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Hip and Knee Specialist

Total Knee Arthroplasty

Dr. Ballard's Comprehensive Surgical Guide

**Your Complete Resource for Preoperative,
Intraoperative, and Postoperative Care**



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Patient Financial Responsibility

Center for Sports Medicine & Orthopaedic Surgery Center

If you are having surgery at CSMO Surgery Center, a Patient Financial Coordinator will contact you via text message or phone call with an estimated cost of the procedure. This estimate includes your financial responsibility for your provider's services and CSMO Surgery Center. These estimates are based on your current insurance benefits, including co-insurance, deductibles and out-of-pocket requirements. Payment for these estimated service costs are due 1 week prior to your surgery date. If payment is not received 48 hours prior to the surgery date, your surgery may be rescheduled.

You will also receive a separate bill for anesthesia services after your surgery with their cost.

Parkridge Medical Center & Bradley Medical/Vitruvian Health

If you are having surgery at a hospital, a Patient Financial Coordinator will contact you via text message or phone call with an estimated cost for your provider's services. The hospital will contact you separately regarding their cost. These estimates are based on your current insurance benefits, including co-insurance, deductibles and out-of-pocket requirements. Payment for these estimated service costs are due 1 week prior to your surgery date. If payment is not received 48 hours prior to the surgery date, your surgery may be rescheduled.

You will also receive a separate bill for anesthesia services after your surgery with their cost.

If you have questions about your financial responsibility, please call Amy Scurlock at (423) 664-5161.



Preparation Before Surgery

Preparing Your Home for Surgery

- Discuss with your family who will be available to assist you for the first several days when you return home after your surgery.
- Frequently used items should be placed on a surface that is easy to reach. Put a bag on the front of your walker so you do not have to carry items when walking.
- Put away any throw rugs and clutter so that you have less risk of tripping.
- Remove any other items that may be a tripping hazard such as electrical cords.
- Use non-skid mats or decals in the shower or tub, use a plastic non-slip shower stool if you need to sit down.
- Arrange for assistance with pets. Have someone else available to walk your dog, especially if they are leash-walked. Be aware of where your pets are, discourage them from jumping on you. Your assistive device, such as a walker or cane, can sometimes be a deterrent.
- Have a firm chair that has side arms. You will be taught in therapy how to use the side arms to stand up and sit down. Avoid soft or low chairs, as they are difficult to get out of at times. A good height for chairs and toilets is 18 inches from the floor.

Dental Services

- Have dental work and teeth cleanings taken care of at least 3 weeks prior to your surgery. Infected teeth and/or gums can cause your new total joint to become infected. IF YOU ARE CONCERNED, SEE YOUR DENTIST PRIOR TO SURGERY TO DISCUSS.

Rehab Education

- Plan on attending or watching a rehab education class before surgery, commonly called prehab. This class or video will provide you with education and prepare you for recovery. The surgery scheduler will discuss this class with your surgery date is determined.
- You will be provided with information on machines to help ice your knee after surgery. You are not required to get one of these devices. Dr. Ballard does believe it is very helpful with pain and swelling in the postoperative period. Ice packs can work well but are less convenient. There are three options: purchase an ice machine directly from our office, rent a machine for four weeks through Kinex, or purchase a machine on Amazon. Insurance does not cover the cost of these machines.

Medical Clearance

- You may be required to obtain medical clearance from your primary care physician or other specialists based on your past medical history. Medical issues that have not been treated for a while can potentially lead to complications or delay your surgery.
- If you are having surgery at **CSMO Surgery Center**: Please enter your medical history online by completing the ONE MEDICAL PASSPORT, located at <https://sportmed.com/pre-registration/>. All information is kept confidential and will be thoroughly reviewed by your medical team.

