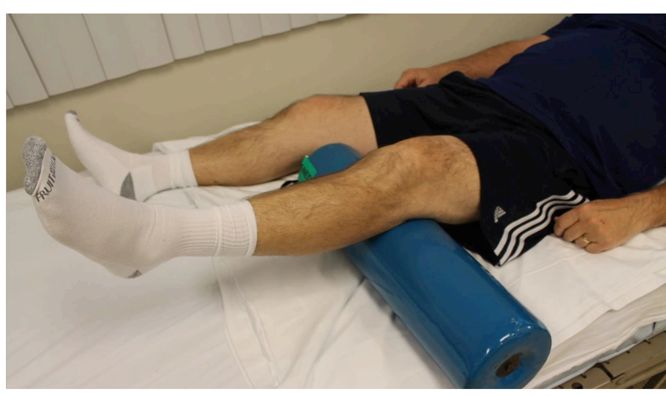
This exercise promotes range of motion in the hip and knee and is important for allowing hip and knee bending during walking and stair climbing.



6. SHORT ARC QUAD (SMALL KNEE KICKS)

Lie on your back or recline comfortably. Place a rolled towel or bolster under your knee. Lift your foot, straightening your knee. Do not lift your knee off the roll. Repeat 20 times.

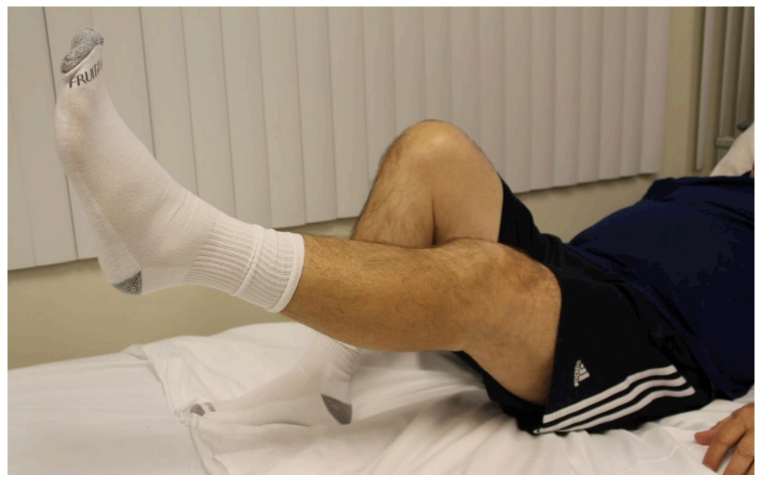
This exercise promotes full knee straightening and promotes strength of the thigh muscle.



7. STRAIGHT LEG RAISE

Lie on your back or recline comfortably. Bend the knee of the nonsurgical leg to protect your back and provide leverage. Lift the surgical leg (no higher than the bent knee) keeping your knee straight and toes pointed toward the ceiling. Return to the starting position and allow your thigh to relax. Repeat in sets of 5 or 10 as your strength allows for a total of 20 repetitions.

This exercise is important in helping you be able to lift your surgery leg in and out of bed.

