



SURGICAL SPECIALTY
CENTER OF
MID-ATLANTIC

Pre-Operative Knee Replacement Guide

Patient Name: _____

Please review this guide with your nurse and family.
Bring guide with you on the day of your surgery.

WELCOME

Choosing the right facility for your total knee replacement is no small decision. We are pleased that you have selected the Surgical Specialty Center of Mid-Atlantic for your healthcare needs. Our Center is the recipient of the Gold Seal of Approval™ from The Joint Commission.

REMEMBER, THIS IS ONLY A GUIDE!

This booklet is meant as a general guide to your care; however, your individual care will be directed by your physician. You are not expected to read it all in one day, nor memorize any of it. Keep this guide as a handy reference as you prepare for your surgery.

We are very proud of our Total Joint Program and we are confident that you will be very satisfied with the care you receive.

Our mission is to provide our patients with cost-effective, friendly outpatient surgical services through friendly staff, caring doctors, state-of-the-art technology, and a well-equipped, comfortable facility.

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TOTAL KNEE REPLACEMENT

Total knee replacement is a surgery to replace a badly damaged knee joint with man-made parts. These man-made parts are called prosthesis. The man-made joint is made of metal or a combination of metal and plastic.

The surgery is done to lessen pain and improve mobility. It is for people with severe osteoarthritis or rheumatoid arthritis of the knee.

The most common cause of knee damage requiring knee replacement is osteoarthritis, which is a degenerative disease of the bones of the knee that causes the surfaces of the knee joint to become irregular and rough, preventing smooth and painless motion of the knee joint. Knee joint replacement may be recommended for: knee osteoarthritis or arthritis causing knee pain that has failed to respond to conservative therapy, decreased knee function caused by arthritis, inability to work because of knee pain, inability to sleep through the night because of knee pain or inability to walk more than three blocks because of knee pain.

Before



After



TOTAL KNEE REPLACEMENT

Risks involved with Total Knee Replacement include but are not limited to the following:

- Bleeding
- Blood clots
- Infection
- Respiratory issues
- Reaction to anesthesia
- Dislocation of joint
- Damage to nearby blood vessels, bones, or nerves
- Leg length difference

Please discuss any questions regarding risks with your surgeon.

PREPARATION CHECKLIST (Overview)

APPROXIMATELY 6 WEEKS PRIOR TO SURGERY

- Make pre-op appointments (see checklist on next page)
- Make outpatient therapy appointments
- Begin pre-op exercises/deep breathing exercises
- Begin nutrition management
- Begin using the pain scale
- Begin Smoking Cessation (STOP SMOKING)

APPROXIMATELY 30 DAYS PRIOR TO SURGERY

- Complete medical clearance appointment
- Determine who will be your Care Coach

APPROXIMATELY 2 WEEKS PRIOR TO SURGERY

- Complete pre-op screening telephone interview
- Complete pre-op appointment with surgeon
- Begin preparing your home/meals for your return
- Begin preparing for pet care

APPROXIMATELY 2-3 DAYS PRIOR TO SURGERY

- Clear clutter, remove rugs, clean home environment

THE NIGHT BEFORE SURGERY

- Shower using antibacterial soap

PRE-SURGICAL CHECKLIST

As soon as you get your surgery date: _____
(WRITE THE DATE HERE)

You will need to:

- Call the Surgical Specialty Center of Mid-Atlantic Screening Department at 240-630-8241 to schedule a **telephone** interview for your medical history. Refer to page 6 for information regarding this interview. _____

(WRITE THE DATE/TIME HERE)

- Schedule a **Pre-op** Appointment with your Surgeon and/or Physician Assistant (PA) if requested. _____

(WRITE THE DATE/TIME HERE)

- Schedule a **Pre-op** appointment with your Primary Care Physician (PCP) for a Medical Clearance letter. This may include an EKG and lab work. _____

(WRITE THE DATE/TIME HERE)

- Schedule your **Outpatient** Physical Therapy appointments. _____

(WRITE THE DATE/TIME HERE)

PRE-OPERATIVE SCREENING TELEPHONE APPOINTMENT

Call the Surgery Center as soon as you are scheduled for surgery to make an appointment for a telephone interview. You must have the following information available during the interview:

1. Name and phone number of your Primary Care Physician
2. Completed medication list found on page 7
3. List of previous surgeries and hospitalizations

A nurse in the pre-op department will obtain your health history and medication list for the Anesthesia Department.

