

A patient's guide to

Surgery & Recovery



ORTHOPEDIC +FRACTURE

SPECIALISTS

Put Your Life in Motion

IMPORTANT APPOINTMENTS

Your knee replacement is scheduled at: Center for Specialty Surgery 11782 SW Barnes Rd. Suite 200 Portland, OR 97225 503-906-4300



Put Your Life in Motion
Main 503-214-5200

Date/Time of Surgery:
Your Surgeon:
Pre-Operative Appointment (Date/Time):
Your Physical Therapist:





WELCOME!

A life well lived tends to be an active one, but sometimes, an active life leads to injuries to bones, joints, or both. That's where Orthopedic + Fracture Specialists comes in. Our physicians are passionate about their work and compassionate for their patients. They're here to help you **Put Your Life in Motion**.

The physicians of Orthopedic + Fracture Specialists stand at the forefront of surgical treatment of bone and joint problems, including fractures, arthritis, and inflammatory conditions for both adults and adolescents, degenerative problems, and joint replacement surgery of hip, knee, and shoulder joints.

Effective joint reconstruction requires a combination of surgical expertise and collaboration among a variety of specialists throughout the patient's entire course of treatment. The patient care and research collaboration among the physicians of Orthopedic + Fracture Specialists and other area specialists allow progressive treatment alternatives and new technologies for joint reconstruction. Our joint reconstruction specialists have been leading the way nationally in current surgical techniques, which significantly shorten recovery time, allowing you to recuperate in the comfort of your own home.

KNEE REPLACEMENT BOOK

Your surgeon, nurses, physical and occupational therapists, and discharge planners have worked cohesively to provide this information about your surgical experience and your recovery. These are general guidelines designed to help you and those assisting you through all phases of your surgical treatment: pre-surgery; day-of-surgery; post-surgical expectations; and recuperation and healing. Each person is unique; therefore, your recovery and rehabilitation may vary from these general guidelines. Protocols listed in this book may vary slightly based on provider/surgeon preference - please follow your provider's post-operative protocols as that will be tailored to your specific needs.



ABOUT CENTER FOR SPECIALTY SURGERY

Your surgeon has scheduled your joint replacement at our Ambulatory Surgery Center, Center for Specialty Surgery (CSS). Owned and operated by the Physician Owners of Orthopedic + Fracture Specialists (O+FS) in collaboration with Providence, CSS is Certified by Medicare and the Accreditation Association for Ambulatory Health Care (AAAHC). CSS' goal is to provide you with safe surgical and recovery care in a setting this is comfortable and convenient for you.

The Total Joint Specialists at O+FS along with the CSS administration have built a robust Outpatient Total Joint Program to help you get back to the things your love and help you Put Your Life in Motion.

Surgeries and procedures performed at CSS have a greater level of personal care than hospital settings with shorter wait times, lower costs, and most importantly, lower rates of infection*. With more one-on-one nursing care, CSS also has Physician Anesthesiologists who are well-trained in administering nerve blocks to improve post-surgical pain control, and physical therapists to ensure your safe mobility prior to being discharged to your home.

At CSS you will find:

- 5 Operating Rooms
- 2 Procedure Rooms
- Comfortable Pre-Operative Rooms and Recovery Bays
- Spacious Waiting Area with a vending machine and hot coffee for family/friends (Please note: Patients are not allowed to eat/drink anything prior to surgery)
- Free Parking and private patient exit with drop-off service to your vehicle

To learn more about Center for Specialty Surgery, please visit our website:

www.CenterForSpecialtySurgery.com



*Check out our Safety Record by scanning the QR code below:

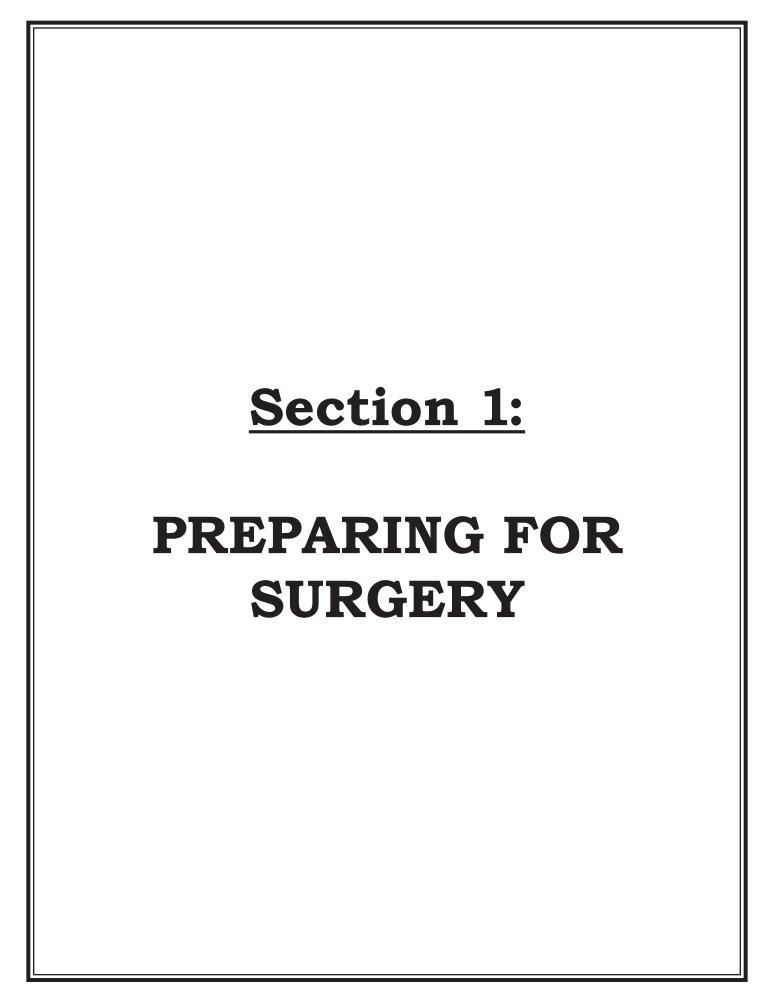


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IMPORTANT PHONE NUMBERS

Orthopedic + Fracture Specialists	
Scheduling	503.214.5255
After Hours Answering Machine	503.214.5200 #9
Center for Specialty Surgery	503.906.4300
Billing Department	503.608.5172
Physical Therapy	503.906.4323
Physicians/Medical Assistants	
Dr. Brett M. Andres	503.214.5273
Dr. Alex M. DeHaan	503.214.5226
Dr. Alec E. Denes	503.214.5283
Dr. Jason B. Kurian	503.214.5256
Dr. Elizabeth G. Lieberman	503.214.5241
Dr. Jessica L. H. Phillips	503.214.5201
Dr. Kimberly L. Workman	503.214.5272



PREPARING FOR SURGERY

FAMILY/FRIEND SUPPORT

Please:

- Arrange for someone to take you to the surgery center and bring you home the day of surgery, please have their name and contact information available at check-in. We recommend large two or four (2 or 4) door cars, SUV's, vans, or trucks. A compact car can be used if no other vehicle is available.
- Arrange for someone to assist you at home for a minimum of three (3) days following surgery.
- Consider bringing a friend or family member to pre-operative appointments, follow-up appointments, and physical therapy.
 - During these sessions, you will be provided with information regarding pre-operative
 instructions, medications, and knee rehabilitation techniques and exercises. The
 importance of knee positioning will be explained. It is important to have a friend or
 family member at these appointments so they can understand their role in assisting you
 with activities at home after your surgery during the recovery process.

