John J. Mercuri, MD Orthopaedic Surgery – Adult Reconstruction Geisinger Orthopaedics and Sports Medicine – Scranton

Patient Playbook for Joint Replacement

Introduction

Dear Patient,

Welcome to an important journey toward improving your overall health and quality of life! By selecting Geisinger to support you on this path, you have chosen a nationally recognized institution with a longstanding reputation for delivering high-quality care. Our shared objectives are clear: to alleviate your joint pain and facilitate a swift, comfortable, and safe return to a more active lifestyle.

To accomplish this, we have assembled an extensive multidisciplinary team consisting of anesthesiologists, pain management experts, skilled peri-operative and intra-operative orthopedic nurses, physical therapists, physician assistants, nurse practitioners, office support staff, and clinical care coordinators. Every team member is dedicated to ensuring the success of your hip or knee replacement. Through collaborative efforts, we have harnessed our collective expertise to establish a joint replacement program with your safety and satisfaction at the forefront.

The most vital member of our team is you, the patient. Your active participation and commitment to recovery are essential for the success of your surgery and the achievement of the best possible outcome. Therefore, it is crucial that you read this entire booklet, treating it as your comprehensive guide throughout the process. Share this booklet with your closest supporters who will form your essential support system during recovery. We strongly recommend designating one primary person as your "coach" through this process.

As you prepare for surgery, our Nurse Navigators will inquire about your chosen "coach." While you will initially lean on your coach for support, you will swiftly gain independence and mobility. We eagerly anticipate contributing to your recovery and ensuring the optimal outcome.

Above all, remember that you are never alone! Feel free to reach any team member listed below between 8:00 am to 4:00 pm, Monday to Friday, by calling the office at (570) 961-3823. For weekends or evenings, also contact (570) 961-3823, and Dr. Mercuri's answering service will connect you with the team.

Dr. Mercuri's Team:

Dr. Mercuri's team is made up of several essential members, each with a unique role:

Cory Crinella, PA – Physician Assistant Ellen Grogan, RN – Nurse Karen Novak, MA – Medial Assistant Marjorie Ecker, RN – Nurse Navigator Christine Palmer – Surgical Scheduler Stacy Veramendi – Surgical Scheduler Cynthia Reynolds – Financial Counselor

Additionally, your team may involve two other physicians undergoing training in joint replacement surgery under Dr. Mercuri's guidance. One is a surgical fellow, and the other is a surgical resident.

Together, all of these members contribute to the comprehensive care and expertise provided during your joint replacement journey.

Location of the Hospital:

Your surgery will be performed at:

Geisinger Community Medical Center 1800 Mulberry Street Scranton, PA 18510 (570) 703-8000

Changes in Your Medical Status

Ensuring your optimal health before surgery is our top priority. If you experience any new medical or dental issues such as a sore throat, cold, fever, infection, skin eruption, tooth abscess, etc., you must promptly notify Dr. Mercuri's team at (570) 961-3823. For those who spend time with young children, if you come into contact with any viral illness like chickenpox within two weeks of your surgery, please contact the office as well. Your proactive communication helps us maintain a comprehensive understanding of your health and ensures the best possible surgical outcomes.

Scheduled Pre-Operative Appointments

Be sure to record and review all the appointments scheduled for you. Refrain from altering or canceling any appointments without consulting our office first. If you need to change the time for any of your appointments, simply give our office a call, and we will do our best to accommodate your request.

Punctuality is essential for your pre-operative appointments. If you arrive more than thirty minutes late, the appointment will be canceled, and there's a possibility that your surgery may be canceled as well. Here's an overview of the pre-operative appointments:

- <u>Pre-Admission Testing</u> This visit involves drawing blood, additional X-rays, and receiving essential patient instructions.
- <u>Joints Camp</u> In this virtual session, our Nurse Navigator provides critical education about the joint replacement process at Geisinger. It is mandatory that your designated "coach" also participate in the session. If you completed Joints Camp more than three months ago, a repeat session is required.
- <u>History and Physical</u> With rare exceptions, you must return to the office for a history and physical visit with Dr. Mercuri's PA within 30 days of your chosen surgical date.
- Medical Clearance or Subspecialty Clearance If deemed necessary for your medical safety, you may need pre-operative visits with your primary care physician or subspecialty physician (e.g., cardiologist) for approval.
- <u>Dental Clearance</u> If you haven't seen a dentist in the past 12 months, approval from your dentist is required before proceeding with surgery.