Pretesting

- At least one week prior to surgery, the CSMO Surgery Center or the hospital pretesting department will contact you. They will discuss your past medical history and set up your appointment for pretesting. Pretesting will consist of lab work and other testing such as an EKG, chest x-ray, urinalysis, etc. This is mandatory prior to surgery. You will be contacted if your results are abnormal.
- If you have not heard from pretesting seven days prior to surgery – please contact them:

CSMO Surgery Center: 423-698-6871, option #1

Parkridge Pretesting: 423-493-6923

Holding Medications prior to surgery

Prior to surgery, certain medications will be stopped. The exact timing depends on several factors, but if they are not held, your surgery will potentially be delayed, rescheduled or cancelled. This list is not comprehensive, therefore please contact us with any specific medication questions. Typically, at the preoperative call or visit, all your medications are reviewed, and medication recommendations are made. Recommendations for certain medications will be coordinated with the prescribing provider.

Four weeks prior to your surgery date these drugs need to be stopped:

- **Rheumatoid Arthritis Medications**

Humira Remicade Enbrel Methotrexate Others

- We will coordinate these medications with your rheumatologist

Two weeks prior to your surgery date these drugs need to be stopped:

- All Herbs
- All Joint Supplements (Glucosamine, Omega Oils)



- Multi-Vitamins, Vitamin E, Fish Oils/Omega Oils
- All Diet Pills

8 Days prior to your surgery date, these drugs need to be stopped. These injections can cause a build-up of stomach contents, raising the risk of aspiration during anesthesia.

- **Weekly Injections - Stop 8 FULL days BEFORE the scheduled procedure.**

Generic: Semaglutide; Brand: Ozempic, Wegovy

Generic: Dulaglutide; Brand: Trulicity

Generic: Exenatide; Brand: Bydureon

Generic: Tirzepatide; Brand: Mounjaro, Zepbound

- **Daily Injections-Stop 1 FULL day before scheduled procedure:**

Rybelsus

Five days prior to your surgery date these drugs need to be stopped:

Anti-inflammatories (Ibuprofen, Aleve, Aspirin, Mobic, Celebrex, etc)

Diabetic Medications BEFORE surgery:

Many diabetic medications need to be taken differently in the days leading to your surgery. You will receive instructions from pretesting on how to hold these types of medications. If these instructions are not followed, your surgery will be CANCELLED.

Glucophage Metformin Glucovance Janumet

Blood Thinners BEFORE surgery:

Recommendations on how to discontinue these medications prior to surgery will be coordinated with the prescribing provider. If the instructions are not followed, your surgery will be CANCELLED.

Coumadin Warfarin Jantoven Xarelto Eliquis Effient Pradaxa

Aspirin & Plavix (may be continued at times)

Bowel Management before surgery

- Pain medication used after surgery can cause constipation. You may start stool softeners 1-2 days prior to surgery. It is recommended to continue taking them as long as you are taking narcotics
- Try to have a bowel movement the day before surgery.



Prevention of urinary retention

It is our policy to prescribe Flomax (Tamsulosin Hydrochloride) 0.4mg to help prevent urine retention after surgery. You will begin taking this medication 3 days prior to surgery and 4 days after surgery. This medication will only be prescribed if you meet at least one of the following criteria:

- Male patient with a history of BPH
- Male patient with history of urinary retention
- Male patient age 70 or older

The Evening Before Surgery

- You will receive a call sometime between 2pm-5pm from the Surgery Center or hospital to receive your actual arrival time for your surgery. If not, check your phone messages.
- Do not eat or drink anything after midnight, EVEN WATER, unless otherwise instructed.
- If you are having surgery at the **CSMO Surgery Center**: You will have been instructed to drink 6-8 ounces of a preoperative carbohydrate drink 2 hours before arrival time on the morning of surgery. Please follow your pretesting nurse's instructions regarding this drink.
- If you are having surgery at **Parkridge Hospital**: You will have been instructed to drink 20 ounces of a preoperative carbohydrate drink 1 hour before arrival time on the morning of surgery. The recommended flavors are yellow, blue or clear. Please avoid orange, red or dark purple. Diabetics may be used zero-sugar carbohydrate drinks. Please follow your pretesting nurse's instructions regarding this drink.
- Do not take medications unless you have been instructed to do so during your preoperative assessment at the surgery center or hospital.
- Take a shower with an anti-bacterial soap that is either given to you at Pretesting or purchased at a pharmacy or store. Common brands of the Chlorhexidine soap may be Hibiclens, Dynahex, or others. If you are having surgery at **Parkridge Hospital**, you are to shower with this soap daily for 5 days prior to surgery.
- **Parkridge Patients**: Your medications will be sent to your preferred pharmacy at discharge.
- **CSMO Surgery Center**: Please pick up your post-operative medication at your preferred pharmacy the day before surgery.