We offer free Wi-Fi service in the reception area for your family or friends to enjoy.

HOME SAFETY CHECKLIST

The greatest priority is safety following surgery. Please review the information below to ensure that your risk of fall/injury is minimized.

You may need some equipment at home to ease your recovery process (See Appendix 3 on pg. 39). Your therapist will review and assist you with the use of these items during your pre-operative meeting if they are needed.

Living Area

- Clear stairs and pathways of clutter
- Remove throw rugs
- Remove telephone or electrical cords from walk areas

Pet Care

Arrange for someone to care for your pet for the first week after your surgery

Bathroom

- Place slip-proof mats or strips in the bath/shower
- Determine the need for grab bars (Appendix 3, pg. 40) NOT towel racks in the bathroom for added support
- Optional use of a shower bench (Appendix 3, pg. 40)

Kitchen

- Store items that are used most often within easy reach (hip height or above)
- Purchase necessary food and essential household products prior to surgery

PRE-OPERATIVE TIMELINE: MEDICATION, SKIN PREPARATION

Two (2) Weeks Before Surgery:

STOP taking all supplements, including herbal remedies and vitamins. We want to avoid any interactions with anesthesia or medications you will receive in the surgery center.

One (1) Week Before Surgery:

STOP taking aspirin products. If you are taking aspirin as prescribed by your cardiologist, consult with him/her prior to stopping.

Three (3) Days Before Surgery:

STOP taking any medications that may cause bleeding. Examples include anti-inflammatories: Meloxicam, Motrin, Aleve, Voltaren, Ibuprofen and Advil. If you currently take Celebrex, you may continue until the day before surgery. If you have questions, please call your doctor's office.

Notify your physician before coming to the surgery center if there is any change in your physical condition, such as a cold, fever, rash, sunburn, or skin disruption.

Night Before Surgery:

- Take a shower and wash with Hibiclens (See Appendix 1 on pg. 37 for instructions).
 - > **DO NOT** use oils, lotions, or make-up after bathing.
- Sleep in clean clothes and on clean sheets.
 - ➤ DO NOT EAT OR DRINK ANYTHING AFTER MIDNIGHT! This includes water or coffee. This will reduce the likelihood of nausea and vomiting following anesthesia.
 - ➤ You may brush your teeth, but do not swallow anything. Refrain from consuming mints, chewing gum, cigarettes, or chewing tobacco.

Day of Surgery (prior to arriving at the surgery center):

- Take your usual morning medications as reviewed by your surgeon with a sip of water unless otherwise instructed by your primary care physician, nurse and/or anesthesiologist at the surgery center.
- Take a shower with Hibiclens in the morning.
- Wear clean, loose, and comfortable shoes and clothes such as sweats, shorts, and light t-shirt with loose fitting sleeves or zip up sweatshirt.
 - > NO high heels!
- Arrive at the surgery center no later than the time given to you by the Center for Specialty Surgery.

PACKING FOR THE SURGERY CENTER

You will be returning home the day of surgery so you only need to pack a few items:

- This book
- Clothing: We will have you back in your own clothes shortly after surgery.
 - A sweatshirt, t-shirt, easy to button shirt or blouse or light sweater.
 - Easy fit or slip on shoes with flat, non-skid soles and an enclosed heel to practice walking
- Personal devices: hearing aids, eyeglasses and dentures. If you wear contact lenses or glasses, bring a case for their safekeeping. We will provide containers for removable dentures and bridgework.

DO NOT bring any medications from home unless specifically requested to do so.

Leave all valuables, including jewelry and cash at home. We cannot be held responsible for damaged or lost property. Cell phone use is permitted in non-patient areas for you and your visitors.

We will provide non-skid socks.

NUTRITION

Food

Protein helps your body heal, therefore, it's essential to consume adequate protein every day. Have at least two servings of beef, fish, poultry, eggs, dairy products, or legumes per day.

Increase your fiber intake for bowel health; include raw fruits and vegetables, whole-grain breads, muffins, cereals, nuts, and beans.

Make sure you are getting sufficient iron; eat lean red meat, dark green leafy vegetables, egg yolks, raisins, and prunes.

Include 1,500 mg of calcium and vitamin D spread out through the entire day in your diet. Milk, yogurt or cheese can be an excellent source of calcium and multivitamin or fortified cereals provide the necessary vitamin D.

Stay well hydrated for the weeks leading up to surgery.

Remember: <u>DO NOT CONSUME ANYTHING BY MOUTH AFTER MIDNIGHT THE DAY BEFORE SURGERY!</u>

SMOKING AND ALCOHOL

Smoking

You must **STOP** smoking at least one (1) month prior to surgery. Smoking is proven to decrease your healing rate and increase the rate of post-operative complications.

Alcohol

Decrease your alcohol intake to no more than one (1) drink per day.

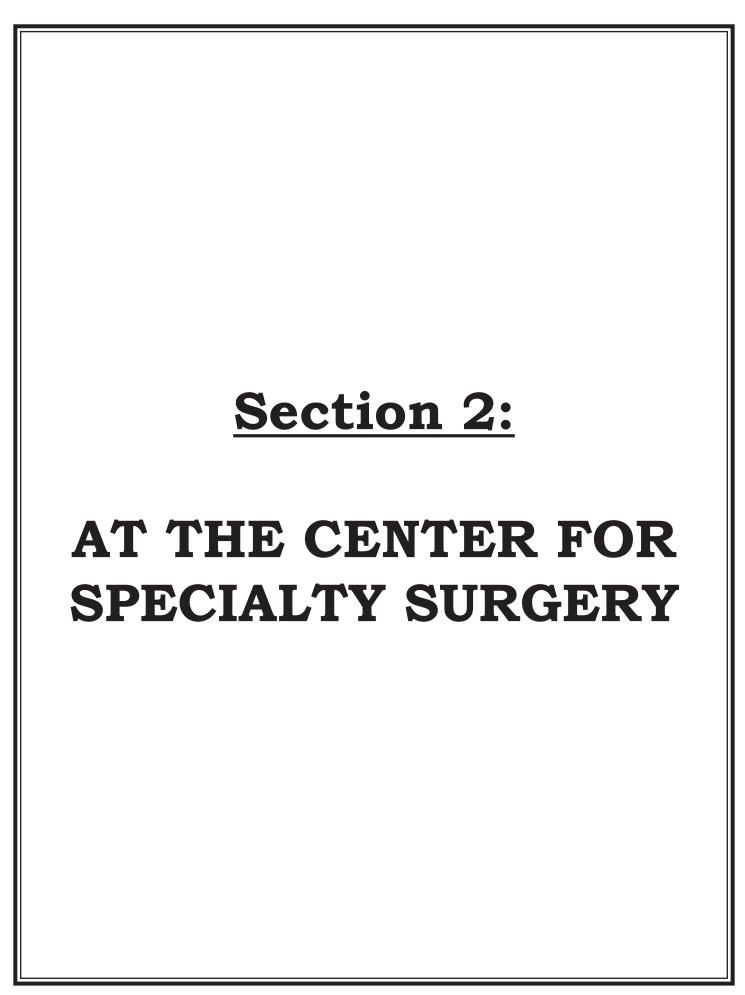
STAYING ACTIVE PRIOR TO SURGERY

Continue normal activities for as long as you are able to up until your surgery date. Do not begin new activities unless instructed by your surgeon or physical therapist as needed for pre-operative preparation.