At the end of the interview the nurse will give you instructions for the day of surgery. The instructions will include food and fluid restrictions, medications to take on the day of surgery as well as the time and location of arrival on the day of surgery.

REGISTRATION FOR YOUR SURGERY

You will report to:

Surgical Specialty Center of Mid-Atlantic

6430 Rockledge Drive, Suite 11

Bethesda, MD 20817

Phone: 240-630-8241

Fax: 240-800-3950

Registration: You will be registered for your surgery. Bring your photo identification and insurance cards for registration.

Pre-Op: You will be escorted to a private room prior to surgery. A nurse will review several questions with you to ensure safety during and after your procedure.

MEDICATION FORM

You may complete this form and email to lross@ssmidatlantic.com prior to your interview.

PLEASE LIST ALL MEDICATIONS PRESCRIBED BY A PHYSICIAN (include pain medications)				
Name	Dose	Route/Frequency	Reason/Diagnosis	Date & Time of Last Dose Taken
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				

PLEASE LIST ALL OVER-THE-COUNTER MEDICATIONS				
<i>Examples include: Aspirin, Motrin, Metamucil, laxatives, cold medicine, etc.</i>				
Name	Dose	Route/Frequency	Reason/Diagnosis	Date & Time of Last Dose Taken
1.				
2.				
3.				
4.				
5.				
6.				
7.				

PLEASE LIST ALL HERBAL SUPPLEMENTS/VITAMINS				
Name	Dose	Route/Frequency	Reason/Diagnosis	Date & Time of Last Dose Taken
1.				
2.				
3.				
4.				
5.				
6.				
7.				

Name: _____ Date of Birth: _____ Date of Surgery: _____

PRE-OPERATIVE GUIDELINES

PATIENT SELECTION: Minimum age of 1 year of age. No patients with ESRD. Obesity: Maximum BMI limit of 45.

FASTING:

- Food: Do not eat anything after midnight.
- Liquids: May have up to 4 ounces (half cup) of water or black coffee (no sugar or milk) up to 2 hours prior to procedure.
- Infants on breast milk NPO for 4 hours; on formula 6 hours.

MEDICATIONS:

DAY OF SURGERY

- Continue to take all morning medications except Metformin, diuretics.
- Insulin Management: Must call PCP or Endocrinologist on how much insulin to take day of surgery. Typically, it is 1/3 to 1/2 of normal morning insulin. Sugar must be less than 300 to do surgery.

ONE WEEK PRIOR TO SURGERY

- Stop all weight-loss products (Phenteramine) and nutritional or herbal supplements (garlic, Vitamin E, St. John's Wort).
- Stop all recreational drugs like marijuana, cocaine.
- Blood thinners: The decision to continue or discontinue any blood thinners should be managed by surgeon and physician prescribing the medication. Recommendation is to stop these medications and NSAIDS 1 week prior to procedure. Check with physician prescribing them before stopping therapeutic blood thinners like Plavix, Aspirin.

TWO WEEKS BEFORE SURGERY

Stop all monoamine oxidase inhibitors (MAO inhibitors). Must speak to PCP on stopping these as they must be weaned off and not stopped abruptly. See medication list.

PRE-OPERATIVE TESTING

EKG must be less than 1 year of age.