While not a formal appointment, Dr. Mercuri highly recommends that all patients speak with Cynthia Reynolds, the financial counselor. She can assess your insurance plan specifics and provide information about any co-pays or out-of-pocket costs. You can reach her at (570) 209-7614, and she also works at the front desk of our orthopedic office at the Marketplace at Steamtown.

Your cooperation and timely attendance at these appointments contribute to a smooth and successful surgical process.

Advanced Technology in Surgery

Dr. Mercuri utilizes advanced technologies such as computer navigation, custom instruments, robotics, or augmented reality for almost all of his surgical procedures. These technologies require you to undergo a CT scan about 4 weeks before your surgery. You must attend your scheduled appointment for this scan. The information derived from the scan is essential for the computer systems to visualize the inside of your joint accurately. Additionally, Dr. Mercuri may need to make small incisions around your hip or knee to allow the attachment of technology instruments to your body. These incisions will be covered with a dressing and can be cared for using the guidelines outlined in the "Wound Care" section of this document.

Website Information

Please register for the following digital resources prior to your surgery:

- MyGeisinger website
- Force Therapeutics website

These two online platforms are accessible 24/7 to assist you throughout this process. You can connect with your surgeon's office, request prescription refills, check test results, watch instructional videos for physical therapy, and more.

To access the Force Therapeutics and MyGeisinger mobile applications, simply download them from the "App Store" on your phone or tablet. Apple iPhone users should note that having a credit card on file with Apple is required to download the applications, even though there is no charge associated with the downloads.

Pain Medications Before Surgery

You can continue taking certain pain medications before your surgery. For instance, you may still use regular anti-inflammatories (NSAIDs) and routine Aspirin leading up to the surgery. If you take opiate medicines on a regular basis, you should also continue that.

As part of your pain control protocol, Dr. Mercuri has prescribed three medications to be taken the day before surgery. Please ensure to follow the prescribed dosage. These medications have already been sent to your local pharmacy in advance. They include:

- Tylenol 1 gram every 8 hours (3 grams total)
- Meloxicam 15 milligrams at dinner
- Aspirin 81 milligrams at dinner

Antibiotic Medications Before Surgery

Before your surgery, you will need to start using Mupriocin medication for your nose. This ointment is essential for eliminating harmful bacteria residing inside your nose, which could lead to an infection in your joint replacement. Make sure to apply the Mupriocin ointment to each nostril three times a day for 5 days leading up to your surgery.

Additionally, it is important to use the provided Scrub-Stat (Chlorhexidine Gluconate) soap before your surgery. Begin using this wash 5 days prior to your surgery and on the morning of the procedure. Allow the wash to remain on your skin for 2 minutes before rinsing. Avoid using lotions or other bathing products after applying this soap or following your shower/bath. This wash is crucial for eliminating harmful bacteria on your skin, reducing the risk of infection in your joint replacement.

Continuing Medications Before Surgery

Certain general medications are important to continue throughout your surgical event. These include medications for cardiac, pulmonary, seizure, anxiety, thyroid, reflux, stomach, and antibiotics. Here are specific examples:

You should continue your beta blockers. Examples of beta blockers include:

- Betapace
- Blocadren
- Bystolic
- Cartrol
- Coreq
- Corgard
- Corzide
- Inderal
- Inderide
- Kerlone
- Levatol

- Lopressor
- Normodyne
- Sectral
- Tenoretic
- Tenormin
- Timolide
- Toprol
- Triandate
- Viskazide
- Zebeta
- Ziac

You should continue your cholesterol medications. Examples of cholesterol medications include:

- Advicor
- Altoprev
- Caduet
- Crestor

- Lescol
- Lexcol
- Lipitor
- Mevacor

Pravachol

Simcor

Vytorin

Zocor

You should continue medications for Attention Deficit Hyperactivity Disorder (ADHD). Examples of ADHD medications include:

Metadate

Methylin

You should continue certain anti-psychotic medications such as:

Isocarboxazid

• Phenelzine

Selegiline

Tranylcypromine

Rasagline

Stopping Medications Before Surgery

(1) Blood Thinners

Upon confirming your surgical date, it is essential to consult with your primary care physician or cardiologist regarding the cessation of any blood thinners you may be taking. They might propose an alternative schedule or consider transitioning you to a different blood thinner. This is particularly important if you are using blood thinners due to a past stroke or cancer.

Dr. Mercuri suggests the following timeline for discontinuing blood thinners before surgery. It is advisable to communicate this timeline with your other healthcare providers. In case of any disagreements, please reach out to Dr. Mercuri's office.

