



# Knee Replacement Surgery

A joint approach | Patient education handbook



# Contents



## Part I: Quick reference guide

*This section contains general information you will need to fill out, as well as tasks to complete prior to surgery. It also contains checklists and reminders for you.*

What is a knee replacement? . . . . .	2
Hospital registration . . . . .	2
The process at a glance. . . . .	3
Important telephone numbers. . . . .	4
General hospital information. . . . .	4
Medical information . . . . .	5
Packing for the hospital. . . . .	6

## Part II: Knee replacement surgery

*This section explains the surgical process — from the day of admission to the day of discharge.*

Understanding the risks. . . . .	7
Surgery information . . . . .	7
The night before surgery . . . . .	8
The day of surgery . . . . .	8
After surgery . . . . .	9
The remainder of your hospital stay. . . . .	9
Physical therapy . . . . .	10
General precautions. . . . .	10
Self-care after surgery. . . . .	11
After discharge from the hospital. . . . .	12
Living with your new knee . . . . .	13

## Part I: Quick reference guide

### What is a knee replacement?

A knee replacement is a surgical procedure in which a knee joint that is worn out or injured and painful is replaced with an artificial joint. The surgery can benefit you by reducing knee pain, increasing leg strength and enabling easier movement.

### How long the surgery takes

The surgery takes about two hours.

### How a knee is replaced

The orthopedic surgeon makes an incision on the front or side of the knee, and the damaged bone is cleared away. The surfaces are prepped and shaped to hold the new joint. The new joint is aligned and secured to the femur (thighbone), patella (kneecap) and tibia (shinbone).

### Hospital registration

Prior to your scheduled surgery, a hospital admissions representative will call you to complete the preadmission process.

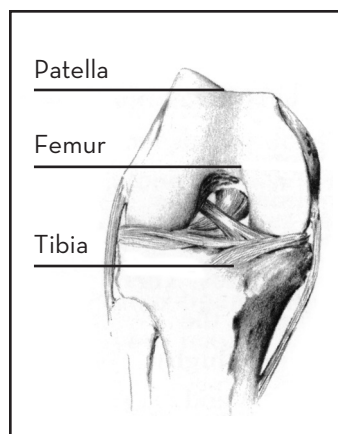
### Before surgery

You will receive a call from a registered nurse, who will review your current medication list, including prescriptions, over-the-counter drugs, vitamins and herbal supplements. You will also be given a tentative arrival time for your surgery.

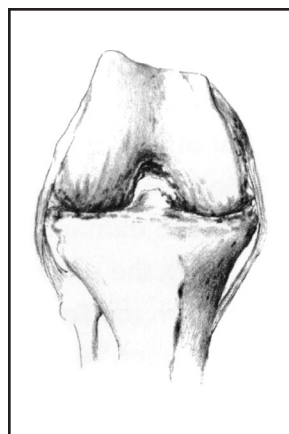
You will have an electrocardiogram, blood drawn and any other tests your doctor has ordered.

### What to bring

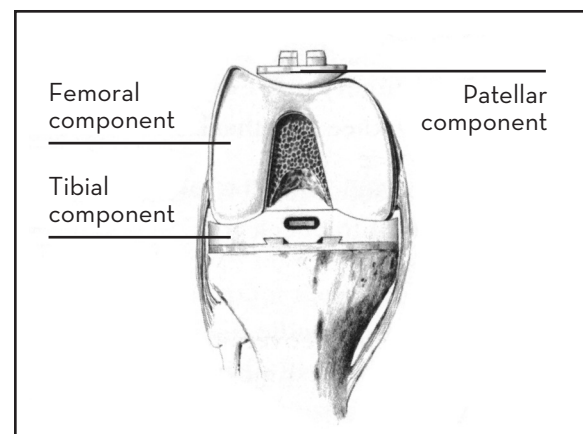
- Insurance/Medicare cards
- Identification
- Copy of your Physician Orders for Life-Sustaining Treatment, or POLST, form
- Advance directive
- This handbook. Please complete the medical information on page 5 or bring a printed medication list if you already have one. Be sure to include prescription and over-the-counter medications as well as any vitamins or herbal supplements you take. Include doses and how often you take them.



Healthy knee



Arthritic knee



Knee replacement component

## Part I: Quick reference guide

### Support team expectations

- You will need someone to cook and clean for you after you return home.
- You will need transportation for up to six weeks following surgery.

### The process at a glance

Here is an overview of the process of having total joint replacement surgery. This summary is to help you understand the general progression of events and the stages of the surgical and recovery process.