Patient Type	Clearance	What to Order
Healthy age 0-65		H&P
Healthy 65-80		H&P EKG
Healthy 80 and over	Medical Clearance	H&P EKG
CAD, CHF, Cardiomyopathy	Cardiac Clearance	H&P EKG CBC BMP
Hypertension		H&P EKG BMP if taking diuretics or ach-inhibitors
Peripheral Vascular Disease		H&P EKG CBC
COPD		H&P EKG CBC
Renal Disease		H&P EKG CBC BMP
Diabetes		H&P EKG CBC BMP
Liver Disease		H&P EKG CBC BMP LFT PT/PTT/INR
Bleeding History		H&P EKG CBC BMP LFT PT/PTT/INR
Seizure within 6 months of surgery	Neurology Clearance	H&P
CVA or TIA within 6 months of surgery	Medical Clearance	H&P EKG CBC
Pacemakers/Defibrillators		H&P EKG <ul style="list-style-type: none"> • Device type, manufacturer, model • Last date it was interrogated • If non-magnet responsive, contact company representative to come DOS

BREATHING EXERCISES

It is very important to take deep breaths both before your surgery when doing your pre-operative exercises and after surgery as you wake up from anesthesia and begin your recovery. Deep breathing will increase oxygen flow to the lungs to prevent complications and also help you to stay relaxed to manage your pain level and enable you to begin using your new joint. Practice taking a deep breath by using the following two (2) step technique:

1. Inhale deeply through your nose.
2. Exhale slowly through pursed lips while counting to five.

Remember to take slow, deep breaths as you change positions during daily activities and also throughout your exercise routine. Deep breathing will keep you relaxed and ease your discomfort as you move before and after your surgery.

NUTRITION

It's best to approach your surgery in a good nutritional state so that you are at your strongest. **Eating a well-balanced diet, consuming an adequate amount of lean protein, and increasing your fluid intake will help to reduce the chance of infection after surgery.**

If you have a tendency to be anemic, you may benefit from increasing your iron intake with your physician's recommendation. The following foods are rich in Iron:

- Spinach
- Iron-enriched whole grain breads/cereals (oatmeal, cream of wheat, grits)
- Beans
- Calf and chicken liver, turkey, chicken and beef
- Oysters, clams, scallops and shrimp

Foods high in vitamin C (citrus juice and fruits, melons, dark green leafy vegetables, and potatoes) help your body to absorb iron. **Limit tea and coffee at meal times so as to not decrease iron absorption.**

If you take an Iron supplement, drink plenty of water and fruit juices to stay well-hydrated as Iron supplements can be constipating.

Pay attention to your elimination. Increase daily fiber and fluids to maintain regular bowel movements. You may take over-the-counter laxatives and/or stool softeners if needed to stay regular in the weeks prior to admission.

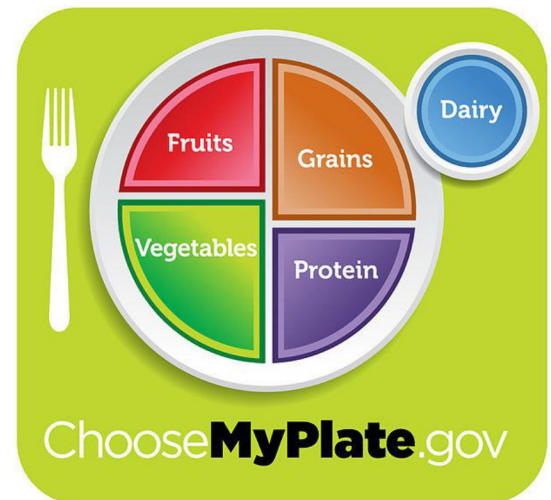
Limit your daily caffeine intake for one week prior to surgery, as caffeine tends to increase urination, potentially causing dehydration.

Alcohol consumption should be decreased or eliminated. Please discuss alcohol consumption with your primary care doctor.

Drink 6-8 full glasses of water each day for three days prior to surgery. This will prepare your body to be well-hydrated for surgery and will help you to eliminate the anesthetic agents. It may also minimize any dizziness or light-headedness when you get out of bed.

NUTRITION TIPS BASED ON THE U.S. DIETARY GUIDELINES (USDA)

- **Make ½ your plate fruits and vegetables.** Eat the color of the rainbow.
- **Make ¼ your plate lean protein** (beef—loin, round chuck, skinless chicken, turkey, beans or tofu).
- **Take your time.** Enjoy your food but eat less.
- **Avoid oversized portions.** Use a smaller plate, bowl and glass. Portion out foods before you eat.
- **Switch to fat-free or low fat (1%) milk.** They have the same amount of calcium and other essential nutrients as whole milk, but less calories and saturated fat.
- **Make half your grains whole grains.** Substitute a whole-grain product for a refined product—such as eating whole-wheat bread instead of white bread.
- **Compare sodium in foods.** Use the Nutrition Facts label to choose lower sodium versions of foods. Select canned foods labeled “low sodium”, “reduced sodium” or “no added salt”.
- **Drink water instead of sugary drinks.** Cut calories by drinking water. Soda, energy drinks and sports drinks are a major source of added sugar and calories in American diets.