EDUCATIONAL RESOURCES

If you would like to learn more about your procedure, here are some good resources:

- Check out www.OrthopedicandFractureSpecialists.com to gather more information about knee replacement surgery
- Research "total knee replacement" on the American Academy of Orthopaedic Surgeons website at http://orthoinfo.aaos.org/
- Research "Knee Replacement" on the American Association of Hip and Knee Surgeons website at https://hipknee.aahks.org/



AT THE CENTER FOR SPECIALITY SURGERY

TEAM ROLES AND FUNCTIONS

All members of the Orthopedic + Fracture Specialists/Center for Specialty Surgery team work with one another to provide the best individualized care to each patient. We are committed to making your time with us as comfortable and informative as possible. Please let us know if there is anything we can do to help you at any time.

Our team members include:

Front Office Staff: Our front desk coordinators are there to assist you with the registration process. They are our first line of support for questions that you or your family might have during your progression through the facility.

Registered Nurse: You will meet a number of our registered nurses during the continuity of your care at The Center for Specialty Surgery - from pre-op to operating room to recovery and discharge. During every step of your care, the assigned team will coordinate your nursing care and assure that you and your family receive proper education about medications, diet, and activity to prepare you for discharge to your home.

Surgeon(s): Your surgeon will visit you prior to surgery. Any questions specific to your surgery can be answered by your surgeon.

Anesthesiologist: The anesthesiologists at the Center for Specialty Surgery are all Board Certified. They will contact you prior to your surgery to review your medical history. If you have any particular concerns, you should discuss them with the anesthesiologist at that time.

On the day of your surgery, you and your anesthesiologist will review your anesthetic plan prior to you receiving any sedatives or anesthetics. They will discuss the risks and benefits associated with anesthetics.

Physician Assistant: A physician assistant is a medical provider who has been specially trained to help your surgeon safely complete your procedure. Their role includes preparing and positioning patients for surgery, holding retractors, wound closure, dressing placement, and they may also be involved in your follow-up care after surgery.

Physical Therapist: The physical therapist will help you develop in your ability to follow precautions safely and independently while moving in bed, walking, going up and down stairs, and getting in and out of chairs or a car. The therapist will teach you how to use your walker or crutches. They will also instruct you in the exercises that your surgeon suggests.

MORNING OF SURGERY

When you arrive, enter using the Corby Drive entrance, park on the top floor of the parking structure, and enter through the main entrance on your right as you approach the building. Take the elevator to the second floor where you will be greeted by our front office staff.

Once you are in the pre-operative area, a nurse will provide you with a gown, non-skid socks and a bag to store all your clothing and personal belongings in a locker.

They will begin preparing you for surgery by:

- Reviewing your health history
- Starting an IV line to give you fluids
- Administering any pre-ordered medications
- Taking your vital signs (blood pressure, pulse, and temperature)
- Answering any questions you may have

You will meet your anesthesiologist who will review their role and their anesthesia plan. Your surgeon will also greet you and answer any final questions, confirm your procedure, and mark the surgical site.

Your family member(s) may stay with you until the surgical suite is ready for you. At that time, they may wait in the surgery center reception area. Our front desk staff will coordinate notification for them when you are ready for visitors.

GOING TO OUR OPERATING ROOM

Your surgery will be performed in one of our state-of-the-art operating suites. Your surgeon and their team, using modern equipment and techniques, will attend to you. Your team will begin to introduce themselves and the role they will be playing in your surgery.

When it is time, you will be escorted to your surgery suite. Once you enter the operating room, your team will begin to introduce themselves and the role they will have in your surgery. The staff will do everything possible to make you feel comfortable on our padded operating bed, and to ensure your safety, our staff will connect you to monitoring devices. You will begin to feel drowsy as the anesthesiologist starts adding medications through your IV.

When the surgery comes to completion and your dressings are in place, you will be moved to the recovery room with your monitoring equipment connected to you at all times. During this period, you will have a trained recovery room nurse who will take care of you.

AFTER SURGERY

Knee replacement surgery patients usually spend one and half (1.5) hours in the operating room. You will then be transferred to the immediate post-surgical recovery area (PACU) where you will remain until you're awake and alert before being moved to StepDown, the return to home recovery area. This is where you will switch to oral pain medications, eat lunch, complete physical therapy and prepare to return home once discharge criteria are met. You may have one (1) visitor with you in this area if you desire.

Nursing Care

The area around your knee will have a dressing. We try to avoid using urinary catheters; however, if you require one, it will be removed as soon as you are mobile and able to use a toilet. Nurses will have you cough often and practice deep breathing to prevent pneumonia. If your doctor has ordered a deep breathing device (called an incentive spirometer), you will use this as well. Your nurse will regularly check your temperature, pulse, blood pressure and the blood flow to your feet.

A loss of appetite is common after surgery, and your nurse will assess when you are able to drink and eat.

Pain

Although all pain cannot be eliminated, it is important that you are comfortable enough to participate and make progress in physical therapy, do the necessary exercises, and perform deep breathing. Talk with your nurse about how you feel and your need for pain medication. As you progress, you can expect your pain to lessen.

Physical Therapy

A physical therapist will begin working with you within a few hours after surgery as the second phase of your recovery and discharge plan. They will review your movement precautions, how to move in and out of bed, how to walk and use stairs, and teach you a home exercise program. Be sure to communicate how you are feeling with your physical therapist. Your physical therapist will ensure your safety and understands the steps to recovery and the steps required to allow you to return to home safely. You will complete as many sessions of physical therapy as needed to allow your safe return to your home.