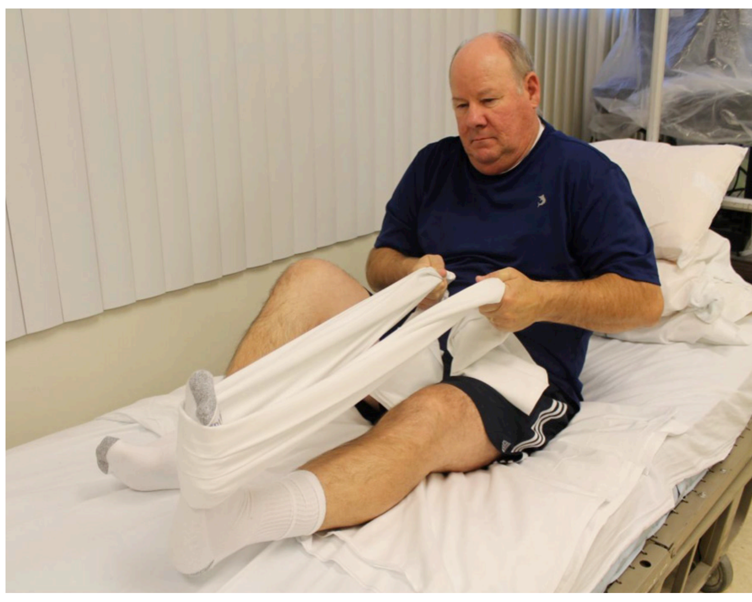


8. HAMSTRING STRETCH

Lie on your back. Place a sheet or strap around the arch of your foot. Pull your leg up toward the ceiling keeping your knee straight until you feel a stretch in the back to the thigh and knee. Hold this position for 20-30 seconds. Do not hold your breath. Return to the starting position. Relax. Repeat 5 times.

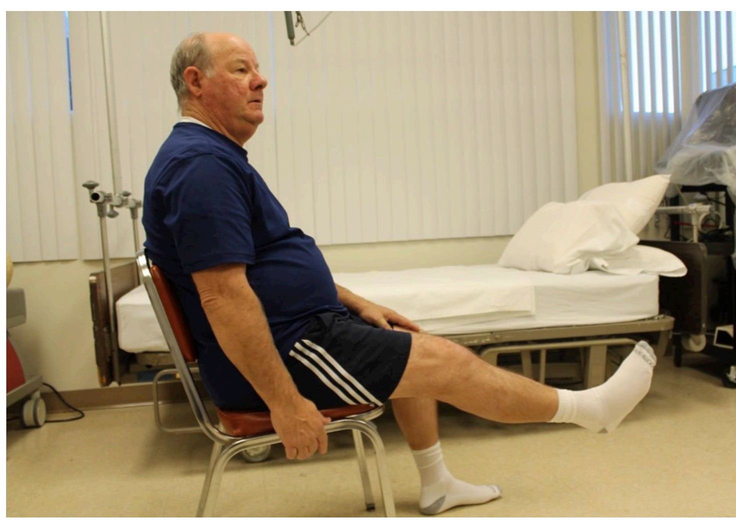
9. GASTROC STRETCH

Recline comfortably. Place a sheet or strap around foot, just below base of toes. Keep your knee as straight as possible. Pull back on foot and ankle until a stretch is felt in the back of the calf and knee. Hold for 20-30 seconds. Do not hold your breath. Return to the starting position and relax. Repeat 5 times.

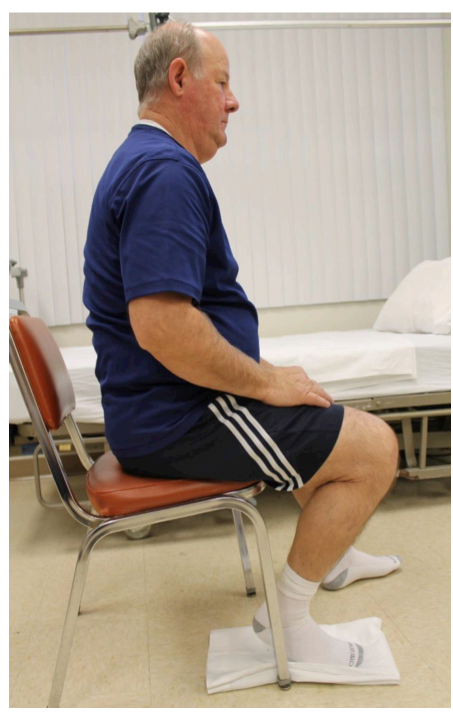


10. LONG ARC QUAD (LARGE KNEE KICKS)

Sit on a firm surface with thigh of surgical leg well supported on seat. Begin with both feet on the floor. Straighten your surgical leg at the knee without lifting your thigh off the seat. Return to the starting position. Repeat 20 times.