ON THE DAY BEFORE YOUR SURGERY

- Avoid red meat, beans, nuts, fresh vegetables and whole grain products. This will reduce the amount of waste that moves through your intestine.
- Pay attention to your portions. Eat a light meal on evening prior to surgery.

NIGHT BEFORE SURGERY

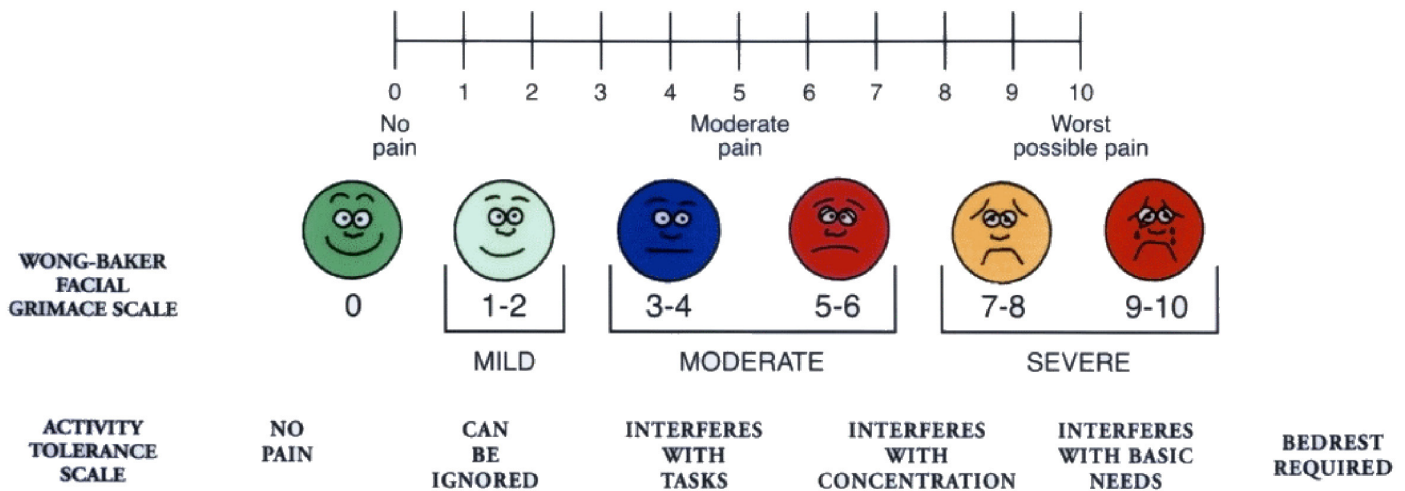
- No eating or drinking after midnight. This includes hard candy and gum.

PAIN MANAGEMENT

You will experience surgical pain after your joint replacement. Pain is evaluated on a numeric scale. While everyone experiences pain differently, these descriptions will help you determine your level of pain on the scale. **Please begin to use this pain scale before surgery by assigning a number to your pain or discomfort as you move through your daily activities.** This will allow you to become familiar with using a number to describe your pain and will be helpful to you and the Total Joint Team in managing your surgical pain during your recovery.

UNIVERSAL PAIN ASSESSMENT TOOL

This pain assessment tool is intended to help patient care providers assess pain according to individual patient needs. Explain and use 0-10 Scale for patient self-assessment. Use the faces or behavioral observations to interpret expressed pain when patient cannot communicate his/her pain intensity.



- 0 = No pain.
- 2 = Discomfort or mild pain.
- 5 = Pain that interrupts your ability to relax and rest. Best described as: you'd like to take a nap, but can't because it hurts too much.
- 7 = Best described as pain that wakes you up from a sound sleep.
- 10 = Excruciating

Zero to four is generally considered the reasonable range for post-operative pain.