- You and your doctor have agreed that you need surgery. Understanding what is happening to you will make your hospital visit more pleasant and improve your recovery.
- Your doctor's office obtains medical clearance for surgery.
- You must read all the educational information provided by your doctor and the hospital. The information in this handbook is for you to read prior to surgery; it will help you understand what to expect once you come to the hospital.
- On the day of surgery, arrive at the hospital at the time reserved for you.
- Have surgery.
- Begin recovery and rehabilitation in the hospital.
- Be discharged from the hospital.
- Take care of your new joint. Go to all appointments set or suggested by your doctor and the orthopedic surgeon.

A partnership among you, the orthopedic surgeon, the hospital and your support team is vital to the success of the surgery. As a partner, you need to be informed and knowledgeable about every aspect of the surgical and recovery process. Your understanding, participation and commitment are important to the success of the procedure.

**Please bring this handbook with you to all of your related appointments as well as to the hospital on the day of surgery.**

You may receive various instructions, information booklets and copies of forms; that information should be kept in this handbook. It is important that you have at your fingertips all the information you require when you need it.

Our goal is to help you have good results, and we are committed to assisting you on a successful journey.

## Part I: Quick reference guide

### Important telephone numbers

Please feel free to make photocopies of this completed page and share them with your family, friends and caregivers.

#### Emergency contact person

Name \_\_\_\_\_

\_\_\_\_\_

Relationship \_\_\_\_\_

\_\_\_\_\_

Home phone \_\_\_\_\_

Cell phone \_\_\_\_\_

\_\_\_\_\_

#### Physician information

Physician name \_\_\_\_\_

\_\_\_\_\_

### General hospital information

#### Asante Three Rivers Medical Center

500 SW Ramsey Ave.  
Grants Pass, OR 97527  
**(541) 472-7000 or (800) 944-7073**

#### *Asante Billing office*

**(541) 789-4111**

#### *Estimate line*

**(541) 789-7271**

#### Asante Physician Partners Orthopedic Surgery and Sports Medicine

537 SW Union Ave., Floor 2, 2A and 2B  
Grants Pass, OR 97527  
**(541) 507-2050**

#### Visiting hours

Your caregiver or family member may stay with you, if you desire, and will be an active participant in your recovery.

Please inform us if you wish for your caregiver to stay overnight. Most of our rooms have a couch that converts to a single bed, and we will make every effort to accommodate you.

Post-surgery therapy is very important to your recovery. To avoid interruptions to your therapy sessions, please advise your visitors that they may remain during these sessions but that the therapist will continue the treatment; your visitors will be asked to wait until the therapy session is finished.

## Part I: Quick reference guide

### Medical information

Fill out this page unless you already have this information completed. If you do, please attach a copy.

Do you have any allergies? If so, list what you are allergic to and your reaction:

---

---

---

---

List all prescription medications you are taking, including strength and amount:

---

---

---

---

List all over-the-counter medications you take, including vitamins and herbal supplements (e.g., aspirin, Tylenol, Motrin, glucosamine, chondroitin, methylsulfonylmethane, saw palmetto, fish oil and flax seed oil):

---

---

---

What pharmacy do you use?

---

---

Have you had surgery before? If so, what surgery have you had and when?

---

---

---

---

---

## Part I: Quick reference guide

### Packing for the hospital

#### Things to bring

- This handbook
- CPAP machine if you have and use one
- Ice therapy machine if you have purchased one
- Comfortable attire for exercise, or you may wear hospital attire
- Shoes that you can slip in and out of easily, such as tennis shoes, walking shoes or slippers as suggested by the nurse during the orientation session; no high heels
- Socks/undergarments, if desired
- Loose clothing, such as shorts and T-shirts; elastic waist only
- Knee-length nightgown and a robe that opens all the way down, if desired. This may not be worn if it impedes monitors or intravenous lines.
- Toiletries; be sure to include eyeglass case, contact lens case, hearing-aid batteries and other necessities
- Cell phone and charger, if desired; there are phones available for each patient for local calls
- A minimal amount of money — no more than \$5 or \$10 unless you need money for transportation at discharge
- Front-wheeled walker; you may bring yours to the hospital if you desire, and the therapist will check it for correct height and good repair status

#### Things we ask that you do not bring

- Medications, unless requested by the nurse practitioner. This is for your safety.
- Valuables, jewelry, credit cards, insurance card and large amounts of cash. Please remove all jewelry, including rings; they cannot be worn during surgery. Please be aware that if your hand swells and your wedding ring becomes unsafe, we may need to cut it off.

