

# PATIENT GUIDEBOOK

Kinematically Aligned Total Knee Replacement

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# INTRODUCTION

Total knee replacement is a major medical procedure that improves the lives of hundreds of patients every year. Orthopaedic Specialty Clinic of Spokane is excited to assist you on your journey through this beneficial surgery.

Dr. David Scott, our chief surgeon for joint replacement procedures, will be conducting a kinematically aligned total knee replacement on your affected knee. In order to prepare for this procedure, we will provide several educational tools, including this guidebook, so that you can feel confident and informed as you undertake the necessary steps toward a healthier, more pain-free life.

This guidebook will be a helpful tool over the next several months as you prepare for and recover from the surgery. Among other things, it will give you the following information:

- Contact information and directions (Section 7, p. 29)
- Checklists for surgery and recovery preparation (Section 4, p. 9)
- Introductions to our doctors and staff (Section 1, p. 2)
- Basic exercises for recovery (Section 6, p. 22-23)

Visit [orthospecialtyclinic.com](http://orthospecialtyclinic.com) for more information and to download an electronic version of this guidebook for sharing with family and friends.

**For ease of access, here is our phone number: (509) 466-6393. Please call us with any questions or concerns!**

# SECTION ONE: ORTHOPAEDIC SPECIALTY CLINIC – OUR TEAM

## Orthopaedic Surgeons



**David F. Scott, MD**, is an accomplished orthopaedic surgeon with fellowship training in adult reconstruction, specializing in arthritis surgery with an emphasis on joint replacement. He is an active member of the American Association of Hip and Knee Surgeons, as well as a fellow of the American Academy of Orthopaedic Surgeons. He maintains an active presence in clinical research, and has been published in numerous orthopaedic journals and texts. He is also a pioneer in the use of kinematic alignment in knee replacement, as well as biologic reconstruction alternatives in joint replacements, such as cartilage and meniscus replacement.



**Amaryllis Scott, MD**, is a board-certified orthopaedic surgeon with fellowship training in reconstructive shoulder surgery and sports medicine expertise, specializing in arthroscopy, knee ligament reconstruction, rotator cuff repair, total shoulder replacements, and osteochondral transplants for cartilage defects of the knee. She specializes in treating patients with all types of shoulder and knee problems, from simple sprains to severe arthritis of the shoulder and complex ligament ruptures of the knee. She is also a fellow in the American Academy of Orthopaedic Surgeons.

## Physician Assistant

**Chris James, PA-C**, is an orthopaedic specialist who will assist Dr. Scott in surgery and monitor you throughout your hospital stay.

## Orthopaedic Nurse Navigator

**Anne Wood, RN**, is a specially trained nurse who coordinates your care from pre-surgery through your recovery.

## Medical Assistant

**Tiffany King** will assist you with a wide variety of tasks related to your procedures and treatments, including but not limited to medical records, insurance forms, appointments, hospital admission, laboratory services, and billing and bookkeeping. She will also assist Dr. Scott in taking medical histories and recording vital signs, explaining treatment procedures, and preparing you for and assisting during examinations. She may also instruct you about medications and diet, prepare and administer medications, authorize drug refills, draw blood, prepare you for X-rays, remove sutures, and change dressings.

## ***Surgical Coordinator***

**Karla Brundige** coordinates with the surgeon and hospital to schedule your surgery and pre- and postoperative appointments. She also works with Dr. Scott to order implants, instruments, and other important orthopaedic supplies.

## ***Physical and Occupational Therapists***

We are the only orthopaedic clinic in the Spokane area with its own integrated therapy facilities. Our therapists are a friendly group of well-educated healers dedicated to speeding your recovery in our on-site facility. They will instruct and assist you with your mobility and exercises for bending and straightening your knee after surgery, provide tips for safely performing activities of daily living, and teach you how to manage swelling of the knee.

**C. Robert Price** holds a master's degree in physical therapy and has been an invaluable member of our team since June, 2006.

Working together as a unit, these essential team members will contribute to your care by answering questions and conducting patient education; planning and coordinating your procedure, admittance, and discharge; communicating with your insurance company; and arranging for home care, physical therapy, and follow-up appointments.

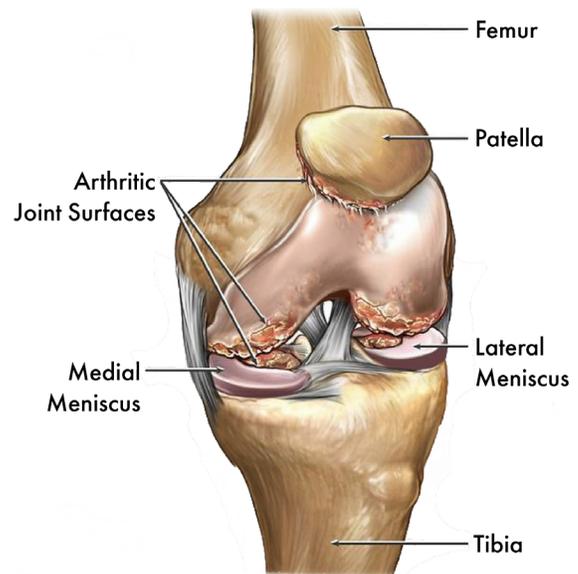
# SECTION TWO: KNEE ARTHRITIS & KINEMATICALLY ALIGNED TOTAL KNEE REPLACEMENT

## What is Arthritis of the Knee?

Osteoarthritis (OA) is the most common form of knee arthritis. OA is a slowly progressive degenerative disease in which the joint cartilage gradually wears away. It most often affects middle-aged and older people. Symptoms include gradually developing pain, joint stiffness and swelling, difficulty bending or straightening the knee, worsened symptoms in the morning, increased pain after activity, locking or buckling of the knee, and/or weather-responsive symptoms (e.g., better range-of-motion in warm weather or greater stiffness in cold temperatures).

Due to loss of cartilage, OA decreases the space and natural cushioning between the femur, tibia, and patella in the knee joint, causing a painful condition referred to as bone-on-bone contact.

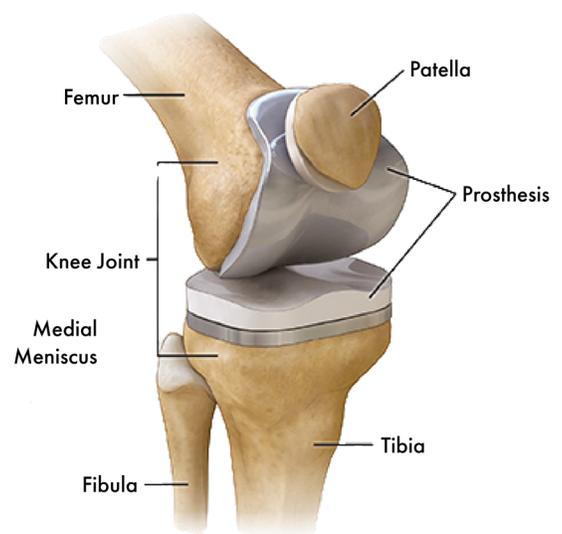
A total knee replacement involves the insertion of metal and plastic implants built out of highly engineered components, which restore a smooth joint surface similar to the original healthy knee anatomy. These replacements work to relieve chronic pain caused by the breakdown of the joint's original cushioning.



## Who Might Benefit from a Total Knee Replacement?

OA patients suffer from limited functionality in daily life due to chronic pain and stiffness. Orthopaedic specialists will try a wide variety of therapies and treatments for OA symptoms such as anti-inflammatory agents, weight loss, exercises, injections, and/or the use of a knee brace or cane before recommending a replacement surgery. Once these options have proved ineffective, however, total knee replacement will become a viable option.

Ideal candidates for a total knee replacement are not patients suffering from mild discomfort or slight restriction of movement, but those who have undergone years of alternative therapies without significant alleviation of



OA symptoms. A patient is ready for a knee replacement surgery only once he or she has experienced the following: failure of treatments such as anti-inflammatories or physical therapy; poor quality of life and overall physical and psychological health due to severe, unrelieved pain; and chronic swelling or stiffness that inhibits daily activities such as walking or lifting objects. At Orthopedic Specialty Clinic, our doctors take each patient's individual situation into consideration before prescribing a total knee replacement.

## **Why You Should Consider a Kinematically Aligned Total Knee Replacement**

The human knee has three axes of alignment. One controls flexion-extension (bending and straightening); the next controls the motion of the patella (kneecap); the final controls the rotation of the tibia (shinbone) in relation to the femur (thighbone). Kinematic alignment takes all three of these axes into account. Precise measurements are made by Dr. Scott during the surgery and used to adjust the small portions of bone that are removed until they are within 0.5 mm to 1.0 mm of the thickness of the implant parts. This restores the native axes of alignment more accurately than other surgical techniques. While the implant is tested for range of motion, the three axes will also be considered to ensure perfect balance. If Dr. Scott finds any tightness or looseness, adjustments will be made to the bone and implant. This ensures that the fit of the implant perfectly mimics the patient's native anatomy.