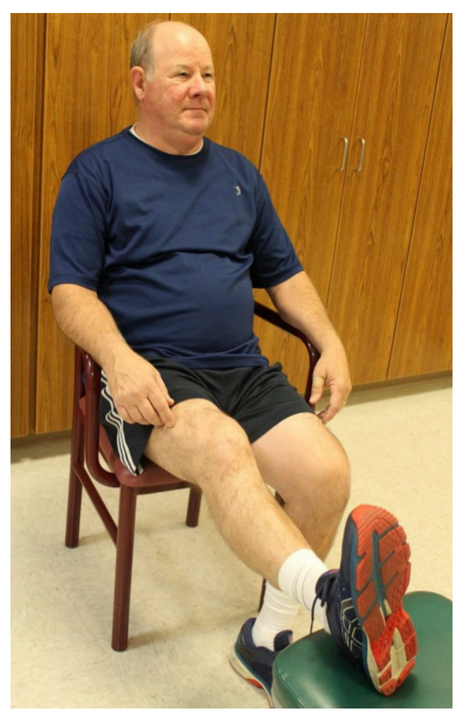


11. SEATED HEEL SLIDE



Sit on a firm surface with feet flat on floor. You may need to scoot to the edge of the seat to allow room to complete the exercise. Place a plastic bag or towel on the floor to help your foot slide easily on the surface. Keeping the foot of your surgical leg on the floor, slide your foot forward and then pull back (straightening and bending your knee) as much as possible. Return to the starting position. Repeat 20 times.

12. KNEE EXTENSION STRETCH (COMMERCIAL STRETCH)



Sit on a firm surface. Place the foot of you your surgical leg on another chair or foot rest with your knee straight. You may want to place a small rolled towel under your ankle for comfort. Place and ice pack on top of your knee as needed for pain. Place a small weight, it may be as little as an ice pack or folded blanket initially, gradually increasing to 5-10 pounds as tolerated, to feel a stretch in the back of the knee, thigh and calf. Hold for 3-5 minutes (the time it takes to watch commercials on television) and complete 3-5 times per day. This exercise promotes full knee extension prior to and following surgery.

Post Discharge Care

Caring for Yourself at Home

When you go home there are a variety of things you need to know for your safety, your speedy recovery and your comfort.

Control Your Discomfort

- Take your pain medicine at least 30 minutes before physical therapy.
- Gradually wean yourself from prescription pain medication to Tylenol.
- Change your position every 60-90 minutes throughout the day.
- Applying ice to your affected joint will decrease discomfort. Also minimizing swelling will help with range of motion (moving) of your new knee. You can use it before and after your exercise program.

Body Changes

- Your appetite may be poor. Drink plenty of fluids to keep from getting dehydrated. Your desire for solid food will return.
- You may have difficulty sleeping. This is normal. Don't sleep or nap too much during the day.
- Your energy level will be decreased for the first month.
- Pain medication that contains narcotics can cause constipation. Use over the counter stool softeners or laxatives such as milk of magnesia if necessary.

Blood Thinners (Anticoagulation)

You will be discharged home on a blood thinner to help prevent blood clots. There are two types of blood thinners commonly used by the surgeons, Oral or Injectable.

Oral Blood Thinners:

Your surgeon will prescribe an oral blood thinner to be taken the first day after your surgery. Some examples of blood thinners are Xarelto, Eliquis, Coumadin and Aspirin. These are a tablet that you take as prescribed by your surgeon for up to 30 days after your surgery. These medications help prevent the formation of blood clots.

There can be serious side effects from this medication such as:

- Unusual bleeding from nose, or mouth. Bleeding from wounds or needle injections that will not stop.
- Feeling like you may pass out.

- Black or bloody stools, coughing up blood or vomit that looks like coffee grounds.
- Numbness, tingling or muscle weakness especially in your legs and feet or,
- Loss of movement in any part of your body

If any of these problems occur, stop taking medication and call your doctor at once.