## Part II: Knee replacement surgery

### Understanding the risks

As with any major surgery, there are certain risks. This section outlines some of the common complications associated with knee replacement surgery and the precautions you can take to help prevent them.

#### Infection

With any surgery, there is a risk of infection. Presurgery test results will affirm that you have no active infections, and antibiotics administered to you before and after surgery will further help prevent infection.

#### Coronary blood clots

With knee replacement surgery, circulation is impaired during the healing process. To counter this effect and promote circulation, we want you to pump your feet frequently — at least 20 times hourly while awake — and exercise your ankles following surgery and during your recovery.

While in the hospital, you will wear pneumatic stockings on both legs while in bed; these help prevent blood clots. A blood-thinning medication that helps prevent blood clots will also be prescribed for you. Each day in the hospital, blood may be drawn to check levels.

#### Pneumonia

To help prevent pneumonia, you may be asked to either use an incentive spirometer or take several very deep breaths hourly while awake to prevent fluid from pooling in your lungs. For the same reason, it is important to get out of bed often. Breathing deeply after surgery and using an incentive spirometer are important measures to prevent congestion in the lungs, which can lead to pneumonia.

#### Numbness

You will experience some numbness on both sides of your knee following surgery. This is normal and should not be cause for concern. During surgery, the nerves around the knee are disturbed; as these nerves heal, you may experience tingling sensations. You may have permanent numbness in the area around the incision, but this will not affect the function of your new knee. In only rare situations is there permanent numbness or weakness in the knee, ankle or foot as a result of trauma to a nerve.

#### Severe complications

As with any major surgery, there is the possibility that any of the foregoing complications, as well as complications from the anesthesia, could be severe enough to result in death. If you have any questions or concerns regarding complications, please discuss them with the orthopedic surgeon.

### Surgery information

Your surgery has been scheduled for a specific date and time, but sometimes it is necessary to change your arrival time due to circumstances over which we have no control. If the surgeon has a cancellation, for example, the lineup has changed since you were scheduled or there is an emergency, your surgery and arrival times may be revised.

To enable us to maintain the schedule as efficiently as possible, a nurse from the hospital preop clinic will call you the day before your scheduled surgery if the times have changed. If you do not receive a call, please come at the time given to you.



## Part II: Knee replacement surgery

### Anesthesia

The kind of anesthesia you will have depends on the type of surgery, your health history and what the anesthesiologist and the surgeon feel is best for you.

- Spinal anesthesia is given through a catheter that the anesthesiologist inserts into your spinal column. It numbs from the midchest to the toes. You will be asleep during the operation.
- General anesthesia is given through an intravenous, or IV, line or by breathing from a mask. It is like a deep sleep that happens very quickly.
- Other medications for pain and relaxation will be given.

### The night before surgery

We recommend that you eat a light meal the night before surgery. Unless the anesthesiologist, nurse practitioner or registered nurse tells you otherwise, you should have nothing to eat or drink after midnight. This includes but is not limited to water, coffee, food and any kind of gum or mints. If you have any questions, please call us.

### The day of surgery

#### Before coming to the hospital

- Unless told otherwise, do not eat or drink after midnight before surgery. You can brush your teeth and rinse your mouth, but do not swallow.
- Take only the medications that the doctor or nurse practitioner has told you to take, using just enough water to swallow them.
- Shower and use the antiseptic soap prior to coming to the hospital.

#### Once you arrive at the hospital

- Come in through the hospital's main entrance and go to Patient Registration.
- A nurse will complete your paperwork and finish the orders your doctor has written. You will have one or two IV lines started. You may have additional lab work done as ordered by your doctor.
- An orderly will come with a gurney to bring you to a holding area or directly to the operating room, or OR.
- If you are wearing dentures, hearing aids, socks or jewelry, please remove them unless arrangements have been made to keep them with you. You will be given a hat to cover your hair.
- The OR is bright and noisy. We can provide you with a warm blanket. The OR nurse will be with you throughout the surgery. There will also be an anesthesiologist, a scrub nurse or technician and an assistant to the surgeon.

## Part II: Knee replacement surgery

### After surgery

When the surgery is over, you will be taken to the Post-Anesthesia Care Unit, or PACU. You will be cared for by specially trained registered nurses, who will monitor your vital signs (heart rate, blood pressure and temperature) and pain level. A good indication of how much pain you may be experiencing can be determined on a scale of 0 to 10, with 0 being no pain and 10 being the highest level of pain.