The Morning of Surgery

- Take a shower with an anti-bacterial soap that is either given to you at Pretesting or purchased at a pharmacy or store. Common brands of the Chlorhexidine soap may be Hibiclens, Dynahex, or others.
- Suggested items to take to the hospital: Personal hygiene (toothbrush, toothpaste, deodorant), Watch, Phone and charger, Loose fitting or athletic clothing, Slippers with non-slip soles or tennis shoes, Rolling Walker (front wheel only, rollators are not recommended). You will need a walker to get into the home you are staying in.
- **It is very important to bring your Photo ID, an up-to-date list of medications, and your Insurance cards.**

After Surgery

Discharge

CSMO Surgery Center Patients: You will be discharged from the surgery center the same day. You must have someone remain with you until you are discharged and drive you home. You must have arrangements made for someone to stay with you at home for the first 24 hours after surgery.

Parkridge Patients: You may be discharged home from the hospital the same day or you may stay overnight at the hospital. You must have arrangements made for someone to stay with you at home for the first 24 hours after surgery.

- You will wake up with a knee immobilizer on. You are to wear this only when sleeping for the first 6 weeks after surgery.
- You will leave the hospital using a walker, and transition to a cane as guided by therapy.

Compression stockings QR Code

You will wake up with thigh high compression stockings on. You are to wear these for 23 hours a day for the first 6 weeks after surgery on both legs. This helps to limit swelling and the risk for a blood clot.

**Please scan QR code for additional stockings,
just pick your size (15-20mmHg)**



- Use ice for pain relief at least three times daily for 15-20 minutes, and more as needed. Always use ice after your exercise program.
- Your appetite may be poor at first but will return.
- Drink plenty of water to stay hydrated.
- As you recover, your energy level may be low for a while after surgery.
- Walk every 2 hours while awake, continue to increase the distance that you walk as you heal.
- If you are not staying at your own home after surgery, please inform our office where you will be staying and the best phone number to contact you at.

How to use an Incentive Spirometer

- Sit up as straight as possible. Do not bend your head forward or backward. Hold the incentive spirometer in an upright position. Place the target pointer to the level that you need to reach or that your healthcare provider has suggested. Exhale (breathe out) normally and then do the following:
- Put the mouthpiece in your mouth and close your lips tightly around it. Do not block the mouthpiece with your tongue.
- Inhale slowly and deeply through the mouthpiece to raise the indicator. Try to make the indicator rise up to the level of the goal marker.
- When you cannot inhale any longer, remove the mouthpiece and hold your breath for at least 3 seconds.
- Exhale normally.
- Repeat these steps 10 to 12 times every hour when you are awake, or as often as desired for the next 3 to 5 days.
- Clean the mouthpiece with soap and water after each use.

Post-Operative Instructions for Lower Extremity Nerve Block

- As part of your anesthetic, you will receive a nerve block that helps control the pain from surgery on your lower extremity. Nerve blocks are performed by injecting a local anesthesia drug (similar to Novacaine) near the nerves which provides feeling to the part of your body on which you will have surgery. The duration of the block is variable depending on such factors as age, patient size, circulation dose, and the proximity of the injection to the nerve. The nerve block will not numb the entire surgical area of the lower extremity. It is important when the block starts wearing off to begin taking the prescribed pain medication as soon as you begin to feel discomfort.