DISCHARGE PLANNING TIMELINE

Discharge Goals

Plan to be discharged home in the afternoon. In order to be safely discharged home, our team will be sure you meet the following goals and are cleared by your physical therapist:

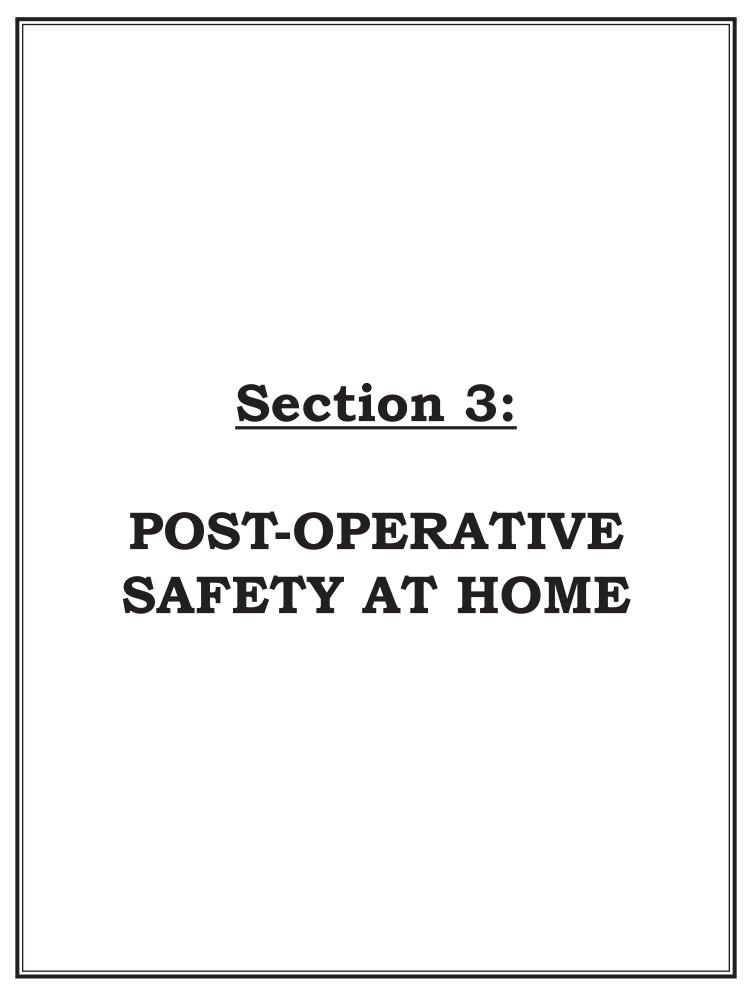
- Be in stable physical and medical condition
- Understand all precautions need to be followed
- Receive adequate pain control from oral pain medications
- Demonstrate safe movement in and out of the bed and safe use of the bathroom
- Demonstrate independence with walking or have sufficient help at home to ensure safety
- Be able to care for yourself or have help in your home
- Have family or a caregiver arranged for pickup and immediate home care for three days
- Have needed equipment and/or services at home
- Navigate stairs safely

It is not unusual for patients to have nausea or vomiting after surgery. If you are having nausea and vomiting, you may still be discharged to home as the sensation often passes within a few hours.

BACK AT HOME

After you have returned home, be sure to follow your surgeon and therapist's orders regarding diet and rest, and make sure you take medication for pain as directed. You can resume your normal diet when you are ready to do so. It is not unusual to feel a little sleepy, light headed, or dizzy for several hours after surgery.

A nurse from the Center for Specialty Surgery will contact you the day after your surgery to see how you are and answer any additional questions that you might have.



POST-OPERATIVE SAFETY AT HOME

GENERAL HEALTH

It is normal to feel tired after surgery; however, it is important to maintain activity and exercises outlined by your surgeon and therapist. This will ensure proper blood flow, range of motion, strength development, and bowel/bladder health.

MEDICAL APPOINTMENTS

It is very important to keep all follow-up medical appointments.

INCISIONS AND PREVENTION OF INFECTION

- You may notice swelling of your operative leg for several weeks after surgery. This is normal. Lay down flat and elevate your leg on two to three (2-3) pillows so your leg is higher than your heart. Elevate for 30-60 minutes several times per day. DO NOT place pillows under your knee as this can risk causing a knee flexion contracture. Place pillows at calf or ankle to keep knee elevated, but also in extension.
- You may notice bruising of your operative leg that may extend down to your ankle. This is a normal result of gravity and will resolve with time.
- You may notice numbness around the knee. This is normal and may last up to 18 months, but should decrease with time.
- Showering: Unless told otherwise by your surgeon, you may shower anytime after your surgery. The dressing on your knee is waterproof. Make sure all edges of the dressing are securely sticking to the skin, wash gently around the dressing and pat dry. Do not immerse in a bathtub or swimming pool for at least six (6) weeks unless otherwise directed.
- Leave your Mepilex dressing intact for seven (7) days after surgery. After seven (7) days, please replace with a new Mepilex dressing until your follow-up appointment.
- Infection: Your chance of infection is very low, however, please contact your surgeon if you notice or experience any of the following:
 - ➤ Warmth, redness, increased pain or swelling around the incision
 - ➤ Increased drainage/leakage from the incision
 - Thick, green, or foul-smelling drainage
 - ➤ Separation of wound edges
 - ➤ Body Temperature above 101 degrees Fahrenheit

An infection in your body could cause an infection in your knee replacement area. If you are treated for any infection, please notify your surgeon. If you plan to have dental work, consult your surgeon regarding antibiotics. It is advised that you avoid dental cleaning for three (3) months after knee replacement surgery – see Appendix 2 on pg. 37 for more details. If you develop symptoms of a bladder infection (e.g., frequent urination, pain or burning with urination, cloudy urine), consult your PCP. Be sure to inform your PCP that you have had a knee replacement.

DRIVING AND ACTIVITIES

Driving and returning to work can be different for every patient as it is very much dependent upon your job, pain level, and restored movement. Your surgeon and therapist will help determine when it is appropriate to begin driving and working. Please note that if you have had a replacement on your right knee, it generally takes a bit longer to return to driving. You **may not** drive if you are taking narcotic pain medication (Oxycodone, Norco, Percocet, etc.)

PAIN MEDICATION

- The goal is to get you off of all pain medications as soon as possible. Narcotic medications are highly addictive and have side effects including constipation, nausea/vomiting, dizziness and sedation.
- You will be sent home with a prescription and instructions about medications for pain. As a general rule, Tylenol and other over-the-counter anti-inflammatories (Ibuprofen, Aleve, etc.) are effective for baseline pain relief. We encourage you to take this continually for four (4) days. Do not exceed 4000 mg of Tylenol per day.
- You may be prescribed Oxycodone, Norco, or Dilaudid upon discharge; these are narcotic
 medications and should be used for very elevated or "breakthrough pain". Again, the goal is
 for you to transition off of these medications as soon as you are able. A week after surgery,
 evaluate your pain level without narcotics and begin to spread out the time in between each
 dose and lower the dose as you are able. Please Note: Norco has Tylenol, so make sure to
 monitor your daily intake of Tylenol don't exceed 4000 mg/day.

PREVENTION OF BLOOD CLOTS

Blood clots can develop in either leg, not just the surgical leg, up to three (3) months after surgery.