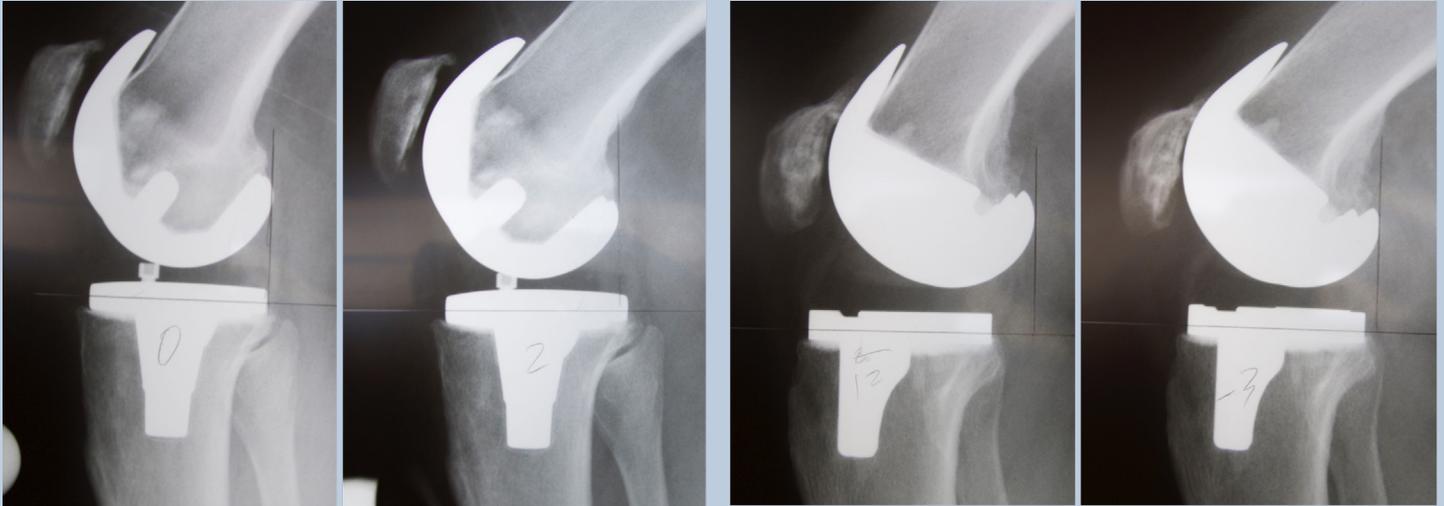
Until recently, mechanically stabilized total knee replacements were the most wide-spread approach to the surgery. However, long-term patient satisfaction was surprisingly low. This led Dr. Stephen Howell to develop the kinematically aligned replacement technique, which prioritized preserving as much of the original knee structure as possible, leading to better balanced implants and a decreased need to restructure the original ligaments. Additionally, four meta-analyses, three randomized trials, and a national multicenter study have ascertained that patients treated with kinematic alignment report significantly better pain relief, function, bending of the knee, and a more normal-feeling knee than patients treated with the traditional or average mechanical alignment.

### **Additional benefits include:**

- Shorter times in the operating room (approximately 60 minutes).
- Consequent reduced risk of infection and need for blood transfusion. Dr. Scott's rate of infection is at 0.16%, nearly five times better than the national rate of 0.85%.
- Brief hospital stays. Dr. Scott's patients remain for an average of 33 hours, which is half the national average of three days.
- Low rate of readmission within 30 days of surgery. Only 1.3% of Dr. Scott's patients are readmitted.
- A greater than ten-year implant survival rate for 97.5% of patients, reducing the overall need for reoperations to repair implants.

At OSC, Dr. David Scott believes that nothing should stand in the way of offering patients the best and most advanced joint care. This philosophy combined with a commitment to research and orthopaedic advancement means that he prioritizes kinematic alignment for total knee replacements.

## Results



### Knee Replacements: Medially Stabilized (left) vs. Posteriorly Stabilized (right)

*Medially stabilized implants are kinematically aligned to the patient's anatomy. Under stress tests from front and back, they show excellent sagittal (front-to-back) stability. On the other hand, the posteriorly stabilized implants which are in common use are usually aligned mechanically. They show considerable lack of sagittal stability under stress tests.*



*Left: Patient's preoperative knee, showing natural alignment*

*Right: Patient's kinematically aligned knee, showing restored natural alignment*

## SECTION THREE: DIAGNOSTIC CARE

The goal of your initial office visits with Dr. Scott will be to assess the severity of your arthritis (or other underlying cause of chronic knee pain). Dr. Scott's preliminary goal is always to establish the degree to which your symptoms are affecting your quality of life, overall health, mental health, and activity levels. If it is determined that your knee pain can be managed effectively through some other means, that form of therapy will be attempted first. Once it becomes clear, however, that your knee condition shows advanced osteoarthritis with major symptoms that are constantly decreasing your quality of life, etc., he will broach the topic of a total knee replacement procedure.

Dr. Scott wants to make it clear, however, that the final decision to undergo a total knee replacement is always left to the patient. He will go over all risks and benefits for the surgery. You will not be forced into the procedure until you feel fully ready for it, which you will indicate with your official consent to the surgery.

Once you have reached the point where you and Dr. Scott have agreed that the surgery is the best next step, you will no doubt have many questions. During an office visit with Dr. Scott, he will take his time in answering all these questions and addressing any concerns you may have. He will explain the implant in detail, and may also show you different implants and their parts should you be interested.

The basic components of any total knee replacement implant include femoral (shin) and tibial (thigh) implants, composed of stainless steel and high-density polyethylene plastic, which will be cemented onto the ends of your existing bones in a process similar to capping a tooth. The patella (kneecap) may also receive a small implant made of surgical-grade plastic which helps repair any arthritic damage to the bone and ensures a smooth action in the implant.

Since Dr. Scott also places heavy emphasis in his practice on groundbreaking research in orthopaedic surgery, he may also discuss a research study protocol for you, should your particular case and procedure match the parameters of one of Dr. Scott's ongoing studies.

We will assess the severity of your limitations and disability based on your history, physical examination, treatments, and a review of your radiographs. We will educate you about kinematically aligned total knee replacement and what to expect after the surgery. This Patient Education Guidebook also offers a comprehensive resource that you can share with your family, friends, and personal coach so that they too can learn about your total knee replacement procedure.



*Knee prosthesis*

## ***Inpatient vs. Outpatient Procedures***

Traditional total knee replacements once required an average 3.5 day hospital stay. Advances in surgical techniques, better implants, improved anesthesia, and expedited rehabilitation protocols now allow patients to walk out of a surgical center the day of surgery and recover in comfort at home (or in a local hotel for our traveling patients).

The outpatient experience is not for everyone, but if you are otherwise in great health, such a procedure can be a perfect fit. During your initial consultations with Dr. Scott, you will decide together whether an inpatient or outpatient procedure works best for your overall state of health. Patients who undergo outpatient procedures report getting their mobility back faster, as well as having an overall better experience, with more individualized care and better sleep during recovery in their own bed.

Outpatient orthopaedic surgery is performed at highly specialized locations set up for this type of treatment. Because these surgical facilities are smaller than hospitals, they can offer many benefits that hospitals cannot. Due to the better patient-to-caregiver ratio, care is more individualized and focused exclusively on you. These facilities also do not service sick patients, meaning they are much cleaner than regular hospitals, leading to lower infection rates. They also offer the doctor greater control over the implant device types, medications, anesthesia, and equipment used—all of which leads to better results.

### **Here is a typical timeline for how outpatient total knee replacements work at OSC:**

- Initial visits with Dr. Scott: diagnose the problem, possibly complete X-rays or other imaging, and consider alternative, non-surgical solutions. If the patient needs a replacement, and is in otherwise good health, they may opt for an outpatient procedure.
- Preoperative arrangements: Surgery date is scheduled. Patient attends a comprehensive pre-surgery orientation. OSC makes all arrangements for post-surgical care.
- Day of surgery: patients arrive at the ambulatory clinic an hour before their surgery is to begin.
- After surgery: Patients spend two to three hours in recovery.
- Same day: Patients walk out of the surgery center under their own power. They go home, or to a local hotel for out-of-town patients
- Evening after surgery: Visit at home or hotel by a specialized nurse.
- Next day: Out-of-town patients can fly home. For local patients, the visiting nurse and physical therapist begin house calls.
- Three to six weeks following surgery: Outpatient physical therapy at OSC's in-house clinic (or nearby physical therapy clinic, for out-of-state patients).

## SECTION FOUR: PREPARING FOR YOUR KNEE REPLACEMENT SURGERY

After you and Dr. Scott have agreed that a total knee replacement is the best therapy for your arthritis or other chronic joint problem, the first step is to review this guidebook thoroughly. The next step is to schedule your procedure.

### **Please be aware that the surgery may not be scheduled immediately.**

Various factors, including your own calendar, will influence the choice of best date for the surgery. Several months or even a year may intervene between the initial prescription of surgery and the actual procedure. Once you and Dr. Scott have determined the best timeline, you are welcome to call our office (509-466-6392) and speak to our Surgical Coordinator about your desired surgery date. Depending on your location in the Inland Northwest, your procedure may be scheduled at Pleasant View Surgery Center (Post Falls, ID) or Providence Holy Family Hospital (Spokane, WA). Calling our office at least two months ahead of your desired surgery date increases the chance that your procedure will be scheduled for that date.

Leading up to the surgery date, several steps related to your general health need to be completed.

### **If you have a history of heart disease, or other potentially serious medical problem, please see your cardiologist or relevant medical specialist.**

If you are diabetic, your diabetes must be properly controlled, with a recent Hemoglobin A-1c level of 7.0 or lower. Proper evaluation and treatment of any potentially serious medical conditions take precedence over scheduling elective surgery. Putting off these checkups could cause substantial delays in obtaining a scheduled surgery date with Dr. Scott. Most ideally, you should visit any specialists even before your original consultation with Dr. Scott, so that your medical history can be considered from the beginning of your orthopaedic treatment.