Your family is encouraged to stay in the waiting area outside of surgery if they wish to speak with the surgeon after the procedure is over. A volunteer will escort them to a private room, where the surgeon will apprise them of your condition. Family members are not permitted in the PACU, but you can see them when you return to your room.

You will be in the PACU for one to two hours, depending on the type of anesthetic you had and how you are feeling. The nurses will keep you warm and comfortable.

### Equipment you may see when you wake up

#### *Intravenous line*

An IV line is a tiny catheter that is inserted into a vein in your hand or arm. Attached to the catheter is a small tube that connects to a bag of fluid. The bag will hang from a pole near your bed.

#### *Oxygen*

You will receive oxygen through a nasal cannula or an oxygen mask. The presence of oxygen does not mean that there is a problem or that you are having difficulty breathing. The nurses will check your oxygen level with a finger sensor.

### The remainder of your hospital stay

- For safety reasons, the staff will ask you to repeat your name and birthday before any procedure or medication.
- The nurses will closely monitor your heart rate, blood pressure, temperature and oxygen level.
- The nurses will ask you to rate your pain on a scale from 0 to 10. This enables them to assess the effectiveness of the pain medication.
- You will have a dressing after surgery that will remain in place for several days or less, depending on the surgeon's preference.
- You will have an IV line in your hand or arm for fluids until you are taking them well by mouth. At that time, the IV site will be capped; it will be removed before you are discharged.
- After surgery, you will be given ice chips, then water, clear liquids and full liquids. The nurses will monitor you for nausea and provide medication as needed. If you are not nauseated and have good abdominal sounds (as determined by the nurse), you will progress to solid food and a normal diet.
- Be sure to use your call light for any needs and questions.
- All mobility must be with staff present.
- The nurses will monitor your oxygen level using a finger sensor. You may have oxygen on the night of surgery through a nasal cannula. This will be discontinued when you can maintain a good oxygen level on room air.
- Blood will be drawn for lab work early every morning or every other morning, depending on your doctor's orders.

## Part II: Knee replacement surgery

- You will wear compression and pneumatic stockings on both legs while you are in bed. These assist the blood flow back to your heart and help prevent clot formation and blood pooling in your legs.
- If you would like to turn onto your side, please use the nurse call system so that staff may assist you.
- Please ask nurses, therapists, your doctor or the discharge planner any questions you may have. We are here to help you.
- You may be discharged home the day of surgery, or you may be required to stay overnight, depending on your medical condition and pain level.

### Physical therapy

This section outlines specific activities and exercises that the therapist will be helping you with each day.

**Important:** Do not place anything behind your knee, as this will limit your recovery and possibly lead to a knee that won't fully straighten.

#### Level I

- Lying and sitting exercises: ankle pumps, quad sets, heel slides, short-arc quads, straight-leg raises, active assistive range of motion, long-arc quads, knee flexion and stretches
- Review home exercise program, including stretches
- Progress transfer training, including a toilet transfer
- Progress walking, including to the bathroom with staff (if safe) and stair training (if able)

#### Level II

- Lying and sitting exercises: ankle pumps, quad sets, heel slides, short-arc quads, straight-leg raises, active assistive range of motion, long-arc quads, knee flexion and stretches
- Review home exercise program, including stretches
- Progress transfer training, including a toilet transfer
- Progress walking, including to the bathroom with staff (if safe) and stair training (if able)

#### Level III

- Lying and sitting exercises (see level I), toward a goal of at least 90 degrees
- Review home exercise program
- Progress transfer training
- Progress walking as tolerated toward the goal of 200 feet; practice stair climbing
- Sit in a chair for meals and walk to bathroom with staff

### General precautions

- Use a walker or crutches when walking until the therapist says you no longer need them.
- Do not lift or carry things while walking.
- Avoid small pets, remove throw rugs and secure electrical cords on the floor where you may walk.
- Do not drive until cleared by the surgeon.
- Allow for adequate room at the side of your bed to walk with a walker.
- Avoid pivoting on the operated leg.

## Part II: Knee replacement surgery

### Self-care after surgery

#### TED hose/support stockings

If you were given TED hose in the hospital, they must be worn until you see the surgeon after discharge. The surgeon will tell you when you can discontinue their use.

**TED hose should be removed at least once per day for bathing and skin care.** They are to be worn about 20 hours per day and should be hand-washed and hung to dry. To speed up the drying time, you can wring them dry in a towel or place in a dryer on the “air” setting (no heat).