 Warfarin (Coumadin) 5 Days or until INR is < 1.5 Acenocoumarol 72 Hours or until INR is < 1.5 Subcutaneous Heparin 24 Hours Enoxaparin (Lovenox) 40mg 12 Hours Enoxaparin (Lovenox) 1.5mg/kg 24 Hours Dalteparin 24 Hours Fondaparinux 4 Days Clopidogrel (Plavix) 7 Days Prasugrel (Effient) 10 Days Ticagrelor 5 Days Cangrelor 3 Hours Dabigatran (Pradaxa) 6 Days Rivaroxaban (Xarelto) 72 Hours Apixaban (Eliquis) 72 Hours Edoxaban 72 Hours

Abxicimab (Reopro)
Eptifibatide (Integrilin)
Tirofiban (Aggrastat)
Ticlopidine (Ticlid)
5 Days
24 Hours
14 Days

You should also avoid the following medications that can affect a person's normal blood clotting process:

- Davron Compound
- Decagesic
- Fiorinal
- Measurin
- Meclomen

- Pepto Bismol
- Stilbestrol
- Vitamin E
- Zactirin
- Zomax

You should also avoid hormonal medications that can increase your risk of blood clots. Examples of those medications are the following:

- Female hormones
- Premarin
- Hormonal birth control (pills, ring, patch, injection)

(2) Herbal Medications

You should stop all herbal and alternative medications at least 10 days prior to surgery.

(3) Diuretics ("Water Pills")

You should not take any diuretic medication on the morning of the surgery, unless you have been diagnosed with congestive heart failure (CHF). If you have CHF, please take your diuretic as prescribed on the morning of surgery. Examples of diuretics include the following medications:

- Aldactazide
- Aldactone
- Amiloride
- Bumex
- Demadex
- Dyazide
- Edecrin
- Enduron

- Hydroclorothiazide
- Lasix
- Lozol, Lozide
- Maxzide
- Moduretic
- Thalitone
- Triamterene
- Zaroxolyn

(4) Blood Pressure Medications

You should not take any blood pressure medications on the morning of surgery. Examples of blood pressure medications are the following:

- Lotensin
- Vasotec
- Monopril
- Prinivil, Zestril
- Univasc
- Aceon
- Accupril
- Altace
- Mavik
- Vaseretic
- Prinizide, Zesoretic
- Uniretic
- Accuretic
- Tarka
- Edarbi
- Atacand

- Teveten
- Avapro
- Cozaar
- Benicar
- Micardis
- Diovan
- Avalide
- Hyzaar
- Azor
- Tribenzor
- Twynsta
- Exforge
- Valturna
- Tekturna
- Valturna

(5) Diabetes Medications

You should not any diabetes medications the morning of surgery. Examples include:

- Amaryl
- Avandaryk
- Avandia
- Diabeta
- Diabinase
- Duetact
- Glucamide
- Glucotrol
- Glycron
- Glynase
- Glyset

- Junavia
- Micronase
- Onglyza
- Orinase
- Oramide
- Prandin
- PrecoseRonase
- Starlix
- Tolinase

There are also some diabetic medications that you should not take the night before surgery:

- Actoplus
- Avandamet
- *lucophage
- Glucovance

- Junamet
- *Metaglip
- Prandimet*

There are also some diabetic medications that you must stop several days before surgery:

- Canagliflozin = 3 days
- Dapagliflozin = 3 days
- Empagliflozin = 3 days
- Ertugliflozin = 4 days

(6) Insulin

You must adhere to the specific instructions provided by your primary care physician or endocrinologist regarding the use of insulin before your surgery.

(7) Diabetes and Weight Loss Medications:

Certain medications designed for weight loss, which may also be used to manage diabetes, can potentially complicate your anesthesia on the day of surgery. Consequently, it is essential to discontinue these medications as outlined below. <u>If you do not follow these instructions</u>, your surgery will be canceled!

- Medications with Weekly Dosing must stop 3 days before surgery. Also, you
 must have a diet of only Clear Liquids for the entire 24 hours proceeding
 surgery.
 - Dulaglutide (Trulicity)
 - Exenatide (Byetta, Bydureon)
 - Semaglutide (Ozempic, Wegovy, Rybelsus, etc.)
 - Tirzepatide (Mounjaro)
- Medications with **Daily Dosing** should not be taken on the morning of surgery. Also, you must have a diet of only **Clear Liquids** for the entire 24 hours proceeding surgery.
 - Exenatide (Byetta, Bydureon)
 - Liraglutide (Saxenda, Victoza)
 - Lixisenatide (Adlyxin)
 - Semaglutide (Ozempic, Wegovy, Rybelsus, etc.)