Next, if your procedure will take place at Providence Holy Family, the Surgical Coordinator will put you in touch with the hospital three to four weeks before the surgery to schedule a preoperative interview, lab work, and a MRSA swab. If you will be a patient at Pleasant View, then your lab work will be ordered by your primary care provider, rather than by the clinic itself.

### **Choose a Personal Coach**

Well before your surgery, ask a willing family member, friend, or caregiver to be your personal coach to assist you during your preparation and recovery from your knee replacement surgery. Choose wisely! This very important person must be able to live with you during at least the first two weeks of your recovery period to assist you in daily tasks. He or she should also be comfortable helping you with bandages, clothing, showers, etc., and capable of supporting your weight.

## Preoperative Visit

Once the results of your preoperative lab work return, you will be scheduled to attend a crucial preoperative visit at our clinic with our Physician Assistant. This visit occurs within the week immediately before your surgery date, and is designed to answer all your questions and thoroughly prepare you for your procedure and after-care. This preoperative visit sets OSC apart from all other clinics in the area, since we are the only one which emphasizes patient education before surgery to this extent.

**Please note: Your personal coach must attend the preoperative visit so that he or she is fully informed of the procedures with which you will need assistance.**

During the preoperative visit, our PA will review all your labwork to ensure there are no major health concerns to address before surgery. You will also go over your xrays together, and review your medical history, including allergies and current medications, to make sure everything is up-to-date and nothing has arisen in the time leading up to surgery that would necessitate any kind of postponement. He will also remind you of the risks and benefits of surgery that you discussed with Dr. Scott, to be sure that your surgical consent is still in place.

Then, regarding your surgery and after-care specifically, the PA will cover three main areas:

### 1. **Key things to remember for the day before surgery**

- Which medications you can continue to take and which you must stop.
- When to stop eating and drinking. It is very important to consume nothing after midnight immediately before surgery. You may, however, still take the allowed medications (to treat conditions like heartburn, depression, etc.) with a sip of water.
- When to check in for your surgery. Generally, we recommend that you arrive at the facility two hours before surgery in order to have time to meet with the anesthesiologist.
- Which knee is the correct site for your surgery. The PA will use a surgical-grade skin marker to write Dr. Scott's initials on the affected knee. He will also send one of these markers home so that you can refresh the marked initials the morning before the surgery, in case the writing has faded.
- How to prepare your skin for surgery. You will be given special soap and instructions for cleaning yourself, to reduce the risk of any contamination of the surgical site from bacteria. Please see p. 14 of this guidebook for complete instructions.

### 2. **What to expect for surgery and discharge**

- The surgery usually lasts between fifty and ninety minutes (1-1.5 hours).
- You will be taken to a recovery unit for the first hour after surgery, so you can be monitored as you emerge from anesthesia. This is where all your after-care will be completed if your procedure takes place at Pleasant View.

- At Providence Holy Family, you will be moved to the orthopedic floor where nurses will help with any after-effects of anesthesia, and a physical therapist will visit to help you get up and start walking and putting weight on your leg. You will use a walker for support and stability during this period and for anywhere from two to ten days after your surgery.
- For three days after surgery, you will wear a bulky surgical dressing composed of cast-padding and Ace wraps, that will cover your leg from foot to mid-thigh. The compression this dressing provides will help limit your knee pain. This dressing will be left undisturbed even if there is some oozing and discharge from the surgical site.
- Your discharge will take place as soon as it is safe for you to return home. For 98% of our patients, this happens on the day of surgery, allowing you to relax at home with fewer disruptions to your rest and recovery, and a greatly reduced danger of infection.

### 3. **Receiving care at home**

- For the first two weeks after surgery, you will receive home health visits from a nurse and physical therapist. The physical therapist will show you exercises and stretches so that you can work on recovering your range of motion before any scar tissue begins to form. While there may be considerable pain and swelling, it is important to push through so as to optimize your recovery.
- The home nurse will monitor your overall health, remove your surgical dressing (there will be an incision straight down the front of your knee, fastened with staples), and change your bandages. After the surgical dressing is removed, you will wear a sterile, non-stick gauze over the incision, which will be held in place by your TED hose. Approximately two weeks after surgery, the nurse will also remove your surgical staples.
- Some important elements of self-care at home include: exercising your affected knee; wearing compression stockings; keeping our leg elevated by placing a pillow behind your heel; and avoiding showering until 48 hours after your surgical staples are removed (about two weeks after surgery). Please see Section Six, pp. 22-28 for full details.
- You will be prescribed several medications for after surgery. Our PA will usually give these to you before your surgery date, so that they can be filled and waiting for you upon your return home. They will include a pain medication, anti-inflammatory, and muscle relaxer which can be taken as needed, and a non-optional blood thinner. Please see p. 24 for a more in-depth explanation.
- You will also learn the signs of infection, so that you can monitor your site and contact our office if any problems arise.

## Medication

All non-steroidal anti-inflammatory drugs (NSAIDs) must be stopped at least seven days before surgery to avoid any complications based on their possible interference with blood clotting.

### **Please consult the following list to make sure you are not taking any of the following NSAIDs:**

- Advil
- Aleve
- Aspirin
- Diclofenac
- Diflunisal
- Ecotrin
- Enteric Coated Aspirin
- Fenoprofen
- Flurbiprofen
- Feldene
- Indomethacin
- Ibuprofen
- Ketoprofen
- Meloxicam
- Mobic
- Motrin
- Naprosyn
- Naproxen
- Oxaprozin
- Piroxicam
- Relafen

This list is not exhaustive, however, so we ask you to review your regular medications with the PA during your preoperative visit to our clinic.

Consult with your primary care provider (or other prescribing physician) about when to stop taking any blood thinners or anticoagulant medications. The physician must specify the optimal number of days for you to discontinue such medications before surgery. These are our preferences for the best times to stop specific drugs:

- 2 days before surgery—Eliquis (apixaban), Xarelto (rivaroxaban), Pradaxa (dabigatran), or Pletal (cilostazol).
- 7 days before surgery—Plavix (clopidogrel) or Brilinta (tricagrelor) and aspirin or any other NSAIDs (see list above), except Celebrex.
- Continue through surgery in the therapeutic range: chronic Warfarin (Coumadin) therapy.

### **Please note: If you have a prescription for Celebrex, you do not have to stop taking it.**

You must stop the use of all herbals and supplements at least one week before surgery. While these supplements may be extremely beneficial to the healthy body, they can cause unexpected complications when the body is undergoing a major surgical procedure. For example, quite a few herbs cause bleeding, including those often suggested for arthritis management (ginger, turmeric, frankincense, etc.)

### **Please consult the following list of common supplements whose use must be completely stopped one week before a total knee replacement:**

- Aloe vera
- Bromelain
- Cat's claw
- Garlic
- Ginger
- Gingko
- Omega-3 fatty acids
- Senna
- St. John's wort

- Danshen
- Dong quai
- Echinacea
- Feverfew
- Frankincense
- Ginseng
- Goldenseal
- Kava
- Licorice (but not candies)
- Thunder god vine
- turmeric
- Valerian
- Willow bark

Patients taking Glucosamine Chondroitin **do not need** to discontinue it.

**If you have rheumatoid arthritis, please consult with your rheumatologist about the best time to stop medications before surgery and resume them after.**

In our experience, the best rule of thumb is to stop these medications a full dosing cycle before your surgery. For example, if you take a drug once every two weeks, at least two weeks must elapse between the last dose and the surgery date. Likewise, you should not resume these medications for four weeks after your knee replacement surgery.

## **Prepare Your Home**

While you are recovering from your surgery, you may experience difficulty in performing daily living activities independently and safely. Besides having your coach living with you during this period, it is helpful to make several preparations before surgery to simplify your life afterward. We recommend that you purchase or prepare your meals ahead of time. If your normal bedroom is on the second floor, we encourage you to set up a temporary bedroom on the first floor within close reach of a bathroom. While we will teach you to climb stairs before your discharge from the hospital, we suggest minimal stair-use for the first few weeks of recovery.

**Please consult the following precautions that can reduce the risk of a fall.**

- Check each room and conceal electric cords and store small objects that can catch a toe.
- Place a phone or your cell phone in easy reach.
- Install nightlights for late night trips to the bathroom.
- Use a cushion to raise the seat in a low chair or choose chair that sits higher and has a firm back and arm rests. Such a chair will help you stand more easily.
- Consider installing handrails on stairs inside and outside your house.
- If you have pets, consider boarding them for a few days after your return home.

## Checklist of Things to Bring to the Hospital

We recommend that you prepare your belongings several days before your procedure and check again the night before, just to make sure you have everything you need.

### Please consult the following list while packing your bags for surgery.

- Personal items – glasses, contacts, dentures, retainers, hearing aids, toiletries, cellphone, charging cord, etc.
- Identification/Information – insurance cards, photo ID, credit card/checkbook, and a detailed list of your medications.
- Clothing – Clean loose-fitting pants or shorts with elastic waist and ability to view the knee (no metal zippers/buttons/snaps and no elastic at the ankles), non-skid shoes with a back (no flip-flops, but Crocs are okay), and a light robe.
- Specific medications (only if directed by Dr. Scott, our PA, or your primary care provider).
- Advance Healthcare Directive/Healthcare Power of Attorney, if applicable.
- A front-wheeled walker. (If you don't have one, we will provide one, but we do recommend you acquire one for use at home after the surgery.)
- This guidebook.