#### Showering

You may resume showering as directed by your doctor. This is usually two days to two weeks after surgery. Refer to the discharge plan the nurse gave you when you left the hospital. You may need a shower bench or chair.

Place a rubber nonslip mat in the tub or shower to prevent twisting your knee while stepping in and out. Have a nonskid rug outside the shower to prevent slipping when stepping out. Do not shower if you feel weak, dizzy or lightheaded.

#### Shower over tub

Until you are able to safely step over the edge of the tub, use a tub transfer bench. The therapist will review the transfer and set up a procedure with you. Use a towel on the bench so that your skin does not stick to the plastic seat. Do not soak in a tub until cleared by your doctor.

#### Dressing

We recommend that you return to dressing without devices as soon as possible. You can use a footstool to make lower-body dressing easier. When donning pants, start with your operated leg first. Remove clothes from the operated leg last. When donning compression stockings, make sure your skin is fully dry, then scoop the top of the stocking over your foot, pulling the material on at ankle level. Do not gather the stocking material before putting them on; it makes pulling the stocking over the foot more difficult.

#### Home mobility and safety

To carry items around the house, use a bag or basket on your walker. You can cut the handles on a plastic grocery bag and tie it to the front of the walker, or you can purchase a walker basket from a medical equipment supplier. A rolling cart is useful for moving larger items around the house, especially in the kitchen.

- To decrease bending and reaching, keep frequently used items within easy reach (shoulder to waist level).
- Leave frequently used items out.
- A reacher helps you retrieve objects from the floor or high places; attach a reacher to your walker with sticky-backed Velcro.
- When alone, carry a portable phone or a personal alarm — or sign up for Asante Lifeline, a local emergency alert system. Call (541) 956-6201 or email [lifeline@asante.org](mailto:lifeline@asante.org).
- Use a high stool in the kitchen for meal preparation. Slide objects across countertops instead of carrying them.
- Remove throw rugs to decrease your risk of tripping.
- Move pet bowls up on a raised surface to prevent the need to bend to the floor.

## Part II: Knee replacement surgery

### After discharge from the hospital

After discharge from the hospital, whether you go home or to a rehabilitation facility, the following factors will be important for the care of your new joint.

#### Physical therapy

Your physical therapy will continue as your new knee improves. You will go to an outpatient physical therapist two to three times per week for about six weeks, as ordered by your doctor. If you are homebound, a physical therapist may see you at home for a week or two. If you go to a rehabilitation facility, you will receive physical therapy there.

You are also responsible for following a daily exercise program that will be outlined by the physical therapist while you are still in the hospital. The success of your knee replacement surgery depends largely on your diligence, cooperation and attention in adhering to your physical therapy program. Remember to take your pain medication at least 30 minutes prior to your planned activity.

#### Ice

You may apply ice packs or your ice therapy machine to your knee as often as needed: 20 minutes on and then 20 minutes off. Applying ice may be especially helpful before and after your exercise sessions and in the evening hours if your knee becomes swollen. Due to trauma to the joint from surgery and the exercise program you will follow thereafter, it is normal that your knee will feel warm and swell slightly. Heat is not recommended, as it may increase swelling.

#### Blood-thinning medication

You will be on blood-thinning medication or aspirin after you are discharged from the hospital. Depending on the specific medication ordered, you may need to have blood drawn to check your blood-thinning level.

There are warning signs that your blood might be too thin; these include nosebleeds, bleeding gums, excessive bruising and blood in the urine. Please call your doctor if you have any of these symptoms.

It is also dangerous to take aspirin, ibuprofen (Advil, Motrin or Nuprin) and any over-the-counter or prescription arthritis medicine while you are taking blood-thinning medication. You may take acetaminophen (Tylenol) or pain pills that have been prescribed for you. You will be able to resume arthritis medicine and aspirin as needed after the blood-thinning medication is discontinued.

#### The knee incision

- Leave the dressing in place, as instructed.
- After the adhesive skin closures fall off, keep the scar clean and dry.
- Report to your doctor any redness, increased warmth to the touch, wound separation or increase in localized pain, bruising or drainage.
- If your knee swells excessively, elevate your leg above heart level and apply ice.

## Part II: Knee replacement surgery

### Driving

You will not be able to drive for the first six to eight weeks following surgery. Although you may feel capable, you will need written approval from your doctor; otherwise, your insurance coverage may be jeopardized and the safety of your new joint compromised. Your safety and well-being are of prime concern during the healing process. Remember: No driving while taking narcotics.