PRE-OPERATIVE KNEE EXERCISES

Begin the exercises on the next page as soon as you receive this booklet.

Exercises three through seven should be done while lying in bed. Please do not do these on the floor. **Stretch to comfort only and do the exercises with both the right and left legs.** The exercises should never cause pain or go beyond the normal movement of that joint. They are stretching exercises to keep your leg flexible and ready to accept a new joint.

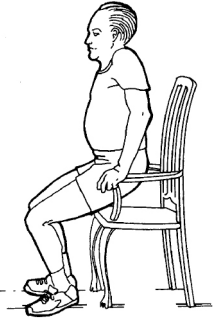
Remember to **take slow deep breaths** as you do each exercise. This will provide oxygen to your muscle tissue and help you stay relaxed as you stretch your muscles. You may want to **count out loud slowly from one to ten as you hold each stretch.** This will prevent you from holding your breath during the stretch.

PRE-OPERATIVE KNEE EXERCISES

1. Arm Chair Push-up

Put hands on arms of chair and push body up out of chair.

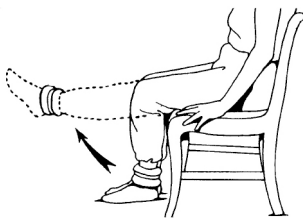
Repeat: 10 times. 2-3 times daily.



2. Long Arc Quad

Straighten your leg and try to hold it for 10 seconds. Slowly bend knee to return. Repeat with other leg.

Repeat: 10 times. 2-3 times daily.



3. Heel Slide

Bend knee and pull heel towards buttocks. Hold for 10 seconds. Return. Repeat with other knee.

Repeat: 10 times. 2-3 times daily.



4. Gluteal Squeezes

Squeeze buttock muscles as tightly as possible for 10 seconds.

Repeat: 10 times. 2-3 times daily.



5. Quad Set

Slowly tighten muscles on thigh of straight leg, which will press the back of your knee down onto the floor or mat. Hold for 10 seconds.

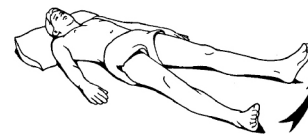
Repeat: 10 times. 2-3 times daily.



6. Knee Abduction

Slide one leg out to the side. Keep kneecap pointing toward the ceiling. Gently bring leg back to midline. Repeat with other leg.

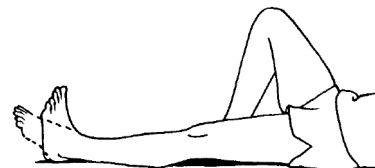
Repeat: 10 times. 2-3 times daily.



7. Ankle Pumps

Bend ankles up and down alternating feet.

Repeat: 10 times. 2-3 times daily.



HOME PREPARATION

Since you will initially experience limited movement after your surgery, please prepare your home for safety.

- Move things that you use frequently to waist level if they are down low in the kitchen, bathroom, bedroom, etc.
- Consider buying or preparing food ahead of time and freezing it so that only reheating is required.
- To maintain safety and independence on the stairs, consider having a stair railing installed on any stairwell you must use during your recovery.
- Items such as tub/shower seats and hand-held shower attachments should be purchased and installed before your surgery date.
- Assess the level of the following items to determine if they are at the appropriate height for use after surgery:
 - » Bed
 - » Chair with arms
 - » Car you will be riding in
 - » Toilet seat

This level can be measured by backing yourself up to each item. Check to see that the seat top of each item is at the level of the back of your knee crease or above your knee

HOME PREPARATION (cont.)

- Decide what chair you will use when you are recovering. If it is low, put a pillow in it to make it higher or use a higher chair. This will assist you to maintain comfort since you might not be able to bend your knee fully.
- Consider the car that will take you home. A four-door sedan is usually preferable but a two-door car will do if the front seat can be pushed back and a pillow raises the seat high enough. This will assist you to maintain comfort since you might not be able to bend your knee fully.
- Shoes need to be supportive, secure on your feet, slip resistant and not too tight fitting as your feet may be slightly swollen immediately after surgery. Clogs and Crocs are not appropriate.