**Please don't bring: Bottles containing prescription medication (unless otherwise directed), jewelry, large amounts of money, or keys.**

## Administer Special Cleansers to Reduce Infection Before Surgery

While the rate of patients who develop a postoperative infection is very low (less than 1% nationally, and around 0.16% for Dr. Scott's patients – meaning only about two patients in every thousand), those patients who do develop such an infection usually show evidence of high concentrations of bacteria on their skin and in their nose and mouth before surgery.

To lessen the risk of such infection, you can take several important steps. First, do not shave or use any kind of hair removal product (e.g., Nair, epilators, wax) on your body for at least five days leading up to the surgery. Shaving creates microscopic cuts in the skin that become a welcoming environment for bacteria. If hair removal is necessary before surgery, we will use electric clippers to clear the skin on the preoperative site.

During the preoperative visit with our PA, you will be provided with a special antibacterial soap (either **Hibiclens** or **Betasept**) to kill these bacteria. If you have an allergy to the active ingredient in these soaps (Chlorhexidine), you can purchase an alternative called Safeguard Soap in almost any store.

On the day preceding surgery, you should wash your sheets, towels, pajamas, and any clothes you will be wearing to your surgery. **Do not let pets touch these clean items.**

## **The night before surgery, please follow this procedure to complete your disinfecting shower:**

4. Wash your hair, face, and body with normal shampoo, conditioner (if desired), and soap. Rinse completely.
5. Pour a quarter-size amount of liquid special soap onto a clean, wet washcloth (use a new one, if you've already used one to wash with normal soap), and apply to your body **from the neck down**.

### **Please note that the soap is not intended for use *inside* the eyes, ears, mouth, rectum, vagina, scrotum, or penis.**

6. Gently rub the soapy washcloth over your entire body (but not inside your orifices). Apply soap generously and as needed, aiming to use **one-third of the bottle** in the shower. Allow the soap to stay on your skin for at least 1 minute (turn off the water, if necessary, to avoid rinsing too soon).
7. Rinse the soap off your body.
8. Dry with a clean towel
9. Dress in your prepared, clean pajamas (or clothes).

### **Please do not use deodorants, makeup, hair-styling products, lotions, powders, creams, perfumes, or moisturizers anywhere on your body after the shower.**

Sleep on your bed with clean sheets. **Do not let pets sleep in the same bed with you.**

When you wake up the following morning, before you leave for your surgery, you must complete another disinfecting shower.

### **Please follow the exact same procedure as the evening before, using another one-third of the bottle of soap for your shower. Please do not apply deodorant or makeup after the morning shower.**

## ***Follow the Advice of the Pre-Admitting Nurse***

Expect a phone call from our office during the week prior to surgery. Our staff will complete a final review of your health history, medications, and allergies, and confirm the date and time of surgery. The surgical coordinator will also instruct you when to arrive at the surgery location (usually about 2 hours before surgery).

### **Please consult the following guidelines for what to do on the night and day immediately before surgery:**

- Check the time of your hospital arrival.
- Complete your evening disinfectant shower

- Starting at midnight, cease consumption of food, fluids, and chewing gum. Small amounts of water (no more than 4 oz total) may be drunk until 5:30 a.m.
- On the day of surgery, take only those medications agreed upon during your preoperative visit (treatments for hypertension, seizures, Parkinson’s disease, indigestion, thyroid problems, or depression) with a small sip of water. **No other food or fluid may be consumed.**
- Complete your morning disinfectant shower.
- Mark your correct leg with Dr. Scott’s initials.
- Depart for your surgery location so as to arrive promptly at the time agreed upon with our Surgical Coordinator.

## **General Guidelines for Reducing the Risk of Postoperative Knee Infection**

**Dental care:** All dental work, including cleaning, must be completed prior to your surgery. You must call the surgeons office if any dental problems arise prior to your scheduled date. Any decaying teeth, abscesses, infections, etc., must be treated fully before joint replacement surgery.

**Clean hands:** Hospital caregivers will use alcohol-based hand sanitizer when entering your room. We encourage the use of the hand sanitizer by your personal coach and any hospital visitors you may have in order to reduce the spread of bacteria that cause infection.

**Illness:** If you contract a fever, cold, sore throat, flu, or any other illness in the week before surgery, please contact our office immediately so we can reschedule your procedure for a safer date.

**Skin condition:** Broken skin or rashes should be reported to your surgeon and may result in a delay of your surgery date.

**Smoking and/or tobacco use:** Because smoking reduces the body’s overall oxygen levels, it directly impairs the body’s ability to repair and build cells. Plentiful oxygen and good circulation reduces the risk of infection in open wounds and provides the foundation for rebuilding skin tissues. Nicotine also delays bone growth and soft tissue healing around the implant after your surgery. In the worst case, this can lead to infections and/or loose implants, requiring extra surgery. Avoiding the use of all tobacco products for six weeks prior to surgery significantly lowers the risks of postoperative complications.

**Pets:** During the five days leading up to surgery, while completing your cleaning protocol, avoid sleeping with your pet, and do not allow them onto your bedding. The same advice holds after your surgery, at least until your first postoperative appointment. Always wash your hands after touching your pet and before handling your incision or bandage. Do not let your pet touch or lick your incision site.

**Blood sugar:** If you are a diabetic, control your blood sugars to maintain hemoglobin (A1c below 7.0). The risk of wound complications is more than three times higher for patients with high blood glucose before and after surgery.

## ***Arrange Transportation Home from the Hospital***

Arrange with your personal coach to drive you home after your discharge. If you are having an inpatient procedure, this may happen around noon on the day after surgery. If you are having an outpatient procedure at an ambulatory surgery center, however, you will go home on the same day. In either case, you will only be released after completing an education course on caring for yourself after discharge.

## SECTION FIVE: CARE THE DAY OF SURGERY

### **Check in at the Chosen Location for Your Procedure**

Arrive at either Pleasant View Surgery Center or Providence Holy Family Hospital at the time given by our surgical coordinator, and follow her directions for check-in.

### **Preoperative Care**

One family member or friend (we recommend your personal coach) can keep you company in the preoperative area during your surgical preparations. You will wash your body with warm cloths containing a special cleanser (Chlorhexidine) and apply nasal and oral disinfectants.

One or two hours before the surgery, we will start an intravenous (IV) line and infuse an antibiotic to reduce the risk of infection. We also administer two tylenol tablets by mouth, as this treatment is less expensive than but just as effective as an acetaminophen drip.

We will apply Thrombo-Embolic-Deterrent (TED) compression devices to the calf area of your lower legs as a precaution against blood clots. You will be fitted for these at our office before surgery and can buy them directly from us for \$30 or purchase them yourself from a medical supply store. The hospital may provide a pair, but these are too flimsy to last for the full six-week recovery period, so you will also need to purchase your own pair for use after surgery and at home.



*Thigh-high compression hose*

Dr. Scott will verify that you have marked his initials on the correct extremity for surgery.

**Please note: If you have significant medical problems, a medical consultant with expertise in the treatment of heart or lung disease, high blood pressure, or diabetes may be asked to evaluate you on the day of admission.**

Although medical complications after knee replacement are not common, the presence of the medical consultant helps decrease any risk for patients with other medical conditions.

Finally, an anesthesiologist provided by the medical center will visit you in the preoperative area. Your medical history will be reviewed, and the options, benefits, and risks will be discussed with you. Because kinematically aligned total knee replacement has a relatively short surgical time (60 minutes or fewer), general anesthetic is preferred. If you are prone to nausea, let the anesthesiologist know so that he or she can administer the right combination of medications to reduce the risk of postoperative nausea.

After you enter the preoperative area and then the operating room, your personal coach, family, and friends are welcome to stay in the surgical waiting room. Dr. Scott or our PA will speak to them about 75-90 minutes from the time you leave the preoperative area. Please be aware that Pleasant View Surgery Center is a small facility with limited seating when you invite people to stay during your surgery.

## Care in the Operating Room

During a kinematically aligned knee replacement, Dr. Scott will use a sequence of 10 caliper measurements that accurately position the implants and balance the ligaments of the knee to within 0.5 mm of its original alignment. Once correctly positioned, the implant will be bound to the bone using a cement mixed with an antibiotic to reduce the risk of infection. An injection of four medicines that numb the knee for 12-18 hours and one medicine that reduces the risk of bleeding (Tranexamic acid) will be administered. A surgical dressing consisting of cast padding and Ace wraps will be applied from foot to mid-thigh.

## Care in the Recovery Room

Immediately after surgery, you will be brought to a recovery room for 60-90 minutes, so you can be attended while you recover from the effects of anesthesia. A specialized nurse will closely monitor your vital signs, including blood pressure, heart rate, respiratory rate, and oxygen saturation. If necessary, a soft tubing may be placed in your nose to administer oxygen.

## Managing Discomfort

Monitoring and managing your discomfort is crucial for recovery as low levels of discomfort help ease the transition into walking and caring for yourself. Upper thigh discomfort above the surgical site is a normal result of the tourniquet used to prevent blood loss during surgery and will linger for approximately a week before resolving itself without intervention. Anti-nausea medicine can also be requested if your stomach feels queasy after administration of a pain medication.

**Please be aware that some pain may remain even after pain medication is administered, as too much medication can compromise your breathing or induce nausea.**

Nurses and our PA will frequently ask you to rate your discomfort on a scale of 1-10, with 10 being severe pain.