Review this list for things you need to do to reduce your risk:

- Activity: walk frequently, do your exercises and ankle pumps listed on the next page.
- Medications: your surgeon will prescribe you medication to help thin your blood (Aspirin, Eliquis, Lovenox, Coumadin, Xarelto), it is very important you take this as directed.
- Signs and symptoms of a blood clot in your leg: Call your surgeon immediately.
 - Localized swelling or redness of your calf that is not relieved by elevation
 - > Your calf is painful when touched or squeezed or is warm to the touch
- Signs and symptoms of a blood clot in your lungs: *Call 911!*
 - Coughing up blood, shortness of breath, or chest pain

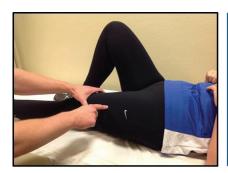
PREVENTION OF LUNG COMPLICATIONS:

Review this list for things you need to do to reduce your risk:

- Breathe deeply and cough at least once an hour during the day.
- When breathing deeply, hold a breath for two to three (2-3) seconds, cough, and breathe out. Repeat five (5) times.
- Coughing involves using large muscle groups, not simply clearing your throat.

HOME EXERCISE PROGRAM

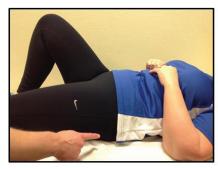
It is recommended that you complete the following exercises as soon as you return to home to assist in improving your circulation and the prevention of blood clots:



Quad Sets

- Tighten muscle on top of thigh
- Hold for 5 seconds
- Relax

Repeat 30 times every 30 minutes.



Glute Sets

- Tighten buttocks muscle
- Hold for 5 seconds
- Relax

Repeat 30 times every 30 minutes.



Ankle Pumps

 Bend and straighten ankle through full range

Repeat 30 times every 30 minutes.



Knee Extension (Straight Hangs)

- Place a towel roll under the foot
- Relax for 5 mins.

Repeat 3 - 5 times per day.



Hold the pose for 10 - 30 seconds

Knee Flexion (Bending/Chair Scoots)

- Sit on a chair with your feet firmly planted on the ground
- Slowly scoot yourself forward on the chair with your feet in the same position
- Use opposite leg to pull the leg into deeper flexion.
- 2 sets, 10 reps each set, 5 times per day.

DRESSING THE LOWER BODY

- Use a reacher to bring your pants over your foot and lower leg if you cannot perform independently. Dress the operated side first and undress the operated side second.
- If needed, use a sock aid for socks. Push socks off from the inside of your leg with a reacher. Wear slip-on shoes with a no-slip sole. Elastic shoelaces often help. Use a long-handled shoehorn.

RETURNING TO SEXUAL ACTIVITY

Sexual activity can resume when your pain has diminished and you are comfortable. Do not compromise your safety at any time. Pease be aware that certain positions may lead to complications for you and your implant. If you experience any pain, **STOP!** For more information, check out the "After Surgery" section on the AAHKS website: https://hipknee.aahks.org/.

WALKING

- Stand up straight and look ahead, not down
- · Use crutches or a walker to assist with walking
- Keep the length of your steps equal for both legs
- Keep your knee pointing straight forward
- Avoid uneven surfaces
- Remove throw rugs to avoid tripping over loose edges
- Be cautious with entryways
- Be cautious of wet surfaces: our local weather can make wet surfaces, leaves, and gravel hazardous
- Be cautious in kitchens and bathrooms where there might be water on the floor
- Wear non-slip shoes and do not wear high heels
- Walk as normal as possible

Sequence for Stairs

- "Up with the good, down with the bad"
- Your crutches or walker move with your operated leg
- Go one step at a time

Upstairs: "Up with the good"

First, step up with your "good" (non-operated) leg. Follow with your operated leg and crutches/walker.

- Use a handrail, if available
- Have someone stand by for safety

Downstairs: "Down with the bad"

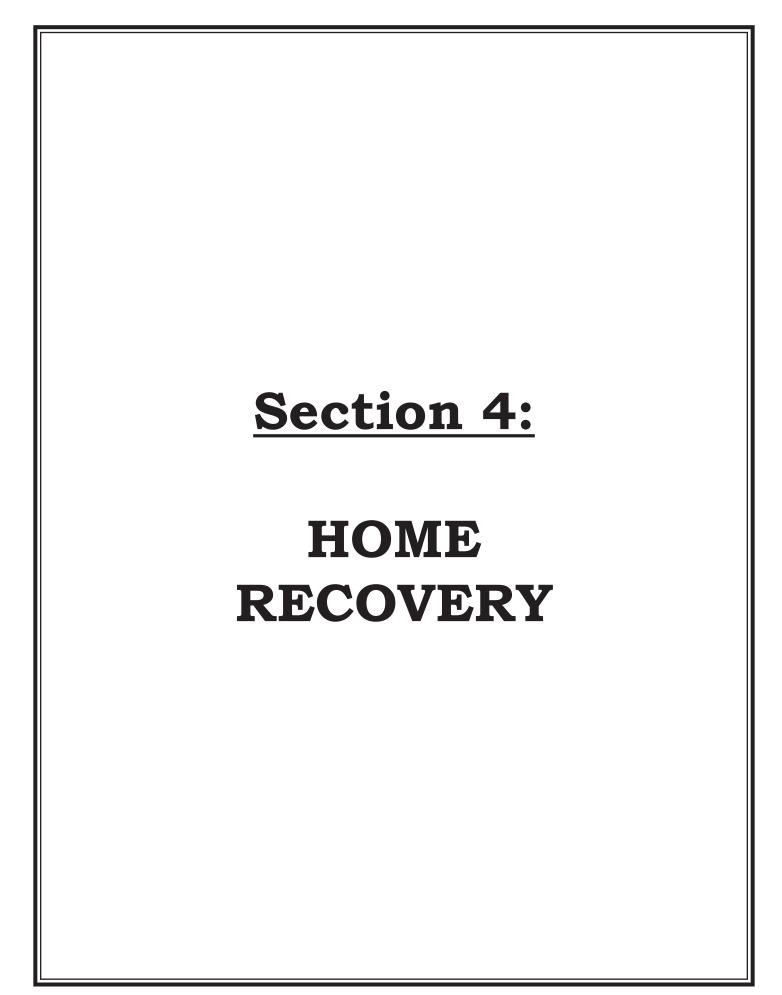
Step down with your crutches or walker, then your "bad" (operated) leg. Then, your non-operated leg follows to the same step.

OTHER TIPS

Peri-care: Thorough washing can be difficult after surgery; for assistance we recommend Cottonelle or Charmin flushable wet wipes found in the toilet paper aisle.

Inclement Weather: Due to risk of falling, do not go out in bad weather until your doctor advises you is it okay to do so. A fall could cause serious injury and future problems with your knee replacement.

It is normal to experience fatigue and abnormal sleep patterns during the first few weeks after surgery. To help with this, maintain normal sleep/wake cycles, stay hydrated and continue to exercise.