(8) Other Medications:

There are some other medications that you might need to stop before surgery. Examples include:

- Hormones
- Vitamins

- Prostate medications
- Diet pills

- Iron Supplements. If you are not currently using oral iron supplements, do not
 to initiate them before your surgery. This advice may vary from
 recommendations provided by other healthcare providers. However, if you
 were previously on oral iron supplements before scheduling a surgery with Dr.
 Mercuri, you can maintain the same doses.
- Opiate Pain Medications. For those already using opiate pain medication, it is important to gradually reduce your doses by half in the weeks preceding your surgery. Failure to taper down your dose may result in more challenging postoperative pain management.

Immune System Medications

Various medications affecting your immune system, commonly known as "biologic" medications, are used to treat conditions like rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, Crohn's disease, ulcerative colitis, and others. It is necessary to discontinue these medications before your total joint replacement. Consult the table below for guidance, and be sure to discuss your decision to stop and resume the medication with your rheumatologist or prescribing physician.

BIOLOGIC AGENTS: STOP these medications prior to surgery and schedule surgery at the end of the dosing cycle. RESUME medications at minimum 14 days after surgery in the absence of wound healing problems, surgical site infection, or systemic infection.	Dosing Interval	Schedule Surgery (relative to last biologic agent dose administered) during
Adalimumab (Humira)	Weekly or every 2 weeks	Week 2 or 3
Etanercept (Enbrel)	Weekly or twice weekly	Week 2
Golimumab (Simponi)	Every 4 weeks (SQ) or every 8 weeks (IV)	Week 5 Week 9
Infliximab (Remicade)	Every 4, 6, or 8 weeks	Week 5, 7, or 9
Abatacept (Orencia)	Monthly (IV) or weekly (SQ)	Week 5 Week 2
Certolizumab (Cimzia)	Every 2 or 4 weeks	Week 3 or 5
Rituximab (Rituxan)	2 doses 2 weeks apart every 4-6 months	Month 7
Tocilizumab (Actemra)	Every week (SQ) or every 4 weeks (IV)	Week 2 Week 5
Anakinra (Kineret)	Daily	Day 2
Secukinumab (Cosentyx)	Every 4 weeks	Week 5
Ustekinumab (Stelara)	Every 12 weeks	Week 13
Belimumab (Benlysta)	Every 4 weeks	Week 5
Tofacitinib (Xeljanz): STOP this medication 7 days prior to surgery.	Daily or twice daily	7 days after last dose

Goodman et al. 2017 ACR/AAHKS Guidelines, Arthritis Care and Research

Hydration Before Surgery

Ensure proper hydration in the days before your surgery. Consider using sports drinks such as Gatorade, Powerade, etc.

You might receive a prescription for MEND, Impact, or Boost energy drinks to be consumed for 5 days before your surgery and in the days following the procedure. These energy drinks aim to facilitate a swift recovery from the surgery.

If you are on medications for weight loss, refer to the previous section for guidance on safe eating and drinking before surgery.

The Final Days Before Surgery

You will receive a phone call one day before your surgery (or on Friday for a Monday surgery) specifying your arrival time at the hospital. If you have not received a call by 7:00 pm, please contact our office at (570) 961-3823.

If you are on medications for weight loss, refer to the previous section for guidance on safe eating and drinking before surgery.

Very Important: There are restrictions on eating and drinking before surgery:

- Clear Liquids = Stop 2 hours before surgery
- Breast Milk = Stop 4 hours before surgery
- Infant Formula = Stop 6 hours before surgery
- Non-Human Milk = Stop 6 hours before surgery, including any milk or dairy products added to coffee or tea.
- Light Meal (e.g. toast and clear liquids) = Stop 6 hours before surgery
- Fried foods, fatty foods, meats = Stop 8 hours before surgery

Similarly, refrain from using any tobacco product after midnight on the night before your surgery.

On the day of surgery, there is no need to bring your own medications to the hospital. The hospital has a record of your medications provided before surgery.

Donating blood for surgery is unnecessary. Due to improved blood loss control, the likelihood of needing blood products during or after surgery is minimal. Storing your blood in a pre-surgery blood bank is not required.