**Medacta International**  
RECORD OF VERIFICATION CHECKS FOR CALIPERED KINEMATICALLY ALIGNED MEDACTA GMK SPHERE TKA

SURGEON: \_\_\_\_\_ HSP/UNIT CODE: \_\_\_\_\_ DATE: (DD/MY/YY) \_\_\_\_\_ KNEE:  RIGHT  LEFT  
 KA DEFORMITY:  VALGUS  VALGUS  HT  
 A/P OFFSET: EXPOSURE: \_\_\_\_\_ mm TRIALING: \_\_\_\_\_ mm DIFFERENCE: 0.0 mm  
 ACL CONDITION:  INTACT  TORN  GRAFT

**DISTAL FEMORAL RESECTION**  
Target Thickness: 8mm Unworn, 5mm Worn (No Cartilage)  
When initial thickness misses target - recut or use a washer

MEDIAL CONDYLE:  UNWORN  WORN  
INITIAL THICKNESS: \_\_\_\_\_ mm  
RECUIT:   mm  
WASHER:   mm  
FINAL THICKNESS: 0.5 mm

LATERAL CONDYLE:  UNWORN  WORN  
INITIAL THICKNESS: \_\_\_\_\_ mm  
RECUIT:   mm  
WASHER:   mm  
FINAL THICKNESS: 0.5 mm

**POSTERIOR FEMORAL RESECTION**  
Target Thickness: 7mm Unworn, 5mm Worn (No Cartilage)  
When initial thickness misses target - recut

MEDIAL CONDYLE:  UNWORN  WORN  
INITIAL THICKNESS: \_\_\_\_\_ mm  
RECUIT:   mm  
FINAL THICKNESS: 0.5 mm

LATERAL CONDYLE:  UNWORN  WORN  
INITIAL THICKNESS: \_\_\_\_\_ mm  
RECUIT:   mm  
FINAL THICKNESS: 0.5 mm

**TIBIAL RESECTION**  
Target: Equal Thickness Measured at Base of Tibial Spines

MEDIAL  MEDIAL  
 LATERAL  LATERAL

PCL CONDITION:  INTACT  TORN  EXPOSED  
TIBIAL V-V RECUIT:   mm  
TIBIAL SLOPE RECUIT:   mm

FINAL CHECK WITH SPACER BLOCK AND TIBIAL COMPONENT'S  
NEEDS 0.5-1.0 V-V LAXITY IN EXTENSION  
2.0 MM OF LATERAL OPENING WITH VALGUS LEAD IN 30° OF FLEXION

**GMK SPHERE** REBUILT STABILIZED KNEE  
FEMUR SIZE: \_\_\_\_\_ TIBIA SIZE: \_\_\_\_\_ INSERT THICKNESS:  CS  CS PATELLA SIZE: \_\_\_\_\_

*Surgical Checklist for Kinematic Alignment*

## **Throughout your recovery, including the hospital stay, please freely inform us of your comfort or discomfort levels.**

The nurse will also be able to assist you if your discomfort levels become unmanageable. Compression devices will again be used on your lower legs to reduce the risk of blood clots. Ice therapy will begin. Aspirin will be administered orally for blood-clotting and pain control purposes, since oral administration has been shown in medical studies to be more effective than any injected pain medication. Ice therapy will begin.

We also offer the alternative and extremely beneficial option of renting a medical post-operative care device called a **ThermoTek VascuTherm**, which totally replaces both ice therapy and any prescription blood thinner. This medical refrigeration device accomplishes two goals: First, it uses wraps to apply sequential, mechanical compression of the calves which significantly reduces any risk of blood clots after surgery. Second, it simultaneously directs constant, thermostat-controlled compression and cooling to the affected joint itself. To quote Dr. Scott, "Proper cooling and compression of the knee works better at control than all the narcotics in the world." While the device does come with a rental fee of \$40 per day that is not covered by insurance, the benefits to health and recovery after surgery, including reduced need for pain medication, less swelling, and improved range of motion, significantly outweigh the extra cost to the patient.



**Please talk to Dr. Scott, our PA, or our nursing staff if you are interested in learning more about ThermoTek cooling and compression after surgery.**

## **Managing Swelling & Reducing Blood Clot Risk**

Starting the day of surgery in the hospital, you will take a prescription blood-thinning medication for fourteen days. This medication is far more effective than aspirin, so we strongly recommend that you fill your whole two-week prescription in order to help prevent the formation of any clots.

Also starting immediately after surgery, it is important that you continue to wear Thrombo-Embolic-Deterrent (TED) hose on both legs. For the surgical leg, compression of the knee is very important, since controlling your swelling can speed up your recovery process considerably, so you will wear a thigh-high TED hose or medical-grade compression stocking on that leg. To reduce any risk of blood clots, you will also wear a calf high TED/compression stocking on the non-surgical leg. The ThermoTek device mentioned above is also an excellent form of therapy.

**Please let the hospital staff or our PA know immediately if, for any reason, you are not given some form of thigh-high compression hose after surgery.**

During waking hours, frequently pump your ankles up and down to reduce the risk of blood clots. We also recommend that you elevate your legs to help reduce swelling. However, **do not place a pillow, bolster, or other prop directly behind your knee.** Holding your knee in a bent position during the first six weeks of recovery can cause the scarred tissues behind the knee to begin contracting, making it impossible for you to fully straighten your leg and leaving you with a permanently altered gait. On the other hand, it is an excellent practice to place a bolster or other prop **behind your ankle.** This accomplishes several goals, including decreased swelling, lessened discomfort, and practice with fully extending your new knee, which restores better knee motion.

## Managing Constipation

Pain medication can cause constipation in many patients. We recommend beginning a stool softening medication (over-the-counter Colace or Metamucil are great options) one day before the surgery. If you become constipated in the hospital despite this precaution, let your nurses know. There are a variety of remedies that can help and can be continued at home.

## Release Procedure

Since we generally recommend outpatient procedures to our patients, due to reduced risk of infection from stray bacteria in the hospital environment, up to 98% of our patients are released and return home the same day as their procedure, with just a few staying overnight (often due to time of surgery, rather than absolute need to stay). The only patients for whom we recommend inpatient procedures are those who have other medical concerns that will need to be monitored (e.g., blood sugar levels for diabetic patients). Even these patients, however, usually only need to stay one night in the hospital before release.

Before release, any patient will need to meet two release benchmarks:

- medical stability (your overall state of good health)
- clearance from a Physical Therapist

The hospital physical therapist establishes your eligibility for clearance by teaching you dressing changes, ambulating with walker, bending and straightening surgical leg exercises, learning how to get in and out of the shower and car, and managing stairs. You are also encouraged to use the bathroom in your hospital room, instead of staying in bed and utilizing a bedpan; even the moderate activity of moving to the bathroom helps speed your recovery process immediately after surgery. You should not, however, attempt to use the bathroom alone. Activate the call light at your bedside to request a nurse, aide, or therapist for assistance. Once you have satisfactorily proven that you are capable of getting into and out of bed, walking 50 feet with a walker, and climbing stairs, the therapist will clear you for release.

Dr. Scott and our PA will supervise you throughout your entire discharge procedure and answer any questions you may have.

Your personal coach will be with you at this time, and we strongly encourage him or her to remain with you for the duration of the discharge procedure for education and note-taking.

## SECTION SIX: KNEE REHABILITATION AND HOME CARE AFTER SURGERY

After your discharge from an outpatient procedure, unless other arrangements are made through a hospital or your insurance provider, you can expect to have physical therapists and nurses from a home health organization visit your residence (whether in your actual home or in a hotel suite if you are arriving from out of town) to provide care, check-ups, and physical therapy instruction. The home services will continue for the first two weeks after surgery if needed, and they will be set up through our office.

If you underwent an inpatient procedure, you will still receive visits to monitor your progress and answer questions from you and your personal coach.

**If a home nurse or physical therapist does not contact you within one day of arriving home, please contact our office. If any problem arises with your surgical site or dressing, please contact your home health care provider. If you cannot reach them directly, please call our office.**

### **General Care**

You should continue to wear TED hose/compression stockings for a full six weeks, with a thigh-high stocking on the surgical leg and a calf-high stocking on the other. You may take them off occasionally to wash them. These stockings help to prevent blood clots from forming in your legs and reduce swelling as well as other potential medical complications. Also, the thigh-high TED hose on your surgical leg will be used in combination with an Ace wrap to keep your dressing secure. In no case should you use or add athletic or medical tape to hold your dressing in place.

As an aid for pain control and swelling, you may ice your surgical site for 10-15 minutes at a time. Place ice in a plastic bag, wrap it in a towel, and lay it over the affected area, checking to make sure the bandage or incision does not get wet. At OSC, we also offer the rental of a compression/cooling and anti-blood clot machine (ThermoTek) which we believe can greatly improve your recovery process after knee replacement. It completely replaces the need for ice therapy. Read more about the benefits on p. 20.

**Please speak to our PA or medical assistant, or call our office if you are interested in renting one of these devices for the first ten days after surgery.**

### **Exercises & Physical Therapy**

Before surgery, our surgical coordinator will make arrangements for your outpatient physical therapy, either at our in-house clinic, or at a clinic more conveniently located for you if you are a patient coming from out of state. This treatment will generally begin about the third week following surgery, once your staples are removed.