Injectable Blood Thinners:
Other options that may be prescribed is injectable therapy. Some examples are **Arixtra** or **Lovenox**. This requires the patient to administer subcutaneous injections in their abdomen once or twice daily for 10 days after being discharged from the hospital. The nurses will provide you with education regarding this injection.

RECOGNIZING & PREVENTING POTENTIAL COMPLICATIONS

SIGNS OF INFECTION

- Increased swelling and/or redness at incision site
- Change in color, amount, or odor of drainage
- Increased pain in knee
- Fever greater than 100.5° F

Prevention of Infection

- Take proper care of your incision as explained.
- Take prophylactic antibiotics when having dental work, colonoscopy or cystoscopy.
- Notify your physician and dentist that you have had a total joint replacement.

BLOOD CLOTS IN LEGS

Surgery may cause the blood to slow and coagulate in the veins of your legs, creating a blood clot. This is why you take blood thinners after surgery. If a clot occurs despite these measures, you may need to be admitted to the hospital to receive intravenous blood thinners. Prompt treatment usually prevents the more serious complication of pulmonary embolus.

Signs of Blood Clots in Legs

- Swelling in thigh, calf or ankle that does not go down with elevation
- Pain, tenderness in calf

NOTE: blood clots can form in either leg.

Prevention of Blood Clots

Post Discharge Care

- Foot and ankle pump exercises
- Walking
- Compression stockings or Sequential Compression Devices
- Blood thinners such as Aspirin, Coumadin, Xarelto or Eliquis

PULMONARY EMBOLUS

An unrecognized blood clot could break away from the vein and travel to the lungs. This is an emergency and you should CALL 911 if suspected.

Signs of a Pulmonary Embolus

- Sudden chest pain
- Difficult and/or rapid breathing
- Shortness of breath
- Sweating
- Confusion

Prevention of Pulmonary Embolus

- Prevent blood clot in legs
- Recognize a blood clot in leg and call physician promptly

Message from the Joint Care Center Medical Directors:

The Importance of Lifetime Follow-Up Visits

Over the past 20 years we have discovered that many people are not following up with their orthopedic surgeon on a regular basis. The reason for this may be that they don't realize they are supposed to, or they don't understand why it is important. Most joint replacements should last up to 20 years or longer depending on your level of activity and wear.

So, when should you follow-up?

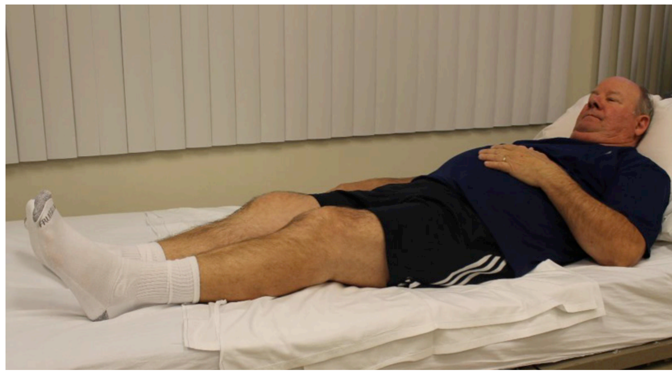
Your surgeon will advise you when to follow up after your surgery. Please consider making an appointment with your orthopedic surgeon:

- Anytime you have mild pain for more than a week in the replaced joint
- Anytime you have moderate or severe pain in the replaced joint that requires medication

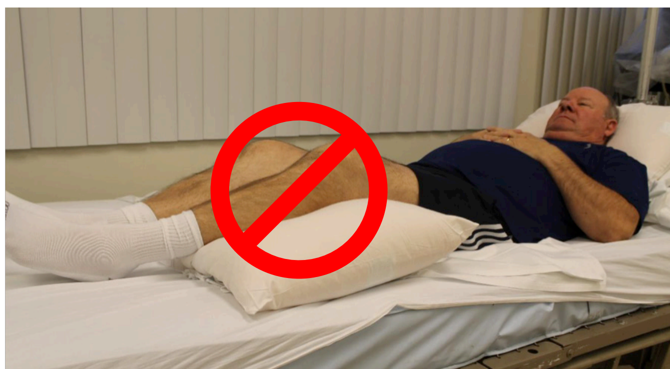
We are happy that most patients do so well that they don't think of us often. However, we enjoy seeing you and want to continue to provide you with the best care and advice. If you are unsure how long it has been or when you next visit should be scheduled, please call us.