HOME RECOVERY

EQUIPMENT YOU MANY NEED AT HOME

Your physical therapist will help you decided on the type of equipment you will need after surgery. You will require an assistive walking device. Typically, a front-wheeled walker is used post-operatively, followed by a cane or crutches. You may also benefit from an ice machine or gel ice packs - you may purchase an ice machine through O+FS or at a pharmacy. Other items you may need are a raised toilet seat or dressing tools. See Appendix 3 (pg. 39-40)

Insurance Coverage for Equipment

Your insurance plan will have coverage policies for types of equipment covered and which companies you may obtain the equipment from. Some insurance companies will pay for all of your items; some have no coverage, and most have partial coverage. Equipment companies may request cash payment upon delivery as reimbursement is unlikely from your insurance plan. It is your responsibility to check with your insurance company before surgery if you have questions about equipment coverage policies. If you are thinking about borrowing equipment from a friend, discuss this with your therapist. They will help you decide if this equipment will work for you. We will work with you to adjust the equipment to meet your needs, but will not take liability for any equipment not purchased from our facility.

Patients may purchase equipment through many local vendors in the area. Commonly used companies are:

Evergreen Prosthetics & Orthotics, LLC

11782 SW Barnes Rd., Bldg. C, Suite 160 E Portland, OR 97225 503.641.2020

Beaverton Pharmacy

12250 SW Canyon Road Beaverton, OR 97005 503.644.2101

RECOVERY AFTER KNEE REPLACEMENT SURGERY

Please following all the post-operative safety measures listed above. Below, you will find some additional care instructions if you've undergone a knee replacement surgery.

Short-term Recovery:

First two (2) weeks after surgery: The primary focus will be on recovery. While there will be some pain, you'll be prescribed pain medication to manage it. You should make notable improvements over first 1-2 weeks. It is normal for your knee to swell - ice and elevation are key. Start working on your knee range of motion exercises. It's also normal to feel discomfort after surgery - especially when performing exercises prescribed by your therapist. However, by strictly following your rehabilitation program, you can improve the long-term results of your knee replacement.

Three to Six (3-6) Weeks after Surgery: Now that you're three to six (3-6) weeks into your journey to recovery, you've made quite a bit of progress - but there's a lot left to look forward to. You should be weaning off assistive devices during this time period. Soon, you will go up and down stairs normally again. You'll typically have to wait until three to four (3-4) weeks after surgery to get back to driving. Continue to work on your knee's range of motion - but an emphasis will also transition to strengthening as your range of motion continues to improve. Depending on your occupation and the pace of your recovery, you'll most likely return to work four to ten (4-10) weeks post-surgery. You should be able to walk more comfortably and for a longer distance. You should feel stronger and more confident. Everyone is different - be sure to listen to your body and ask your physician wherever you're in doubt.

Long-term Care:

After six (6) weeks of rehabilitation, you will continue to recover from your knee replacement surgery.

Here are a few things you should keep in mind as you return to doing the things you love:

- Avoid routine dental work for three (3) months.
- Follow your physician's or dentist's instructions for taking a prescribed antibiotic before you have dental work.
- Follow-up with your surgeon as directed for routine evaluations and x-rays.
- Steer clear of high-impact activities as they can cause increased stress and wear on your knee replacement.
- Metal detectors might be activated by your new implant alert appropriate security staff of your knee implant.

After leaving the Center for Specialty Surgery:

It is normal for your bowels to slow down in response to anesthesia, pain medications, and decreased mobility. It is *very important* to jump start your bowels after surgery:

- Select whole grain foods, green leafy vegetables, citrus fruits, pitted fruits, dairy products, and lean meats.
- Drink at least six (6) glasses of liquid each day.
- Over-the-counter (OTC) laxatives and stool softeners may be taken if needed (e.g. Senokot or Colace).
- Discuss with your surgical team if you have not had a bowel movement in the first 4 days after your knee replacement surgery.

Ongoing Precautions:

Avoid kneeling on hard surfaces as this can cause you some discomfort, however, kneeling will not negatively affect your knee replacement. A foam pad or kneeling bench is helpful with housework, gardening, etc.

EXERCISE PROGRAM FOR KNEE REPLACEMENT

For most patients, exercise after knee replacement begins with walking. Walking is the best way to strengthen muscles, develop balance and coordination after knee surgery. You should emphasize walking with good form versus walking fast. Gradually improve your ability to walk further. Avoid impact activities such as jogging, running, tennis, and skiing until you are cleared by your surgeon. A walker is often used for the first few weeks to help maintain balance, avoid falls, and enable a more normal gait. Occasionally, a cane or a crutch is then used for a few weeks until full strength and coordination have returned. Use the cane or crutch in the hand opposite to your operated knee. You are ready to use a cane or a single crutch when you can stand and balance without a walker with your weight placed fully on both feet, and when you no longer lean on your hands while using a walker. Take a cane with you outside until you are able to walk normally with out loss of balance in the house for a few weeks.

To begin your walking program to start building strength, walk for five (5) minutes every hour to reduce the risk of blood clots. As your strength and endurance improve, you can walk for 20-30 minutes, two or three (2 or 3) times a day. Walk with a gradual pace. Cycling on a stationary bike is an excellent activity to help you regain muscle strength and hip mobility, but should not replace walking. Set the seat height so that the bottom of your foot just touches the pedal with your knee almost straight. Pedal backwards initially. Pedal forward after the backward pedaling becomes easy. You can start with five (5) minutes, two (2) times per day if you have a bike at home. If you are going to a gym, three or four (3 or 4) times per week is recommended. As you become stronger, typically four to six (4-6) weeks after surgery, gradually increase the duration you ride up to 20 minutes one (1) time per day or every other day, then gradually increase your tension.

Remember: Perform the recommended exercise routines on pg. 17 to assist in improving your circulation and the prevention of blood clots.

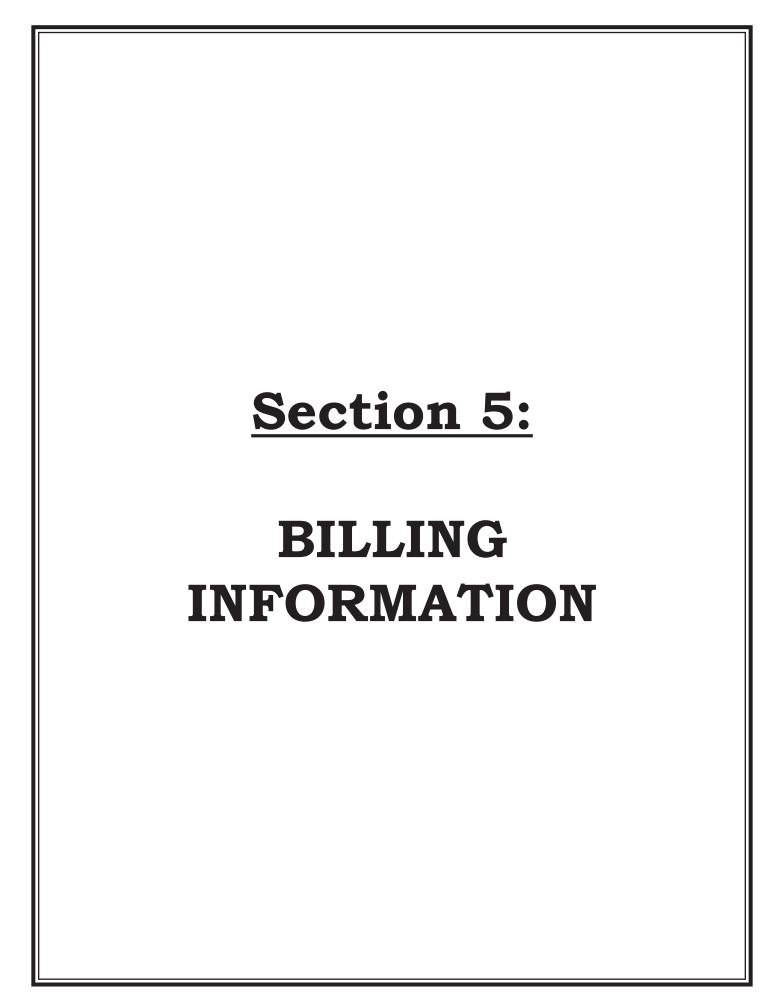
PHYSICAL THERAPY FOR KNEE REPLACEMENT

You should have physical therapy scheduled within one (1) week after your knee replacement surgery for two to three (2-3) times per week for several weeks. Early focus on increasing the range of motion of the knee is critical to a good outcome and a speedy recovery. Your therapist will also ask you to continue your home exercises.