### Sexual activity

Once cleared by the surgeon, you may resume sexual activity. If you have specific questions, please do not hesitate to ask the doctor, nurse or other practitioner.

## Living with your new knee

### Infection

Your new knee is a metal and plastic prosthesis, so the body considers it a foreign object. If you become sick with a serious infection, bacteria can circulate in your body, go to the prosthesis and cause a bacterial infection in your new joint. For this reason, if you become ill with an infection or a high fever, your doctor should evaluate you immediately.

### Surgical procedures

If you are scheduled for a medical procedure, even a minor one such as dental cleaning or surgery for an ingrown toenail, you may be asked to take antibiotics before the procedure in the first two years after your knee replacement surgery.

If the doctor is not sure about the correct antibiotics to give you, ask them to call your orthopedic surgeon. This may also apply to invasive procedures using a scope, such as a cystoscopy, bronchoscopy or gastroscopy.

### Dental work

You may be asked to take antibiotics before any dental work; this includes routine cleanings. The reason for taking antibiotics is that bacteria are present in the mouth that are not present anywhere else in the body. When you have your teeth cleaned, bacteria gain entry into the bloodstream and can circulate to the knee prosthesis, causing it to become infected. Antibiotics kill the bacteria that cause this type of infection, so it is imperative that you notify your dentist of your prosthesis.

If your dentist is not sure about the correct antibiotics to give you, ask them to call your orthopedic surgeon prior to scheduling the dental procedure. Routine daily flossing, twice-a-day brushing and cleanings every six to 12 months are strongly recommended.

### General guidelines

- If you have rheumatoid arthritis, systemic lupus erythematosus, insulin-dependent diabetes, previous total joint infection, malnourishment or hemophilia, or if you have had radiation or drugs that suppress your immune system, you may need to take antibiotics before certain dental procedures.
- If you are otherwise healthy, for two years after surgery you may be asked to take antibiotics briefly if any dental work being done could cause bleeding in the mouth.

## Part II: Knee replacement surgery

The suggested use of antibiotics is as follows:

- **Patients not allergic to penicillin:** Take four 500-milligram amoxicillin tablets one hour before the procedure.
- **Patients allergic to penicillin but able to take cephalexin:** Take four 500-milligram cephalexin tablets one hour before the procedure.
- **Patients allergic to penicillin and cephalexin:** Take 600 milligrams of clindamycin one hour before the procedure.

If oral medications cannot be taken, intramuscular or intravenous drugs should be given.

This relates only to preventing the spread of bacteria from your mouth to your prosthesis during dental work. If you develop a bacterial infection of the skin, lungs, gastrointestinal tract, urogenital tract or other site, it should be treated for as long as it takes to eliminate the source of the infection. Viral infections such as colds and flu do not require antibiotics to protect your new joint.

Your dentist is ultimately responsible for making the decision for or against antibiotics based on their knowledge of the dental work to be done. If your dentist or you have any questions, please call your orthopedic surgeon.

### Skin conditions

It is important that you advise the orthopedic surgeon of any skin conditions or problems prior to surgery. These may include athlete's foot, dermatitis, nail biting with or without bleeding, and rashes or skin breakdown in skin folds, under the arms or in the groin. Your doctor can instruct you in the care needed to heal these conditions.

If you have foot problems, it is important that you dry your feet well after bathing or swimming, wear well-ventilated shoes and absorbent socks and apply anti-fungal ointment or powder as directed.

Use a first-aid cream on minor cuts and abrasions to prevent infection, before and after surgery, indefinitely.

Do not razor-shave your legs, armpits or face within two days of surgery because this can contribute to wound infection of your new joint.

### Follow-up care

Although your knee may feel fine, it is important to remember that the new joint has artificial components and for this reason you must see the orthopedic surgeon at the routine two-week, six-week, three-month, one-year and annual visits thereafter.

These routine examinations to continually monitor your prosthesis are recommended because certain minute changes apparent only on an X-ray or in an examination may be detected. It is important to stay up-to-date with your health immunizations, especially flu shots, Pneumovax and tetanus booster.



## Asante Physician Partners Orthopedic Surgery and Sports Medicine

537 SW Union Ave., Floor 2, 2A and 2B  
Grants Pass, OR 97527

**(541) 507-2050 | [asante.org](https://www.asante.org)**

© 2023 Asante. All rights reserved.

No part of this publication may be reproduced in any form except by prior written permission.

ORTHO328250\_082423