Information About Anesthesia

Thank you for choosing Geisinger. The Department of Anesthesiology will be with you throughout your surgery or procedure. We understand you may have questions, so here are answers to common inquiries.

What is an anesthesiologist?

 An anesthesiologist is a doctor specializing in caring for patients during surgery or procedures.

What will the anesthesiologist do?

- Meet with you before surgery to plan anesthesia. We will review medical history, overall health, and pre-surgical tests.
- Discuss options for managing anesthesia and pain during and after the procedure.
- Administer anesthesia and pain medication as needed during the surgery, staying with you throughout the procedure.
- Monitor vital signs (breathing, blood pressure, heart rate) during the surgery.
- Assist in managing post-surgery pain if necessary.

Who will be my anesthesiologist?

 You may meet with more than one anesthesiologist. All are part of Geisinger's medical staff. Your primary anesthesiologist will meet you in the pre-operative holding area on the day of surgery.

What kind of anesthesia will I receive?

 Joint replacement procedures typically use spinal anesthesia. This involves a shot in your back to numb your legs temporarily, allowing Dr. Mercuri to perform the surgery. Spinal anesthesia has fewer risks, less bleeding, and superior pain control compared to general anesthesia.

Going Home The Same Day

Thanks to advancements in minimally invasive surgery, muscle-friendly approaches, progressive pain management, and robust physical therapy, we have enhanced your recovery, allowing it to shift from the hospital to your home. Research indicates that patients recovering at home report lower infection rates, increased satisfaction, and fewer complications. Recovering in a familiar environment promotes a quicker and safer recovery.

Almost all patients qualify for this rapid discharge approach. You should anticipate leaving the hospital on the surgery day, unless Dr. Mercuri advises otherwise in special situations.

Dr. Mercuri's team will furnish vital details for post-hospital recovery and a safe home discharge. Your Nurse Navigator introduction occurs at the virtual pre-operative Joints Class.

After surgery, Dr. Mercuri might recommend outpatient physical therapy. While Geisinger is the preferred location, you are free to choose any provider. Share your preference with Dr. Mercuri or his team for suitable arrangements.

A few patients may need home care services, approved by Dr. Mercuri before surgery. Most will require only outpatient physical therapy.

Remember to arrange transportation to and from the hospital!

Your discharge medications can now be delivered bedside, removing the need to pick them up at an outpatient pharmacy. Multiple pain medications, with minimal to no opiates, will be provided.

Post-surgery, if needed, physical therapists will help assemble necessary equipment for your home recovery.

Follow Up Appointments

Your initial post-surgery visit with Dr. Mercuri is scheduled around 2 weeks after your operation. Dr. Mercuri's surgical scheduler will arrange this appointment for you before your surgery. If you are unsure of the date and time, feel free to call the office for confirmation. This follow-up will be held at Dr. Mercuri's office. Subsequent appointments are typically scheduled at 6 weeks, 3 months, 6 months, and 1 year post-surgery.

Physical Therapy

All patients under Dr. Mercuri's care are encouraged to register for the Force Therapeutics application. This app serves as your guide through post-operative recovery and any required physical therapy exercises. It facilitates direct communication with Dr. Mercuri's team for any queries you may have.

For those undergoing hip replacement, formal physical therapy is not recommended by Dr. Mercuri. Recent studies have shown that it does not enhance recovery. Instead, patients should gradually resume daily activities at their own pace, following the recovery instructions provided by the Force Therapeutics application.

In the case of knee replacement, Dr. Mercuri advises starting outpatient physical therapy immediately after surgery. This helps in improving strength, reducing leg swelling, and regaining knee motion. The attached physical therapy instructions in this packet should be shared with the therapist.

While Geisinger therapy locations are recommended for optimal coordination with Dr. Mercuri, we understand that distance might be a concern. In such instances, you are free to choose any reputable therapy practice near your home. Please communicate your preference to Dr. Mercuri or his team for appropriate arrangements.

Patients should also recognize that a significant part of the benefits from physical therapy comes from a consistent home exercise program, akin to homework. Just as the therapist guides you, your commitment to the home exercise program is crucial for successful post-operative recovery.

Wound Care

Dr. Mercuri typically uses absorbable sutures and skin glue to close surgical incisions, eliminating the need for suture or staple removal. Occasionally, nylon sutures may be used, which will be taken out by Dr. Mercuri's team at the first follow-up appointment, approximately 3 weeks post-surgery. Do not allow anyone else to remove your sutures.