Scheduling:

Orthopedic + Fracture Specialists in Physical Therapy @ Barnes Office 11782 SW Barnes Rd., Suite 100 Portland, OR 97225 503.906.4323

Orthopedic + Fracture Specialists in Physical Therapy @ Murray-Scholls Office 14795 SW Murray Scholls Dr., Suite 109 Beaverton, OR 97007 503.906.4323



BILLING INFORMATION

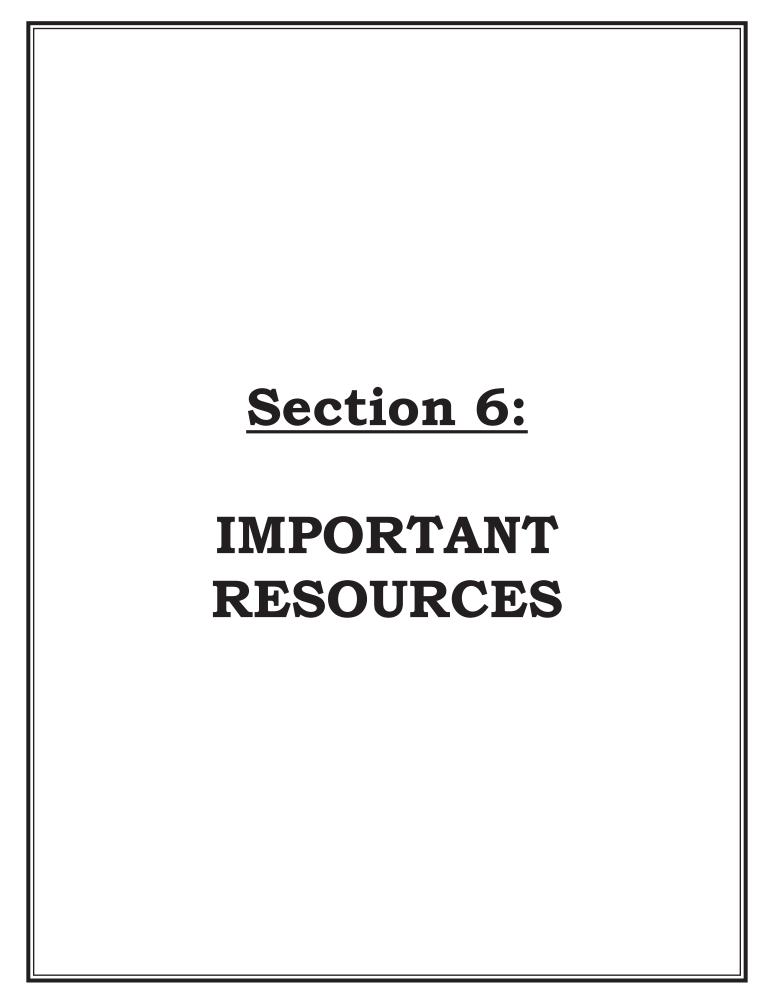
As a courtesy, our office will contact your insurance company to get pre-authorization for your upcoming surgery. At that time, we will also check on your benefits. It is our policy to collect a deposit prior to your procedure or surgery for any un-met deductible and your coinsurance. If, according to your insurance company there will be a patient responsibility for the surgery charges, an account representative will contact you to go over your deductible and coinsurance amounts and collect a deposit.

Anesthesia charges will be separate from the surgeon and facility charges. If you have questions concerning the anesthesia billing, please contact Oregon Anesthesia Group directly at 503.530.0872.

You may incur additional charges for lab work that is separate from the surgery and facility charges. We outsource our lab work, so any lab work that is deemed necessary will be sent out and billed separately.

If you have any questions concerning your insurance coverage or billing, please contact us at 503.608.5172.

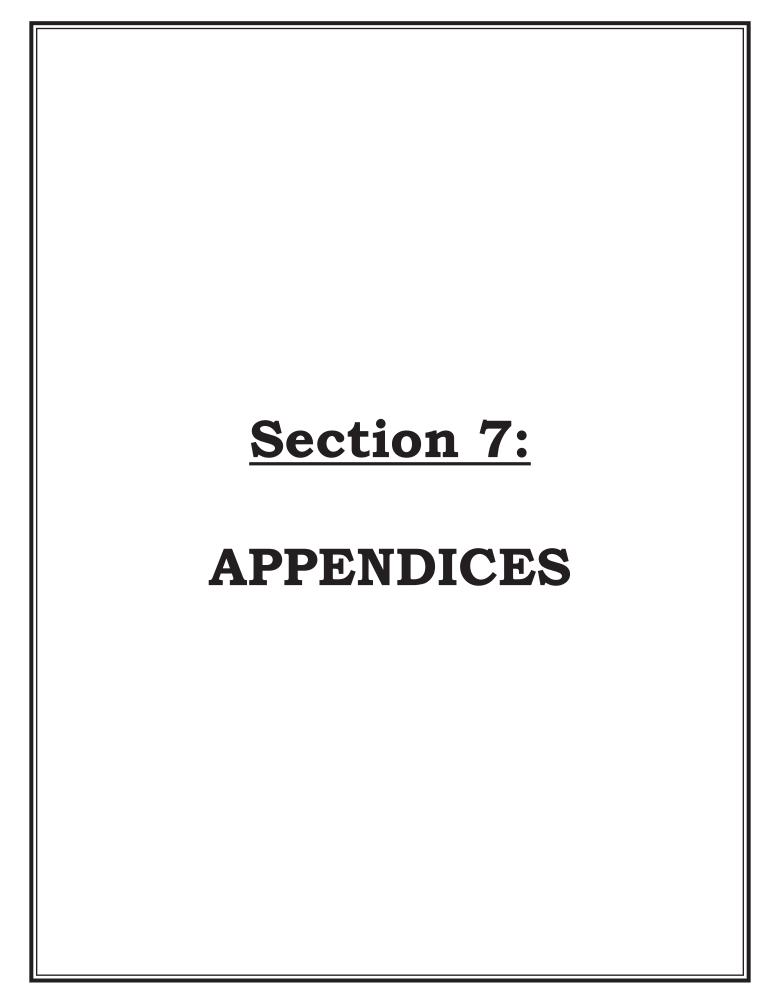
Additional Questions? Call our Billing Office at 503.609.5172!