Activities of Daily Living, Precautions and Safety Tips

When lying in bed –
Keep your knee straight



Do NOT
put a pillow under your knee



When standing up from a chair –

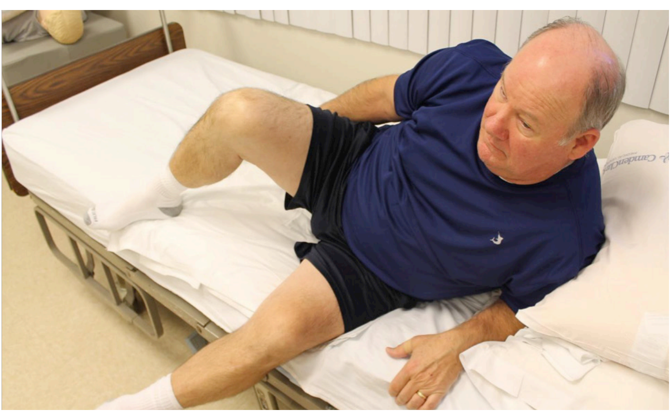
- Place your walker close to your body.
- Place your surgical leg slightly in front of your non-surgical leg.
- Place one hand on the walker and one hand on the seat, pushing your body weight forward and up to standing.
- Once standing, grasp the walker with both hands.

When sitting down –

- Back up to the seat until you feel it behind your legs.
- Place your surgical leg slightly in from of your non-surgical leg.
- Reach back with one hand at a time for the arm rest or surface on which you will sit.
- Slowly lower yourself to the seat using your arms and non-surgical leg primarily.

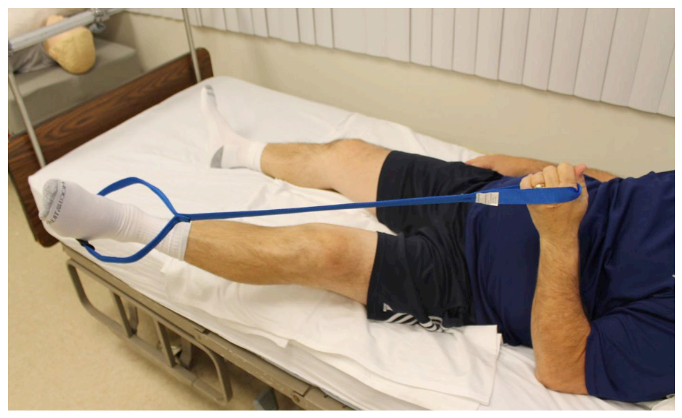
When getting into bed –

- Back up to the bed until you feel it on the back of your legs – midway between the head and the foot of the bed.
- Reach back with one hand at a time, sit on the edge of the bed and scoot back as far as possible.
- Move your walker out of the way, but keep it within reach.
- Scoot your hips around so that you are facing the foot of the bed.
- Lift your leg into bed while scooting around to lay down. If you are unable to lift your surgical leg into bed by yourself, a family member or caregiver can assist or you can use a leg lifter or sheet wrapped around the arch of your foot.
- Once both legs are in bed, scoot your hips away from the edge of the bed.



When getting out of bed –

- Scoot your hips to the edge of the bed.
- Sit up in bed and scoot your legs over the edge of the bed. If you are unable to lower your surgical leg to the floor on your own, a family member or caregiver can assist or you can use a leg lifter or sheet wrapped around your foot.
- Scoot to the edge of the bed.
- Use both hands to push off the bed to stand up slowly.



Walker Height and Walking –

To ensure your walker is the correct height, stand up straight and allow one arm to hang in a natural position at your side. Your walker should be adjusted so that the grips are at the same height as the bend in your wrist. When placing your hand on the walker at this height you should have a 15-30 degree bend in your elbow.

