



Todd Grebner, DO
General Orthopaedics and
Sports Medicine

Total Knee Arthroplasty

Dr. Grebner's Comprehensive Surgical Guide

Your Complete Resource for Preoperative,
Intraoperative, and Postoperative Care



(423) 624-2696 | Sportmed.com

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Introduction

A Message from Dr. Grebner

To my valued patients,

Thank you for giving me the privilege to be your total joint replacement surgeon. My team and I are honored to take care of you. Find peace in knowing we will do everything possible to ensure a great outcome. Please reach out to me or my staff if any questions persist after reviewing this surgical packet.

Blessings,

Todd Grebner, DO

Biography

Dr. Todd Grebner has a broad range of expertise and experience as an orthopaedic surgeon, a physical therapist and as a distinguished member of our nation's military forces. His specialties include:

- General Orthopaedics
- Sports Medicine
- Arthroscopic Surgery
- Total Joint Replacement
- Hand Surgery

A native of Illinois, he grew up in a small farming community before attending the University of Illinois where he graduated with honors. He then moved south where he completed his Masters degree in Physical Therapy at the University of Alabama in Birmingham. After specializing in orthopaedic and sports physical therapy for 4 years, he was accepted into Medical School at Northwestern University in Chicago.

In medical school, Dr. Grebner was honored by his peers to serve as the Class President all four years and as the recipient of the Dean's Commendation Award for exemplary performance as a medical student and for his dedicated service and commitment to the community and the university.

He completed his Internship and his Residency in Orthopaedic Surgery at Ohio University where he was awarded Outstanding Intern. While in Ohio, he had the privilege of receiving additional sports medicine training working with the Cincinnati Reds team physician; he also had foot and ankle surgical training working with the Cincinnati Bengals medical team. He received additional trauma surgery training at Tampa General Hospital in Tampa, Florida.

Most recently, Dr. Grebner moved from Wichita Falls, Texas where he was stationed at Sheppard Air Force Base serving active duty in the United States Air Force. During his military career, he received the Distinguished Graduate/Honor Flight member award in Officer Training School and the Meritorious Service Medal for outstanding achievement and distinguished military service in a level of high responsibility. Dr. Grebner served our country overseas in Operation Enduring Freedom where he was the Chief Orthopedic Surgeon for the 379th Expeditionary Medical Group.

Dr. Grebner is a board certified orthopaedic surgeon and a member of the American Osteopathic Association, the American Osteopathic Board of Orthopedic Surgeons and the American Academy of Orthopaedic Surgeons. He enjoys family time, physical fitness, classic cars, anything football and country music. He and his wife, Marcie have enjoyed settling into the community with their son, Colten.



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.

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 Kim Kirk at (423) 664-5155.



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 cleanings taken care of at least 6-8 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 a rehab education class before surgery, commonly called prehab. This class will provide you with education and prepare you for recovery. The surgery scheduler will arrange this class when you pick your surgery date.
- 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. Grebner does believe it is very helpful with pain and swelling in the postoperative period, but certainly not necessary. 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. The goal is to have your health optimized preoperatively.



- 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.
- **Diabetic Patients**: A1C will need to be less than 8.0 to be considered a surgical candidate.

Pre-Testing

- 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 pre-testing seven days prior to surgery – please contact them:

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

Bradley Medical Center: 423-599-6540

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 **Starr Regional or 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 **Bradley Medical Center**: You will have been instructed to drink 12 ounces of a preoperative carbohydrate drink at 10pm the night before surgery and another 12 ounces 5 hours prior to arrival time. No red or pink drinks.
- 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.
- 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.
- **Bradley/Starr 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 at least the first 24 hours after surgery, longer is better though.

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 4 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

Oxycodone 5mg

This medication is an opioid used to treat pain during the first couple of weeks following surgery. You may take 1 tablet every 4-6 hours as needed for pain. It is strongly recommended that you use this medication at a minimum for the first 3-5 days. You may occasionally take 2 tablets at first if needed.

Aspirin 325 mg, or Eliquis 2.5 mg depending on risk factors

Blood thinner post operatively for DVT prophylaxis taken twice daily in the morning and the evening. You may be on something else as well based on medical history - this will be determined before surgery and taken as prescribed.

Colace 100mg

Laxative for post op constipation due to narcotic use. You may take this as needed.

Zofran / Ondansetron HCl 4mg

Prevention of nausea and vomiting from anesthesia or your pain medication. You may take this as needed.