Rehabilitation of your knee after a total knee replacement must begin within a few hours of surgery in order to maximize your range of motion and minimize your scar formation. Even shortly after your surgery, there is no need to be concerned about your new implant's ability to bear your weight. The parts are cemented to the bone, meaning that the implant is very stable and can easily support you. For this reason, you may be as active as you can tolerate as soon as possible. The more effort you put into your rehabilitation and recovery, the faster you will heal and return to normal knee function. You will experience good and bad days, as after any major surgery, but it is always best to push through the tightness, stiffness, and soreness you will experience as perseverance will lead to the best results in your recovery process.

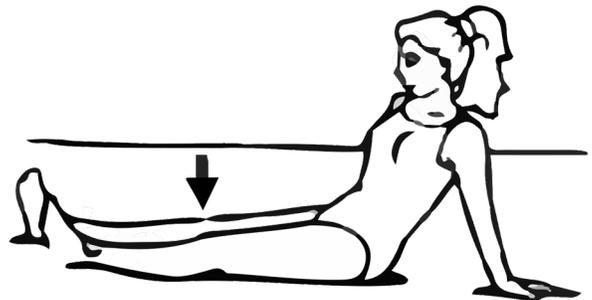
You will use a walker for support and stability for the first two to ten days of home care. We recommend that as soon as you feel steady enough on your feet, you transition to a crutch or a cane. Once you can walk without a limp or significant pain, you may transition to walking without any physical aid.

During your hospital stay, you will also be prescribed an insurance-covered, Continuous Passive Motion (CPM) device which you can take home with you for use. It is a metal, mechanical device that hooks around the back of your quad and calf and allows you to set the desired degree of flexion and extension. Once activated, the CPM device continually flexes and extends your affected knee for you. We leave the use of this device up to each patient's discretion, as some find it very effective, while others do not. In any case, it is not an essential part of your recovery but may provide helpful assistance.

While you are recovering in the hospital, your physical therapist will show you three basic but crucial exercises for your knee rehabilitation.

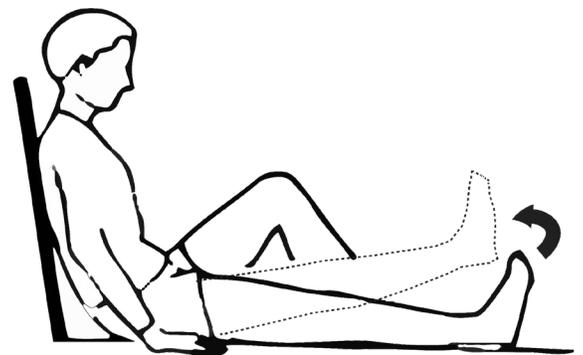
- **Quad sets**

While lying or sitting on the ground or firm mattress, straighten your leg to a relaxed position. Then press your surgical knee firmly toward the ground/mattress, until you feel the muscles of the quadricep over the knee engage. Do not force this motion beyond the point of comfort, but do try to lower your knee farther each time you repeat the exercise.



- **Straight Leg Raises**

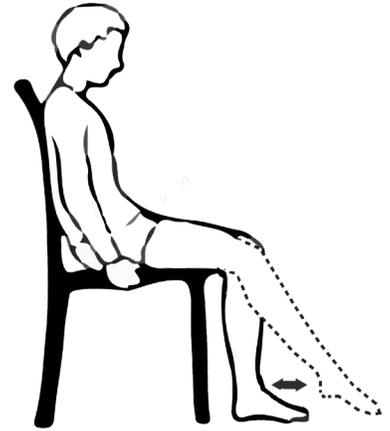
While lying or sitting on the ground or firm mattress, bend your non-surgical leg slightly, with your foot pressed firmly against the surface for support. Then straighten your surgical leg, with the foot flexed flat to engage the leg muscles. Slowly raise your leg until you feel a stretch in the muscles behind your knee, at the back of your thigh and in your calf. Slowly lower your leg to a resting position. Be sure not to complete this exercise too quickly and do not force yourself to raise



your leg beyond the point of comfort. Do, however, aim to lift it a little higher each time you repeat the exercise.

- **Sitting Knee Flexion**

While sitting forward on the edge of a firm chair, set the foot of your surgical leg firmly on the ground, slightly in front of your knee. Then slowly pull it back, still flat on the ground, until it is below your knee and you feel a stretch through your calf and shin. Then slide your leg forward until the foot leaves the ground and you can straighten your knee. Make sure not to stretch or straighten to the point of extreme discomfort, but do try to increase the stretch every time you repeat the exercise.



These exercises form the basis of your knee rehabilitation for flexibility and strength, so you must commit to repeating these exercises 3 to 4 times per day with a minimum of 10-15 repetitions each time.

**While it is important not to push yourself beyond the point of your pain tolerance while completing your exercises, please do be aware that some discomfort is to be expected when you are pushing your knee towards full extension and maximum flexion.**

## **Medication**

After your surgery, you will be prescribed a pain medication, an anti-inflammatory, and a muscle relaxer which you may take as needed. Once you feel that these are not needed for your pain management, there is no obligation to continue taking these three medications.

For the first two weeks/fourteen days after surgery, you will continue taking a blood thinner to help prevent blood clots. This is the only medication for which you must take the full prescription. Dr. Scott will prescribe a blood thinner that is administered by subcutaneous injection in the skin of your abdomen. After the first two weeks have elapsed, however, you may switch to one baby aspirin tablet per day for the next four weeks. If you are already on Coumadin or some other long-term blood thinner, however, you do not need to use aspirin.

Also, if you elect to use our ThermoTek rental option (see p. 20) for compression and cooling of your surgical site for the first ten days after surgery, this therapy plus one full-strength aspirin per day completely takes the place of the blood thinner injection. If you choose this route, the full-strength aspirin is continued for thirty days after surgery (instead of the baby aspirin). The ThermoTek does cost our patients \$400, but the blood thinner injection (depending on your insurance plan) may cost up to \$180, while providing fewer benefits, so in many cases, the extra cost to the patient is outweighed by the improved recovery.

**If you need a refill on any of your prescribed medications, please call the clinic or your pharmacy to request a refill well ahead of when you will run out of your medication.**

Allowing for this overlapping window of time ensures that you won't have to go for hours or days without important pain management or blood thinning medication, allowing you to recover more safely.

**Please note that if you have a narcotic pain medication among your prescriptions, you will need to allow additional time, as you will need to pick up a written prescription from our office every time you wish to refill at the pharmacy.**

A general guideline is to allow two days for standard prescriptions and three to five days for narcotic pain medications. You may also wish to continue the over-the-counter stool-softening medication which we recommend you start the day before surgery to safeguard against constipation.

## Wound Care

Your incision will be dressed with a sterile, non-stick gauze held in place by your TED hose. No tape or adhesive should ever be applied to keep the bandage in place. These can stretch the skin and cause irritation or blistering around the surgical site, which increases the risk of infection in the incision.

Dr. Scott believes it is better and safer to leave the wound alone during the initial healing process, rather than using swabs or other instruments to culture the wound.

**Do not, under any circumstances, insert anything or permit a health professional to insert anything into your incision without first consulting Dr. Scott.**

Introducing a foreign body into the surgical site can lead to an infection inside the joint, necessitating invasive interventions, including repeat surgeries. Additionally, you must not put any salves or ointments on your incision, as the wrong choice can inhibit healing and introduce unnecessary bacteria.

During the first two weeks of surgery, while the skin staples are still in place, you must not wet or immerse your incision site and/or dressing. You may clean yourself, but only in such a way that the surgical leg is not affected. Forty-eight hours after the staples are removed, as long as the incision is clean, dry, shows no drainage, and appears completely sealed, you may take your first full shower. However, for the entirety of the first six weeks after surgery, bathtub bathing is forbidden, as is use of a whirlpool, swimming pool, or hot tub. After the staples are removed and the incision is totally sealed and without drainage, aquatherapy **may** be authorized, but only on a case-by-case basis.

The surgical staples are removed 14 days after surgery, generally by a home care nurse. Wound closure strips will be left on the incision. These you may remove yourself, but wait until they become loose and begin to fall off on their own.



*Surgical scar within 6 months of surgery*

## **Activity Levels after Surgery**

Beginning immediately after surgery, you may be as active as you can tolerate. Discomfort in your knee should be your guide as to how much you can do. Your aim should be more and more activity every day. However if you were told to limit your weight bearing, you should comply with this restriction for the first six weeks.

**Please note that after days of greater activity, you may experience days with some increased swelling and discomfort.**

This is a normal result of using your affected leg and should not be a cause of concern unless the discomfort levels or swelling do not return to normal within a day or two.

You are free to start driving as soon as you feel it is safe for you to do so. If you are taking a prescribed narcotic pain medication, however, it may be wise to wait to drive until you have completed your prescribed course. During the initial six-week recovery period, do not forget to complete your three foundational knee exercises three to four times daily to encourage maximum flexion and straightening of your repaired joint.

## **Normal Effects of Surgery**

Immediately after surgery, you may see bruising, swelling, redness, and moderate drainage in and around your incision. Normal drainage may include blood or clear to pink-tinged fluid. Some patients will experience no drainage after their surgical dressing is removed, while others will continue to see drainage for several days after their return home. Both are completely normal and no cause for concern. During the first few weeks and up to six months after your total knee replacement surgery, you may also continue to experience symptoms like warmth and numbness around your surgical site.

Warmth after a total joint replacement, especially knees, is very common and not a cause for concern. If there are no signs of infection, such as redness, swelling, pain, and fevers, then the warmth is normal.