Your dressing will be removed by Dr. Mercuri during the post-operative visit, revealing surgical glue on your skin. Avoid picking at the glue or incision. If the wound is draining, use a dry gauze pad taped onto the wound until it stops. If drainage persists for more than 1 week, inform the office.

For dry wounds without drainage, no dressing is necessary, and you can expose the wound to air. Use a light gauze to protect against clothing abrasion. Avoid applying creams, salves, lotions, or ointments to the surgical site.

Regularly inspect the wound for signs of infection such as redness, swelling, tenderness, warmth, or abnormal drainage. Mild redness, bruising, or swelling around the surgical site is normal due to the inflammatory process.

Activity After Surgery

Following surgery, patients are advised to apply immediate, full weight bearing to the leg. Within a week, many patients may find little or no need for assistive devices like canes or walkers indoors. Most can walk unassisted outdoors within two weeks, though a slight limp may persist for up to three months until muscle strength is fully regained.

Activities that bend the knee more than 90 degrees are permitted after 14 days post-surgery if the wound remains dry after dressing removal. However, high-impact activities such as running, jumping, aerobics, skiing, or tennis are not permitted for three months to allow proper bone ingrowth into the prosthesis. Swimming should be avoided in the first six weeks to ensure adequate incision healing.

Unless specifically directed otherwise by Dr. Mercuri, patients can bear as much weight as tolerated on the operated leg. The walking aid provided at discharge can be used, and patients may switch to a cane when comfortable. If one feels safe ambulating without any assistive device, they are free to do so, recognizing that each patient has their own pace of recovery.

Please read the recommended number of steps per day that is listed further down in this playbook. Walking too many steps after surgery can worsen your swelling.

There are generally no movement precautions for the operated leg, within reason, unless instructed otherwise by Dr. Mercuri. While no guarantees exist against subluxation or rare dislocation, the joint's stability was assessed during surgery, indicating no need for traditional precautions.

When changing positions, it is advised to move slowly and deliberately. From a reclining position, sitting at the edge of the bed for a few minutes before standing helps acclimate. If feeling dizzy or lightheaded, taking a deep breath and waiting for it to subside before standing is recommended. Using an assistive device during initial walks and having a "coach" or partner is important. As patients gradually move, sensations of dizziness and lightheadedness will diminish. Continue moving slowly during position changes as long as these sensations persist.

Driving is not permitted until the first post-operative visit with Dr. Mercuri, approximately two weeks after surgery.

Similarly, sexual activity can resume around two weeks after the surgical date unless otherwise advised by Dr. Mercuri

Temperature and Fevers

It is common to experience fevers after undergoing a major surgery. There is no need for routine temperature monitoring at home. If you feel unwell and suspect a fever, you may check your temperature. Contact the office only if your temperature exceeds 101.5 Fahrenheit; otherwise, there is no cause for concern if it is below this threshold.

Leg Swelling and Bruising

Many patients experience significant swelling and bruising (black and blue marks) in the thigh and lower leg. This swelling may extend below the knee and sometimes to the foot and ankle. Typically, it progresses over the first week following surgery and begins to diminish over the second week, largely resolving by 4-6 weeks. Assuming compliance with the prescribed anticoagulation regimen throughout the post-operative period, the risk of a blood clot is low, and this swelling is an expected part of recovery.

Warning: If the lower leg remains persistently very swollen, painful, and hard to touch, or if it does not soften with rest and elevation, there may be a risk of a deep vein thrombosis or blood clot. Given the potential progression leading to a pulmonary embolus, it is of utmost importance to notify a physician promptly for the necessary diagnostic tests.

Showering

You are allowed to shower after discharge with your dressing in place. While in the shower, you can let water run over the dressing, but try to keep it as dry as possible. There is no need to cover the dressing during showering.

Once your dressing is removed, it is acceptable to let the incision get wet. Allow soapy water to run over the incision, avoiding scrubbing. After showering, pat the incision dry with a towel.

If you observe wound drainage, opt for sponge bathing instead of showering until the drainage resolves. Continue with sponge baths until the wound has had no further drainage for 3 days.

Submersion in water—including baths, jacuzzis, or swimming—is not permitted during the first 6 weeks after surgery.

Pain Medications

Before your surgery, you will receive prescriptions for your medications. Follow the provided instructions from your nurse at the hospital regarding these medications. You will be taking multiple pain medications simultaneously, employing various approaches and pathways to treat your pain—referred to as "multi-modal" pain management.