GENERAL SURGICAL INFORMATION

- Please arrive one (1) hour prior to your scheduled surgery. Report to 6430 Rockledge Drive, Suite 11, Bethesda, MD 20817
- Family and visitors are welcome to accompany you, but space is limited.
- Wear comfortable clothes. Wear into the facility what you are going to wear home. Upon arrival, you will change into a hospital gown, robe and socks.
- Do not wear jewelry, including your wedding band, as absolutely no jewelry or metal objects may be worn during the operation.
- Contacts may not be worn during surgery. Consider wearing eyeglasses to the facility. Bring a case to keep your glasses safe. Plan to leave your glasses with a family member while you are in surgery.
- Hearing aids may not be worn during surgery. You will be asked to remove them just prior to going to the operating room. Bring a container to keep your hearing aids safe. Plan to leave your hearing aids with a family member while you are in surgery.
- Dentures may not be worn during surgery. You will be asked to remove them prior to going into the operating room.
- Remove eye makeup and nail polish before surgery.
- To reduce the potential risk of infection
 - » Have all types of artificial nails removed before surgery.
 - » Have tooth and gum problems treated before surgery. See your dentist prior to surgery to have a cleaning and to ensure you have no cavities or mouth infections.

DAY OF SURGERY CHECKLIST

Date and Time of your Surgery: _____

Arrival Time: _____

Bring the Following:

- Picture ID and Insurance Cards
- Overnight Bag with:
(only needed if your doctor prefers you to stay for observation)
 - Personal toiletries
 - Case or container for eye glasses, dentures and/or hearing aids
 - Any sleep apnea equipment i.e. CPAP machine, mask and tubing
 - Cell phone charger
 - Cane, walker and/or crutches
- Wear
 - Shorts or pants that are one size larger than you normally wear with loose fitting legs
 - Slip resistant shoes

DO NOT BRING:

- Medications unless directed by Pre-Operative Screening nurse.
- Valuables

DAY OF SURGERY

You will arrive one (1) hour before your surgical time and get changed into hospital clothing. Your blood pressure, pulse, temperature and oxygen level will be taken. The nurse will review your chart and answer any questions you or your family may have prior to surgery.

You will meet your surgeon or nurse and anesthesiologist to discuss and finalize the plans involved with your surgery. At this time please feel free to ask any questions you might have regarding your surgery and anesthesia. You will be asleep during your surgery. A member of the Anesthesia Department is always available should you have any issues or concerns about your anesthesia care during your hospital stay.

When it is time for your surgery you will travel to the operating room by stretcher and be placed on equipment to monitor your heart, blood pressure and oxygen level.

After surgery, you will be taken to the Post-Anesthesia Care Unit (PACU). You will be on oxygen and your vital signs will be watched carefully by a PACU nurse as you recover from anesthesia. Your pain level will be assessed and you will be given medication to keep your pain tolerable. When you meet the PACU discharge criteria, you discharged from the facility. Your family will be contacted for visitation once you are settled in recovery.

An intravenous line (IV), placed during surgery to provide hydration, will continue to run until you are taking adequate amounts of oral fluid. The infusion will then be discontinued. The IV will remain in place until discharge. Prophylactic (preventative) antibiotics will be given to reduce the risk of infection in the artificial joint. You will be wearing anti-embolism stockings and compression stockings which are used to reduce your risk of developing blood clots.

You will leave surgery with a dressing to the knee area.

The nursing staff will continue to closely monitor your condition. Throughout your stay the nurses will coordinate your care, provide pain management, and assist in your daily activities.

POST OPERATIVE CARE

(Day of surgery through Discharge Day)

Nursing:

- Your vital signs will be monitored.
- You will receive pain medications as needed. If you have any questions or concerns regarding the effectiveness of your pain medication, please contact a member of your nursing care team. With your cooperation, surgical pain can be safely and effectively managed.

Physical and Occupational Therapy:

- You will be taught ankle and calf exercises that help prevent blood clots.
- You will practice using your walker or crutches and cane.
- You will practice walking the stairs.
- You will practice getting dressed.