**As always, if you have any concerns or questions, please call our office.**

Numbness around a surgical incision can also be a very common, even expected occurrence following surgery. Knee replacements are usually numb along the lateral (outside) portion of the incision. A small amount of numbness may occasionally be permanent, but it should not affect the function of your new joint in any way. In general, numbness is completely normal, unavoidable, has no long-term effects, and does not have to be reported to Dr. Scott or the OSC office.

On the other hand, if you notice that your drainage is increasing or includes pus, that the redness around your site is increasing and expanding, and/or that you are experiencing fever and chills, you must call Dr. Scott or the OSC office as soon as possible (if you are still receiving home care, you may also contact the home health nurse). We will want to see you for a check-up to ascertain there is no infection to your surgical site.

## **Postoperative Office Visit**

Your first postoperative office visit with Dr. Scott will take place 5 to 7 weeks after surgery. He will take new x-rays of your knee and implant at that time and assess the state of your recovery (usually at around 50% by this point). The surgical coordinator should schedule this appointment for you even before your procedure and should include it on your surgery letter sent ahead of your admission to the hospital.

**Please call the OSC office if you did not get this date and time.**

## **General Guideline for Recovery**

You are the only person who can take responsibility for your progress with range of motion and strength in your postoperative knee. Therapists, nurses, and your personal coach are intended to provide assistance, offer encouragement, and answer your questions, but they cannot rehabilitate your knee for you. For this reason we ask you to commit fully to the three fundamental knee exercises described above, as well as additional exercises your caregivers may prescribe based on your recovery levels and individual knee.

**Please note that under no circumstances should you stop your three-to-four-times-daily repetitions of the three fundamental knee exercises during the first six weeks of recovery.**

## **In Case of Emergency**

Please be aware that these guidelines and directions are all intended for your benefit. If you do not follow them, you may incur problems or complications that could result in a less than excellent result.

**If any problem does arise, please notify the OSC office immediately.**

We strongly recommend that you call us before you visit the Emergency Room. We can assess whether your concern needs intervention, and save you considerable cost and difficulty. The ER medical personelle will need to contact us anyway to gather information about your surgery, so contacting us first streamlines the treatment of any potential medical concern.

**Call the office immediately** if you have any of the following symptoms, which may indicate a blood clot and necessitate an ultrasound to find out whether one has developed in your leg.

- severe calf/leg swelling
- pain while squeezing the calf
- severe calf pain with moving foot up and down.

**Call the office immediately** if you have any of the following symptoms, which may indicate a growing infection or put you in danger for one.

- fever

- chills
- excessive swelling, drainage, and/or redness
- any type of infection such as sinus, chest, tooth or skin.

**Call 911 immediately** if you develop any chest pain or difficulty breathing.

**If you are calling about an urgent postoperative matter that needs to be addressed the same day, please call Dr. Scott's office phone number.**

If he cannot answer when you call, do not leave a message in voicemail, but instead ask the phone operator to connect you with OSC's medical assistant for immediate attention. Dr. Scott's office number is 509-466-6393 (toll free: 1-877-464-1829).

**If your call is not urgent, please ask for the nurse navigator or medical assistant.**

If neither is available, you may leave a message and your call will be returned within 48 hours.

# SECTION SEVEN: CLINIC & HOSPITAL INFORMATION

## Orthopaedic Specialty Clinic

785 E Holland Ave.  
Spokane, WA 99218

**Regular Clinic Hours:** 9 a.m. – 5 p.m., Monday through Friday

### Contact Informationa

Clinic Directory: (509) 466-6393

Toll Free: 1-877-464-1829

Fax: (509) 466-3072

### Directions to the Clinic

#### 1. **From the North**

Highway 2 (Newport highway): Head south on Highway 2 and take the Nevada exit (by the HiCo Village). Go south on Nevada and turn right at Westview Court. Turn left at the first street (Medical Park Road). Go straight and you will see our parking lot sign straight ahead on the northwest corner of Holland and Nevada.

#### **OR**

Highway 395: Head south on highway 395. Turn left on Hawthorne Road. Turn right onto Nevada and head south. Turn right at Westview Court. Turn left at the first street (Medical Park Road). Go straight and you will see our parking lot sign straight ahead on the northwest corner of Holland and Nevada.

#### 2. **From the South**

Hamilton/Nevada: Head north on Hamilton/Nevada until you get to Holland Ave. (just north of Jay Road). Do NOT turn left at the light on Holland. Go through the light and turn left at Westview Court. Turn left again at the first street (Medical Park Road). Go straight and you will see our parking lot sign straight ahead on the northwest corner of Holland and Nevada.

#### **OR**

Division Street: Go north on Division until you come to the "Y". Take the "Y" to the right to get onto Highway 2. At the first light, Holland Ave., turn right. At the entrance just after the Northpoint Plaza (where Cancer Care is located) take a left. Then turn right and head towards the corner and you will see our parking lot sign. We are on the northwest corner of Holland and Nevada.

#### 3. **From the East**

I-90: Take exit 282A. Head north on Hamilton/Nevada (approximately 7.5 miles) until you get to Holland Ave. (just north of Jay Road). Do NOT turn left at the light on Holland. Go through the light and turn left at Westview Court. Turn left again at the first street (Medical Park Road). Go straight and you will see our parking lot sign straight ahead on the northwest corner of Holland and Nevada.

#### 4. **From the West**

I-90: Take exit 282. Head north on Hamilton/Nevada (approximately 7.5 miles) until you get to Holland Ave. (just north of Jay Road). Do NOT turn left at the light on Holland. Go through the light and turn left at Westview Court. Turn left again at the first street (Medical Park Road). Go straight and you will see our parking lot sign straight ahead on the northwest corner of Holland and Nevada.

#### 5. **Public Transportation**

Bus Line 28 (Nevada) serves the area around our clinic. There is a bus stop on the corner next to us (Holland & Nevada)

## **Providence Holy Family Hospital**

5633 N Lidgerwood  
Spokane, WA 99208

**Visiting Hours:** 11 a.m. – 8 p.m. (Times may vary; talk to a nurse on your floor to be certain of visiting hours.)

### **Contact Information**

Hospital Directory: (509) 482-0111

### **Directions to the Hospital**

#### 1. **From the North**

Take Highway 295/Highway 2, which becomes Division Street south. Turn left (east) on Central Avenue and turn right into hospital campus parking for all inpatient and outpatient admitting.

#### 2. **From the South**

From I-90 take the Division Street exit and drive north about 3.2 miles. Turn right (east) on Central Avenue and turn right into hospital campus parking for all inpatient and outpatient admitting.

The Visitor Entrance is on the south side of the campus (whereas the admitting entrance is on the north), so we recommend that visitors drive through the hospital campus to the south side parking. Otherwise, visitors can turn east onto Rowan Street, to access the south parking lot directly.

### **Visitor Dining**

There are two options for visitor meals at Providence Holy Family:

#### **Café Fresca**

Located on the north side of the hospital between Inland Imaging and the Emergency department and offers a wide variety of cereal, fruit, sandwiches, soup, salad, desserts, beverages, and coffee/espresso service. Hours: Monday – Friday, 6 a.m – 9 p.m.

#### **Take 5 Cafeteria**

A full-service cafeteria, located on the west side of the main hospital building on the basement level.

Hours: Monday – Friday, 6:30 a.m. – 7:30 p.m.; Saturday – Sunday and Holidays, 8 a.m. – 6:30 p.m.

## **Nearby Hotels for Out-of-Town Outpatient Procedures**

- Within one mile

North Spokane Ramada – 2 star  
7111 North Division, Spokane, WA 99208

Quality Inn Oakwood – 2 star  
7919 N Division St, Spokane, WA 99208

- A more luxurious experience

The Davenport Tower (5 miles) – 4 star  
111 S Post St, Spokane, WA 99201

The Historic Davenport (5 miles) – 4 star  
10 S Post St, Spokane, WA 99201

The Davenport Grand (4 miles) – 4 star  
333 W Spokane Falls Blvd, Spokane, WA 99201

## **Pleasant View Surgery Center**

4171 W. Expo Parkway  
Post Falls, ID 83854

**Hours:** 6 a.m. – 5 p.m., Monday through Friday

### **Contact Information**

Clinic Directory: (208) 262-3823

### **Directions to Surgery Center**

1. From I-90: Take Pleasant View, Exit 2. Turn north at the light at the bottom of the exit ramp. Turn left (west) onto Expo Parkway. Pleasant View Surgery Center is the third business on the right.
2. From Hwy 53 or Seltice Way: Turn south onto Pleasant View Road. Turn right (west) onto Expo Parkway. Pleasant View Surgery Center is the third business on the right.

Note: from Pleasant View, the road going east is 5th Ave., while the road going west is Expo Parkway.

### **Visitor Dining**

Conveniently located in Post Falls at I-90 exit 2, the surgery center sits less than a mile from several fast-food locations (Carl's Jr., Zips, Subway, McDonalds) as well as two sit-down restaurants (Toro Viejo,

The Cabin) and a pizza place (Nate's New York Pizza). There are also several convenience stores connected to truck stops and gas stations, for quick snacks.