When you begin walking, move the walker forward allowing room to step into the middle portion. Step forward with your surgical leg first into the open space in the middle of the walker. Take as much weight as needed through your arms on the walker, then step with the non-surgical leg. **DO NOT** step past the front bar of the walker. Move the walker forward and repeat.

Going Up Stairs –
When going up stairs, step up with the non-surgical foot first ("Up with the good.")

Bring the surgical leg up to the same step before moving on to the next step.

Going Down Stairs –
When going down steps, step down with the surgical foot first ("Down with the bad.")

Bring the non-surgical leg down to the same step before moving on to the next step.

Around the House –
Saving Energy & Protecting Your Joints

Kitchen

- DO NOT get down on your knees to scrub floors. Use a mop and long handled brushes.
- Plan ahead! Gather all your cooking supplies at one time. Then, sit to prepare your meal.
- Place frequently used cooking supplies and utensils where they can be reached without too much bending or stretching.
- To provide a better working height, use a high stool, or put cushions on your chair when preparing meals.

Bathroom

- DO NOT get down on your knees to scrub bathtub. Use a mop or other long handled brushes.

SAFETY and AVOIDING FALLS

- Pick up throw rugs and tack down loose carpeting. Cover slippery surfaces with carpets that are firmly anchored to the floor or that have non-skid backs.
- Be aware of all floor hazards such as pets, small objects or uneven surfaces.
- Provide good lighting throughout. Install nightlights in the bathrooms, bedrooms, and hallways.
- Keep extension cords and telephone cords out of pathways. DO NOT run wires under rugs; this is a fire hazard
- DO NOT wear open-toe slippers or shoes without backs. They do not provide adequate support and can lead to slips and falls.
- Sit in chairs with arms. It makes it easier to get up.
- Rise slowly from either a sitting or lying position so as not to get light-headed.
- DO NOT lift heavy objects for the first three months, and then only with your surgeon's permission.
- Stop and think. Use good judgment.

Do's and Don'ts for the Rest of Your Life

Whether they have reached all the recommended goals in three months or not, all joint patients need to have a regular exercise program to maintain their fitness and the health of the muscles around their joints. With both your orthopedic and primary care physicians' permission you should be on a regular exercise program three to four times per week lasting 20 – 30 minutes. Impact activities such as running and singles tennis may put too much load on the joint and are not recommended. Infections are always a potential problem and you may need antibiotics for prevention.

What to Do in General

- Always take antibiotics one hour before you are having dental work or other invasive procedures.
- Although the risks are very low for post-op infections, it is important to realize that the risk remains. A prosthetic joint could possibly attract the bacteria from an infection located in another part of your body. If you should develop a fever of more than 101 degrees, or sustain an injury such as a deep cut or puncture wound, you should clean it as best you can, put a sterile dressing or Band-Aid on it and notify your doctor. The closer the injury is to your prosthesis, the bigger the concern. Occasionally, antibiotics may be needed. Superficial scratches may be treated with topical antibiotic ointment. Notify your doctor if the area is painful or reddened.
- At your first follow up office visit you may receive a joint replacement card. Carry this card with you, it may be useful in airports and with follow-up appointments.
- When traveling, stop and change positions hourly to prevent your joint from tightening.
- See your surgeon annually unless otherwise recommended.

What to Do for Exercise

- Choose a Low Impact Activity
- Recommended exercise classes
- Home program as outlined in Patient Guide
- Regular one to three mile walks
- Home treadmill
- Stationary bike
- Regular exercise at a fitness center
- Low impact sports-golf, bowling, walking, gardening, dancing, etc.

What Not to Do

- Do not run or engage in high impact activities.
- Discuss with your surgeon participation in high risk activities.

NOTES:

This project was developed through the cooperation and collaboration of the following: Joint Care Center at Camden Clark Medical Center and Parkersburg Orthopedic Associates

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