Dr. Mercuri's multi-modal pain treatment involves the following oral medications:

- Aspirin (serving as both pain control and blood thinner)
 81 mg twice a day for 30 days
- Tylenol
 - 1 gram every 8 hours for 10 days
- Meloxicam
 - 15 mg once a day for 30 days
- Tramadol
 - 50 mg every 8 hours as needed
- Lyrica
 - 75 mg twice a day for 10 days
- Traneamic Acid (do not use if you have a history of blood clots)
 1950 mg daily for 3 days
- Dexamethasone (do not use if you have a history of diabetes)
 4 mg twice a day for 4 days

It is important to note that most narcotic or opiate pain medications may have side effects, including nausea, vomiting, sedation, dizziness, or constipation. Consequently, Dr. Mercuri typically avoids prescribing these medications after surgery. If you experience and medication side effects, contact our office.

There are rare cases where Dr. Mercuri may prescribe other pain medications, such as a muscle relaxer (Flexeril), skin patches (lidocaine or diclofenac), or topical creams (Voltaren), based on individual needs.

You can discontinue your pain medication when you feel comfortable. Gradually reduce doses or increase the time between doses. For example, if taking 1 tablet every 4 hours, extend that time to every 6 hours, then every 8 hours, and so on.

Please note that the office cannot renew pain medication over the weekend or after business hours. Prescriptions are electronically sent to your pharmacy, not "called in" or faxed. Refill requests can be made by calling the office or sending an electronic message through MyGeisinger or Force between 8:00 am and 4:00 pm, Monday to Friday, at (570) 961-3823. Allow 24 hours for processing, and ensure you have enough medication before requesting a refill. Calling on a Friday afternoon may not result in a refill until Monday morning.

Other Post-Operative Medications

At times, you might experience nausea after surgery. This is often due to the pain medications that you are taking. Dr. Mercuri has given you Zofran to alleviate nausea. Only use it if you feel nauseous.

If you encounter constipation post-surgery, consider combining a stool softener with a laxative. Dr. Mercuri has specifically recommended Miralax powder for constipation relief. Additionally, maintaining a high-fiber diet and staying well-hydrated is recommended.

To safeguard your stomach while on anti-inflammatory medications, Dr. Mercuri will provide Pepcid. You only need to take Pepcid during the period you are on anti-inflammatory medications, which is typically around one month.

As part of your post-surgery care, Dr. Mercuri may prescribe oral antibiotics for a 7-day course. Recent research suggests that oral antibiotics can lower the risk of developing an infection in the new joint replacement. Commonly prescribed antibiotics include Cefadroxil or Bactrim.

Opiate Medications

It is important to be aware of the opioid addiction crisis in the United States, prompting government-mandated efforts to restrict opioid prescriptions. Following joint replacement with Dr. Mercuri's multi-modal pain management approach, the necessity for potent opioid medications is minimal. To obtain narcotic pain prescriptions, direct communication with Dr. Mercuri or his team is required.

Our commitment is to assist patients in effectively managing pain while adhering to legal guidelines. We strive to accommodate your needs within reasonable and lawful boundaries.

Preventing Blood Clots

A significant but preventable complication of orthopaedic surgery is a blood clot (or a DVT). To mitigate this risk, you will take medication for 4 weeks after surgery. Your prescription includes <u>one</u> of the following options:

 Aspirin 81 mg: Take orally twice a day with food. Note that it may cause upset stomach; if so, an over-the-counter proton pump inhibitor like Prilosec, Prevacid, or Nexium can help alleviate these side effects.

- <u>Eliquis 2.5 mg</u>: Take orally twice a day for 4 weeks. Be cautious, as this
 medication is challenging to reverse, and individuals with a history of bleeding
 or ulcers should consider alternatives.
- <u>Lovenox (a self-injectable blood thinner)</u>: Administer 1 injection per day of 40 mg. Hospital and home protocols differ; you received 2 injections per day of 30mg in the hospital.

Less frequently, medications like Coumadin, Xarelto, or Plavix may be prescribed. If you were on these medications before surgery, they may resume postoperatively; confirm with Dr. Mercuri or his team.

Post Operative Medications

Resume all of your original prescribed medications after discharge unless otherwise directed. Individual discussions are necessary with Dr. Mercuri about starting hormonal therapy.

Hold off on restarting herbal supplements or vitamins until 2 weeks post-surgery.

While not mandatory, it is advisable for all patients to consult with their internist or primary care physician within the initial 2 weeks post-surgery for a medication review and overall health assessment.

Diet

Post-surgery, restart to your pre-operative diet and incorporate a daily prenatal vitamin. Avoid consuming alcoholic beverages in the initial 2 weeks of your recovery.