- If a brace or boot is ordered by your physician after surgery, instructions for that will be given in recovery before you are discharged.
- While your lower extremity is numb, you must protect it from injury, as you will not feel pain, heat, cold or pressure. Avoid ambulating without assistance until the block has completely worn off, in addition, keep your lower extremity elevated to avoid swelling which can increase pain and interfere with proper healing.

Post-Operative Medication

The amount of pain medication you are prescribed following surgery is controlled by state laws, insurance companies, and pharmacies. Your surgeon must abide by these rules.

Oxycodone 5mg - 1 tab every 4-6 hours as needed for pain for 2 weeks (May take 2 tabs every 4-6 hours for UNCONTROLLED pain)

- This medication is an opioid used to treat pain after surgery. It is recommended to use this medication a minimum of the first 3-5 days.

Celebrex (Celecoxib) 200mg - 1 cap daily for 2 weeks

- This medication is a non-steroidal anti-inflammatory (NSAID) used to decrease inflammation and pain.
- This medication will NOT be sent in if you have chronic kidney disease, are on a blood thinner other than Aspirin, or have difficulty tolerating NSAIDs.

Robaxin (Methocarbamol) 750mg - 1 tab 3 times daily as needed for muscle spasms

- This medication is a muscle relaxer used to help with muscle tightness, stiffness, and spasms.
- This may NOT be sent in if already taking a muscle relaxer.

Neurontin (Gabapentin) 100mg - 1 tab 3 times daily for nerve pain for 30 days

- This medication is used to treat nerve pain after surgery. This medication may increase the effects of dizziness/drowsiness when taken with other pain medications.
- This may NOT be sent in if you are already taking this or similar medications.

Zofran (Ondansetron) 4mg – Dissolve 1 tab in the mouth every 6-8 hours as needed for nausea.

- This medication is used to treat nausea and vomiting that can be caused by opioids.

Dulcolax (Bisacodyl) 5mg - 1-2 tabs daily as needed for constipation

- This medication is a laxative tablet used to treat constipation. Opioids can cause constipation after surgery.



MEN ONLY - Flomax (Tamsulosin) 0.4mg – 1 cap daily after dinner (begin 3 days prior to surgery) for 7 days.

- This medication is used to help prevent urinary retention if certain criteria are met.

Narcan 4mg nasal spray - WE ARE REQUIRED BY LAW TO SEND THIS FOR OVERDOSE REVERSAL. YOU ARE NOT REQUIRED TO PURCHASE IT.

- * If you are a current patient under the care of a Pain Management provider, please continue your regular medication regiment after surgery. We will alert your provider of the scheduled surgery.
- * We try to wean off stronger prescription medications as soon as is reasonable and use non-prescription pain relievers. It is important that you take your prescriptions as directed. Do not take more medication than prescribed. Do not take medication if your symptoms are controlled. It is entirely reasonable to take your pain medications less frequently than prescribed.

Bowel Management after surgery

Surgery, anesthesia, limited mobility, and the use of certain medications may slow your bowel function and cause constipation. In the event you experience bowel issues, the following are recommendations that may be helpful.

- Take OTC stool softener of choice daily, and laxatives as needed (good choices - Stool Softeners: Miralax, Colace, Laxative: Senekot or Senna).
- Drink extra water every day (at least 64 ounces).
- Drink juices, especially prune juice and apple juice, which promote stool softening.
- Drink a hot beverage about 30 minutes before your usual time for a bowel movement. Caffeinated drinks such as coffee or hot tea can help.
- Increase dietary fiber: whole grain breads, cereals, pasta; fresh/dried fruits, fresh vegetables, beans; use a fiber supplement.
- Increase probiotic foods: yogurt, sauerkraut, kombucha, etc. Use a probiotic supplement.
- Walk every day.
- Reduce narcotic pain medication use as pain level allows.