Tylenol Arthritis

Take 2 tablets every 8 hours for the first two weeks after surgery unless you have liver disease or have been told you cannot take Tylenol.

Narcan

This will be prescribed as requested by law. You may chose not to fill this, but it is used in the event of an accidental overdose.

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 than prescribed and do not take it if you do not need it. When it is time to consider taking another pill and you are not experiencing pain, 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 no results within 2-3 hours, repeat dose. If no additional results in another 2-3 hours, you may repeat dose one more time.
- Fleets enema, if above mixture not successful
- * For Severe Constipation: Call CSMO if no 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.

Post-Operative Blood Clot Prevention

- You will wake up with a thigh high compression hose. You are to wear these for 23 hours a day for the first 4 weeks after surgery on both legs. This helps to limit swelling and the risk for a blood clot. If they cut into your thigh, let us know ASAP! You can roll them down or convert to knee high if necessary.
- Most of the time, you will be prescribed Aspirin 325 mg twice a day for 2 weeks and then once a day for 2 weeks.



- * If you are already taking a blood thinner daily, we will NOT be sending in medication to your pharmacy as you will need to follow the protocol determined by your cardiologist team which is communicated before surgery.**

Physical Therapy

- Typically, you will begin physical therapy within a few days of your surgery.
- Therapy will guide you on the transition from a walker to a cane around the 4-week mark.
- Therapy will be 2 times a week for at least 4-6 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 - you will need a driver initially.
- Walk every 2 hours while awake and continue to increase the distance that you walk as you heal. Continue home exercise programs twice daily for 6 weeks or as instructed.\
- Pump each ankle vigorously up and down for 1 minute every ½ hour while awake for the first two weeks post-operatively.

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 here.



Pedal exerciser 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.

Post-Operative Dressing

Your incision will be covered with a medicated incision dressing for the first week after surgery, usually called Aquacel. This will be overwrapped by gauze and an ACE wrap which you can remove 2 days after surgery.



If you experience severe itching or irritation from the aquacel dressing, please remove it. This dressing is waterproof which allows you to shower after you remove the ACE wrap. It can remain on for the first 5-7 days, and then you should replace it with a new dressing.

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.

A new dry dressing of gauze and medical tape or a large dressing should be used to protect the incision. The incision should then be kept clean, dry and covered until your 2-week post op appointment.

*No ointments or creams should be applied to the incision initially.. No immersing in water (tub, pool, lake, etc) until the incision is completely healed, usually around 8 weeks.

*After total joint surgery, you will 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.

Post-Operative Clinic Appointments

- Most initial 2-week post op visits are scheduled with Luke Mentzer, Dr. Grebner's physician assistant.
- Typically, patients will then follow up around 6 weeks with Luke as well.
- Appointments will be scheduled as recommended or needed thereafter.

Driving Post-Operatively

You may resume driving no earlier than two weeks post-operatively when you are:

- No longer using the 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.
- **Ciprofloxacin 500mg** - Take 2 capsules one hour prior to your procedure.
- **Clindamycin 150mg** - Take 2 tablets one hour prior to your procedure.
- **Erythromycin 250mg** - Take 2 tablets one hour prior to your procedure.

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. Grebner's Medical Assistant – (423) 624-2696

Dr. Grebner's Physician Assistant – (423) 624-2696

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

- Works with you and your family to develop a discharge plan that meets your needs and allows you to return to your regular activities as soon as possible
- Expects that you should be able to go home to recover in your own safe surroundings
- Communicates your plan to the hospital and other centers
- Reviews needs you may have at home after surgery, your physical therapy appointments and medical equipment will be pre-arranged
- Acts as your advocate throughout your total knee replacement journey

Your Surgery Scheduler – (423) 697-8821

- Schedules your surgery, pre-operative appointments, and post-operative appointments
- Assists in coordinating any required pre-operative clearances from your primary care and specialty physicians
- Works with the financial team to ensure that your insurance company's approval / pre-certification is obtained so that you may plan accordingly

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”



Your Billing Department

- Will contact you before surgery to discuss your estimated coinsurance and deductible. They will estimate your out-of-pocket expenses and discuss expected costs and payment expectations.

CSMO Billing Department at 423-629-4395

CSMO Surgery Center Billing Department at 423-269-6244

Bradley Medical Billing Department at 423-380-6090



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