IMPORTANT RESOURCES

IMPORTANT PHONE NUMBERS

Orthopedic + Fracture Specialists	
Scheduling50	03.214.5255
After Hours Answering Machine503.2	214.5200 #9
Center for Specialty Surgery50	03.906.4300
Billing Department50	03.608.5172
Physical Therapy50	03.906.4323
Physicians/Medical Assistants	
Dr. Brett M. Andres50	03.214.5273
Dr. Alex M. DeHaan50	03.214.5226
Dr. Alec E. Denes50	03.214.5283
Dr. Jason B. Kurian50	03.214.5256
Dr. Elizabeth G. Lieberman50	03.214.5241
Dr. Jessica L. H. Phillips50	03.214.5201
Dr. Kimberly L. Workman50	03.214.5272
DURABLE MEDICAL EQUIPMENT	
Evergreen Prosthetics & Orthotics, LLC	03.641.2020
Beaverton Pharmacy50	03.644.2101



APPENDICES

APPENDIX 1: HIBICLENS INSTRUCTIONS - Pre-Operative Bathing

Your cooperation is required to ensure a successful outcome of your surgery. The purpose of Hibiclens soap is to reduce the normal bacteria on your skin that may be a potential source of infection at the surgical site.

Follow these instructions carefully:

- 1. You will be given an 8 oz. container of Hibiclens.
- 2. Shower the night before surgery **AND** the morning of the surgery, using 1/2 bottle for each shower.
- 3. Please remove any body piercing jewelry prior to showering and leave it out until after your surgery.
- 4. Hair may be shampooed with regular shampoo and rinsed thoroughly **PRIOR** to use of Hibiclens on the body.
- 5. Use a fresh, clean washcloth to apply Hibiclens for each shower. Clean in all the skin folds. Have someone help wash your back, or any areas that you are unable to reach.
- 6. Wash your body from the neck down to your toes with Hibiclens. **DO NOT** get Hibiclens into your EYES or EARS. If you do, rinse with water immediately.
- 7. Be sure to clean the area well where your surgical incision will be.
- 8. This is an effective cleanser, even though it doesn't lather (make suds) well.
- 9. Rinse thoroughly with running water. **DO NOT** use any other soap or body rinse on your skin.
- 10. Use a clean towel for each shower, clean sheets on the bed the night before surgery, and clean, freshly laundered clothing after each shower.
- 11. Do not use lotion, powder, deodorant or perfume/aftershave of any kind on the skin after bathing with Hibiclens.

The admitting nurse will ask you if you have taken your pre-operative Hibiclens showers.

APPENDIX 2: FUTURE PROCEDURES

DENTAL PROCEDURES/CLEANINGS:

To minimize your risk of infection following your total knee replacement surgery, it is the surgeon's recommendation that you avoid any procedures, including dental cleanings, for three (3) months following your surgery.

After this three (3) month post-operative period, you will need to take antibiotics prior to any dental procedure (other than a routine cleaning) that involves manipulations of gingival or periapical tissue or perforation of the oral mucosa. These procedures include, but are not limited to, dental extractions, dental implant placement, root canals, periodontal procedures, and periodontal surgery. Antibiotics given for dental antibiotics prophylaxis are as follows:

- Amoxicillin 2g orally one (1) hour prior to dental procedure
- If allergic to penicillin (non-anaphylaxis), cephalexin 2 g is taken orally one (1) hour prior to dental procedure
- If allergic to penicillin (anaphylaxis), refer for allergy testing prior to administering antibiotic prophylaxis

Available evidence does **NOT** support routine antimicrobial prophylaxis before dental cleaning in patients who have undergone total knee replacement surgery.

For high risk patients such as those who are immunocompromised / immunosuppressed (rheumatoid arthritis, uncontrolled diabetes, systemic lupus erythematosus) or patients with previous prosthetic joint infections, your orthopedic provider **MAY** recommend antimicrobial prophylaxis before routine dental cleaning for life - please speak with your surgeon regarding this.

Please call your orthopedic surgeon's office to obtain these prescriptions.

UROLOGICAL PROCEDURES:

For patients with a total knee replacement undergoing a urologic procedure such as kidney stone manipulation, upper urinary tract manipulation (ureteroscopy, percutaneous nephrolithotomy, extracorporeal shock wave lithotripsy), transrectal prostate biopsy, or bowel manipulation, we recommend antimicrobial prophylaxis as follows:

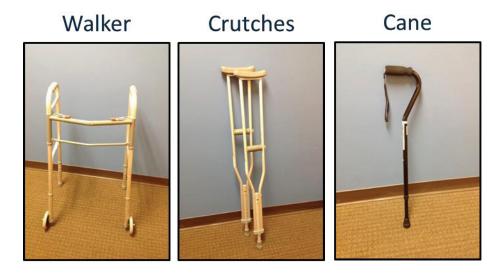
• Ciprofloxacin 500 mg taken orally one (1) hour prior to procedure

Please call your orthopedic surgeon's office to obtain these prescriptions.

APPENDIX 3: COMMON OPTIONAL HOUSEHOLD/BATHROOM EQUIPMENT

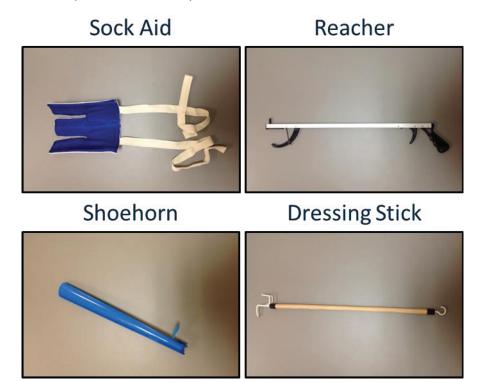
ASSISTIVE MOBILITY DEVICES:

These assistive mobility devices may be purchased at Orthopedic + Fracture Specialists either before or after your scheduled surgery.



DRESSING AIDS:

These dressing aids come in a "Hip Packet" along with the Bath Sponge (pg. 40) that may be purchased at Orthopedic + Fracture Specialists.



ICE MACHINE:

You can purchase an ice machine along with a knee cuff through O+FS, pharmacy, or online.





BATHROOM EQUIPMENT:

The Bath Sponge may be purchased in a kit along with the Dressing Aids (pg.39). The other bathroom equipment may be purchased at:

Evergreen Prosthetics & Orthotics, LLC

11782 SW Barnes Rd. Bldg. C, Suite 160 E Portland, OR 97225 503.641.2020

Shower Bench



Bath Sponge



Toilet Seat Riser

Grab Bar





NOTES

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Put Your Life in Motion

Barnes/Corby

11782 SW Barnes Rd. Suite 100 Portland, OR 97225 Murray/Scholls

14795 SW Murray Scholls Dr. Suite 109 Beaverton, OR 97007