Over the Counter Options for relief of severe constipation:

- Dulcolax 5mg tabs (this medication is sent in by us before surgery)
- Magnesium Citrate



- Suggested constipation mixture: Mix 2 tablespoons Milk of Magnesia with 2 tablespoons WARM Prune Juice and 2 tablespoons Sprite; Drink. If there are no results within 2-3 hours, repeat dose. If there are no additional results in another 2-3 hours, you may repeat dose one more time.
- Fleets enema, if above mixture is not successful.
- * For Severe Constipation: Call CSMO if you do not have a BM within 3 days after surgery. Notify CSMO if you have tried any of these and still do not have a bowel movement. We can order prescription medications if necessary.

Blood Clot Prevention after surgery

- You will wake up with thigh high compression stockings. You are to wear these for 23 hours a day for the first 6 weeks after surgery on both legs. This helps to limit swelling and the risk for a blood clot.
- Medication - you will either begin Aspirin twice daily for 6 weeks after surgery or resume your previously prescribed blood thinner. It is VITAL that Aspirin and blood thinners are taken as directed after surgery.
- If you have a history of a pulmonary embolism, Dr. Ballard may require an Inferior Vena Cava (IVC) Filter be placed prior to surgery.

Physical Therapy

- You will begin therapy 1-2 days after surgery.
- Therapy will guide you on the transition from a walker to a cane around the 2-week mark.
- Therapy will be 2- 3 times a week for at least 4 weeks.
- It is recommended to take your pain medicine at least 45 minutes prior to physical therapy appointments. Do not drive while on pain medication.
- Walk every 2 hours while awake, continue to increase the distance that you walk as you heal. Continue home exercise programs twice daily for 6 weeks.

Home Equipment

- **Pedal Exerciser / Restorator**

Pedal exercises completed twice daily are recommended as part of your home exercise program after a total knee replacement. This active range of motion exercise allows your knee to bend and stretch, and reduces the risk of scar tissue formation during healing. Begin pedal exercises the day after surgery. You may begin pedaling according to tolerance at first. For example, you may only be able to do 25 revolutions forward and 25 backwards. Or, you may only be able to rock back and forth at first until you can begin to do full revolutions. You will gradually increase your revolutions as your knee heals. The pedal exerciser is shown below.



Instructions

- Sitting upright at back of chair, place both feet inside pedal straps.
- Pedal bicycle 100 times forward.
- Pedal bicycle 100 times backward.
- Do this each morning and evening for at least six weeks.

Surgical Dressing

Your incision will be covered with a medicated incision dressing for the first week after surgery, usually called Acquacel. If you experience severe itching or irritation from the dressing, please remove it. This dressing is waterproof which allows you to shower right away.

You are to remove this dressing after 7 days. To remove the specialty dressing, loosen it by stretching an edge before pulling it off. Once the surgical dressing is removed, you will no longer be able to get the incision wet when showering. Please cover your staples during week 2 by wrapping the surgery area with Glad Wrap Press-N-Seal or a plastic bag taped to the skin.

If your incision has drainage present, please keep it covered with a large dry dressing, or gauze and medical tape to protect the incision. Change this dressing at least every other day until drainage has stopped, or more frequently if needed.

You may leave your staples/incision open to air during week two if no drainage is present.

Do not apply any lotions, creams, or ointments on the surgical incision until it is healed or you are instructed to do so.

No immersing in water (tub, pool, lake, etc) until the incision is completely healed, usually around 8 weeks. Further instructions will be provided at your 2-week follow-up appointment.

Please notify us of any increase in drainage from the incision, excessive redness or swelling, or if you run a fever OVER 101 degrees.

After total joint surgery, you may have moderate bruising and swelling up and down the leg. Do not be alarmed, bruising and swelling is very normal after total knee replacement.

Before visiting an ER for surgical site concerns, please CALL THE OFFICE. If it is after office hours/overnight, please call the Ortho On-Call line at 423-624-2696.

If a trip to the emergency room is necessary at any point post-operatively, please go to Parkridge main hospital.

Appointments after surgery

- 2-week visit: scheduled with Dr Ballard's Physician Extender. Staples will be removed if present.
- 6-week visit: typically scheduled with Dr. Ballard.
- Further appointments will be determined by your progress.