### **Nearby Hotels for Out-of-Town Outpatient Procedures**

- Within one mile

SureStay Plus Hotel by Best Western Post Falls – 2 star  
3647 W 5th Ave, Post Falls, ID 83854

Riverbend Inn Post Falls – 2 star  
4100 W Riverbend Ave, Post Falls, ID 83854

Sleep Inn – 2 star  
157 S Pleasant View Rd, Post Falls, ID 83854

- A more luxurious experience

Red Lion Hotel Templin's on the River (4 miles) – 3 star  
414 E 1st Ave, Post Falls, ID 83854

The Coeur d'Alene Resort (12 miles) – 4 star  
115 S 2nd St, Coeur d'Alene, ID 83814

## SECTION EIGHT: ANSWERS TO FREQUENTLY ASKED QUESTIONS

### General

#### **Q: How long does a total knee replacement last?**

A: While most implants are officially stated to last 10 years, we generally find that 90% of total knee replacement implants and procedures last for 20 years, with no need for a revision procedure during that time.

#### **Q: How does physical therapy or home nursing care work after surgery?**

A: Usually, you will have home physical therapy and home nursing after surgery if you go straight home from the hospital. If you have staples, the home nurse will remove your staples 14 days after your surgery.

**If a home nurse or physical therapist does not contact you within one day of arriving home, please contact Dr. Scott or the OSC office.**

#### **Q: When is my first office visit with Dr Scott after surgery?**

A: Your first postoperative office visit with Dr. Scott will be 5 to 7 weeks after surgery. New x-rays will be taken at that time. This appointment should already be scheduled for you and should be on your surgery letter that is sent to you by the OSC surgery coordinator.

**Please call our office if you did not get this date and time.**

### Activity

#### **Q: How much weight can I bear on my leg after surgery?**

A: This will vary depending on the patient. Most knee replacement patients are allowed and encouraged to bear full weight immediately. However, some surgeries will require that the patient limit their weight-bearing for the first six weeks. Our staff and the physical therapists caring for you will advise you regarding your weight-bearing status. It will also be recorded in your discharge instructions. If you have a weight-bearing limitation, this will not change for six weeks.

#### **Q: When can I drive?**

A: You are free to drive when you feel it is safe to do so. You should not drive after taking narcotic pain medication.

#### **Q: How active can I be after my surgery?**

A: You may be as active as you can tolerate. Discomfort in your hip or knee should be your guide to how much you may do. You should try to be more and more active every day. The more effort you put into your recovery, the faster you will recover. However, if you were told to limit your weight-bearing, you should comply with this restriction for the first six weeks.

**Q: When can I play golf or return to skiing or other knee-intensive sports?**

A: Similar to your overall activity, you should gauge your return to these activities based on your general pain levels and mobility.

**Q: If I need to kneel for gardening, chores, or other activities, will it damage my knee?**

A: Kneeling is not harmful for your knee, but it may be painful if you do not practice. We recommend that you wait until at least six weeks after surgery to practice kneeling. After that, a foam pad or other cushion can help ease your return to activities that involve kneeling.

**Q: Is it okay that I can occasionally hear a clicking sound from my affected knee?**

A: Because there are new materials in your knee (plastic and metal), they may create non-organic sounds like clicking at certain times. This happens more early on, when the knee is swollen, but it does not indicate that any part is loose or broken. As recovery progresses, you will notice fewer instances of noise, since there will be less pressure on the implant.

## **Wound Sensitivity & Care**

**Q: How long do I need to wear the TED hose (surgical stockings)?**

A: You should wear the compressive stockings for a full six weeks on both legs. You may take them off occasionally to wash them. These stockings help prevent blood clots from forming in your legs and help reduce swelling as well as other potential medical complications. It is especially important that total knee patients have a thigh-high compressive stocking on their surgical leg. Compression of the knee is very important, as reduction in swelling can greatly speed your recovery process. The thigh-high TED hose or calf-high TED hose/Ace wrap combination should be used to keep the dressing secure. Tape should NEVER be used to hold dressings in place over your knee incision.

**Please let the hospital staff, or Dr. Scott's staff know immediately if for any reason you are a total knee patient without thigh-high compression.**

**Q: Can I use ice for pain control and swelling?**

A: You may place ice in a plastic bag and put it over the affected area to aid with pain control and swelling. Make sure the bandage or incision does not get wet. Use it for 10-15 minutes at a time. We also have a compression/cooling and anti-blood clot machine (Thermotek) which we believe can greatly improve your recovery process after knee replacement.

**Please ask if you are interested in renting one of these devices.**

**Q: When can I take a bath or get my incision wet?**

A: There is no bathing in a bathtub, whirlpool, swimming pool, or hot tub use for the first six weeks after surgery. You may shower 48 hours after the skin staples have been removed if there is no drainage from your incision, and it appears completely sealed. Aquatherapy **may** be authorized on a case-by-case basis. Again, this would only be possible after staples are removed and the incision is totally sealed, with absolutely no drainage.

**Q: When are my staples removed?**

A: Staples are removed 14 days after surgery. This is generally done by the home health agency. Leave the wound closure strips on the incision until they become loose and begin to fall off. At that time you may remove them yourself.

**Q: Should I be concerned that my hip or knee is warm during the first six months?**

A: Warmth after a total joint replacement, especially knees, is very common for the first six months. If there are no signs of infection, such as redness, swelling, pain, and fevers, then the warmth is probably normal.

**If you have any concerns, please call the office.**

**Q: Is numbness around my incision normal?**

A: Numbness around a surgical incision can be a very common, even expected occurrence following surgery. Knee replacements are usually numb along the lateral (outside) portion of the incision. This is totally normal and does not have to be reported to your physician. This numbness likely will improve within several months. However, there may be some permanent numbness. Any associated numbness should not affect the function of your new joint in any way. You do not need to report numbness around your incision to Dr. Scott or the OSC staff, as it is very common, unavoidable, and has no long-term effects.

**Q: What should I do if I notice any drainage, excessive redness, pain or swelling around the incision?**

A: Call the OSC office as soon as possible as we may need to see you to ensure there is no infection.

**Q: Will my wound split open when bending my knee during recovery?**

A: No, your wound has been sutured and stapled at every layer of the dermis. During the recovery process, it will remain secure. The staples will not be removed until the wound has closed and will not open again.

**After Recovery**

**Q: Will I need to worry about my knee implant when passing through security screening and metal detectors?**

A: You do not need to worry about it, as security agents are used to these kinds of medical implants. However, it is likely that your implant will set off all metal detectors in the future, so prepare yourself to have your leg patted down. We recommend that you try the body scanner at airports rather than a metal detector, as the body scanner will point directly to your knee, instead of enforcing a full-body pat-down.

### **Q: Will my knee feel normal after my surgery?**

A: After a kinematically aligned total knee replacement, about 30% report that their knee feels normal (i.e., back to how it felt before pain and/or injury). The other 70% do notice a difference, but it is generally an improvement from their pain levels before surgery.

## **Medications**

### **Q: May I take my anti-inflammatory medicines before and after surgery?**

A: You should stop taking anti-inflammatory medicines 10 days before your surgery. The exception is Celebrex, which you do not need to stop taking.

### **Q: How long am I on the blood thinner?**

A: Usually 14 days total, from the day of surgery. Dr. Scott will give you a prescription for a blood thinner to take after you leave the hospital.

**Please realize that the prescription medicine that Dr. Scott recommends is more effective than aspirin at preventing blood clots, and he recommends that you fill this prescription if at all possible.**

For total knee patients we offer a rental of the Thermotek cooling/compression device. You would use this machine for the first 10 days in conjunction with a full-strength aspirin for 28 days after surgery.

### **Q: What do I take after I'm done with the blood thinner?**

A: It is recommended that you take one baby aspirin tablet per day for the next six weeks. This does not apply if you are already on Coumadin or some other long-term blood thinner.

### **Q: What if I need a refill of my medication?**

A: Please call the clinic or your pharmacy to request a refill at least two days before you run out of your medication. Be sure to allow enough time for this. Narcotic pain medicines require a written prescription that needs to be picked up at our office and taken to your pharmacy. Be sure to allow additional time for this.

### **Q: Why do you advise I quit using tobacco products?**

A: Nicotine delays bone growth and soft tissue healing around the implant after your surgery. In the worst case, this can lead to infections and/or lose implants, requiring extra surgery. We strongly advise you to stop the use of any tobacco products to speed your recovery and minimize your complication rate.

### **Q: I have heard that I might need antibiotics when I have dental work or other surgical procedures?**

A: All total joint patients may need antibiotic treatment before any dental work, even light cleanings for their lifetime following surgery. This precaution also applies to any invasive medical or surgical procedure. Please turn to the next page for the guidelines for you and your dentist.

## ***Dental and Invasive Procedure Prophylaxis Instructions for Total Joint Patients***

Patients undergoing any kind of dental treatment, even light cleanings, and/or any invasive procedures, need antibiotic prophylaxis. You may obtain an antibiotic prescription from our office or your dentist or other physician. Dr Scott recommends that you follow this guideline for your lifetime following surgery.

- If the patient is **NOT** allergic to penicillin: Patient is to take 2 grams of amoxicillin (or cephalexin, or cephadrine) one hour prior to dental procedure.
- If the patient **IS** allergic to penicillin: Patient is to take 600 mg of clindamycin one hour prior to dental procedure.
- If the patient is **NOT** allergic to penicillin but is unable to take oral medications: Patient is to take cefazolin one gram or ampicillin 2 grams IM/IV one hour prior to dental procedure.
- If the patient **IS** allergic to penicillin **and** unable to take oral medications: Patient is to take clindamycin 600 mg IM/IV one hour prior to dental procedure.

No second doses are recommended for any of these dosing regimens.







**With a kinematically aligned total knee replacement, your life and mobility could improve dramatically.**

Contact us today to take ownership of your joint health.

Call us at  
**(509) 466-6393**