Driving after surgery

- You may resume driving around 6 weeks after surgery when you are:
 - No longer using a walker, no longer taking narcotic pain medication during the day, and when you feel safe to drive.
 - Practice in a parking lot and start with short distances first.

Antibiotics after Total Joint Surgery

We do not recommend dental work until 90 days after your total joint replacement. Each time you see your dentist, let them know that you have had total knee replacement surgery. It is important that you take antibiotics prior to any dental procedure - even routine cleanings as it may contribute to a higher risk of developing an infection. You will also need antibiotics before any non-sterile invasive exam. This is a precaution to help prevent a late infection in your knee joint, which is devastating to us all. If you are not sure, please call us.

Depending on a patient's allergies to medications, the following four different antibiotic regimens are recommended prior to dental procedures:

- **Amoxicillin 500mg** - Take 4 capsules one hour prior to your procedure, then one capsule every 6 hours for 24 hours
- **Ciprofloxacin 500mg** - Take 2 capsules one hour prior to your procedure, then one capsule every 12 hours for 24
- **Clindamycin 150mg** - Take 2 tablets one hour prior to your procedure, then one tablet every 6 hours for 24 hours
- **Erythromycin 250mg** - Take 2 tablets one hour prior to your procedure, then one tablet every 6 hours for 24 hours

AT CSMO, MOST OF US BELIEVE THAT TAKING ANTIBIOTICS IS A LIFETIME PRECAUTION FOR ALL PATIENTS WITH TOTAL JOINT REPLACEMENTS. IF YOU ARE NOT SURE WHETHER OR NOT TO TAKE ANTIBIOTICS PRIOR TO AN INVASIVE PROCEDURE, PLEASE CALL OUR NURSES AT (423) 624-2696.



Important Contacts

Dr. Ballard's Clinic Nurse – (423)-624-2696

Dr. Ballard's Physician Extender – (423)-624-2696

Case Manager – Gail Peterson (423)-693-0068

- Works with you and your family to develop a discharge plan that meets your needs
- Communicates your plan to the hospital and other centers
- Acts as your advocate throughout your total knee replacement journey
- Reviews any needs you may have at home after surgery, assists in setting up your physical therapy appointments and pre-arranged medical equipment
- Our goal is for you to return to your regular activities as soon as possible

Surgery Scheduler – (423) 697-8821

- Schedules your surgery, rehab education class, and follow up appointments after your surgery
- Assists in coordinating any required medical clearances from your primary care and specialty physicians
- Works with our precertification team to ensure the required information is sent to your insurance company for the surgery to be approved

FMLA/Disability Forms – MedRecs Management

- Completes any paperwork related to FMLA/Disability
- Option 1: Scan this QR Code for form upload and payment
- Option 2: Go to SportMed.com, under the "For Patients" tab you will select "Submit Disability or FMLA"



Billing Department

- You will be contacted before surgery to discuss expected costs and payment expectations.

CSMO Billing Department at 423-629-4395

CSMO Surgery Center Billing Department at 423-269-6244

Parkridge Billing Department at 844-974-3800



CSMO's Physical Therapy Locations

McCallie Office

2415 McCallie Ave, Chattanooga TN 37404

423-624-2696 x 3000

Gunbarrel Office

1949 Gunbarrel Road Suite 280, Chattanooga TN 37421

423-624-2696 x 3001

C4 Sports Therapy – Chattanooga

6401 Lee Highway Suite 109, Chattanooga, TN 37421

423-713-5639

Hixson Office

2051 Hamill Road, Hixson TN 37343

423-624-2696, x 3002

Cleveland Office

2400 North Ocoee Street, Cleveland TN 37311

423-624-2696, x 3003

C4 Sports Therapy – Cleveland

2399 Parker Street NE Suite C3, Cleveland TN 37311

423-697-8844

North Georgia Office

4725 Battlefield Parkway, Ringgold GA 30736

423-624-2696 x 3005