Urgent Care

Joint replacement is a very safe procedure, and the likelihood of experiencing urgent medical issues after surgery is minimal. While no medical outcome is guaranteed, in case of any concerns, please visit the Geisinger Orthopaedic Urgent Care at the following address:

300 Lackawanna Avenue, Suite 250 Scranton, PA 18503 (570) 961-3823 If you are encountering chest pain, shortness of breath, difficulty breathing, persistent diarrhea, or unrelenting nausea/vomiting, please visit the Geisinger Care Works Urgent Care Center. The Care Works facility is located at the following address:

3 West Olive Street Scranton, PA 18508 (570) 207-4054

Please avoid seeking care at the Emergency Room in a Geisinger hospital or any other local hospital. Emergency rooms are typically unnecessary after joint replacement surgery, and post-COVID, they have been quite busy with extended waiting times. If you believe you have an issue requiring the emergency room, please contact our office in advance for assessment (570-961-3823). Our specialized orthopaedic team may be able to assist you at our office or one of the mentioned urgent care locations, saving you unnecessary time in the emergency room.

For immediate assistance with any feelings of suicide or harm, please call the crisis hotline at 1-800-273-TALK (8255).

Return to Work

The timing for returning to work varies based on job demands, transportation, and other factors. Adequate rest is crucial for your physical and mental recovery. In the initial weeks, you might experience fatigue throughout the day, but your endurance and energy will gradually improve. Typically, individuals resume work after the initial post-operative visit with Dr. Mercuri, which occurs approximately two weeks after surgery.

Physical Therapy Instructions for Your Therapist

Please note that this patient has undergone a knee replacement surgery. Please adhere to these guidelines while providing care. If you have any questions or concerns about the patient's treatment, please contact our office at (570) 961-3823.

Supervised physiotherapy is recommended 2-3 times per week for 8-12 weeks. Any changes to the physical therapy requirements will be determined during the initial visit with Dr. Mercuri.

Unless stated otherwise in the attached prescription, the patient may transition from a walker to a cane, and then to no assistive device, as tolerated.

To reduce swelling after knee replacement, please adhere to the recommended step counts outlined below:

Week 1: Less than 750 steps per day
Week 2: Less than 1200 steps per day
Week 3: Less than 2000 steps per day
Week 4: Less than 2750 steps per day
Week 5: Less than 3500 steps per day
Week 6: Less than 4500 steps per day

Week 7 and beyond: Increase 1000 more steps per day

For knee replacements, the aim is to achieve 0-90 degrees of motion by day 14 post-operatively. Range of motion can then progress beyond that based on the patient's tolerance, taking pre-operative ROM into consideration. Dr. Mercuri's patients are typically advised to focus more on terminal extension activities than flexion activities.

No high performing activities, high impact activities, or extreme ROM for the first 12 weeks (Jumping, tennis, crouches, squats). Failure to follow these restrictions should be reported to the physician.

Under no circumstances should any type of tissue massage be performed near the operative area unless there are specific instructions from Dr. Mercuri. The same applies to lymphedema therapy.

Research Studies

Before your upcoming surgery, a Geisinger research department representative might contact you to discuss potential participation in joint replacement research studies. Dr. Mercuri is dedicated to enhancing orthopedic surgery practices through medical research. A member of the research department will provide comprehensive details about the study, and your participation is entirely voluntary. If you prefer not to participate with any research studies, kindly inform a staff member. Your willingness to contribute in advancing medical practices is appreciated.

Antibiotic Prophylaxis for Invasive Procedures

As per the American Academy of Orthopaedic Surgeons, surgeons might prescribe antibiotics before specific dental, orthopedic, vascular, gastrointestinal, head and neck, obstetric and gynecologic, and genitourinary procedures subsequent to joint arthroplasty. However, this recommendation is no longer mandatory or lifelong.

During these procedures, bacteria could enter the bloodstream and potentially settle in your artificial joint, increasing the risk of infection. While antibiotics may help prevent this, they also pose risks and might not be necessary for everyone or every case. Your orthopedic surgeon, in collaboration with your physician or dentist, will determine the appropriate treatment plan for you. Personal preferences will also be considered. If antibiotics are chosen, specific ones for various procedures include:

Dental Cephalexin, Cephradine, or Amoxilcillin 2 grams 60 minutes prior to procedure

Vascular Cefazolin, Cefuroxime, or Vancomycin 60 minutes prior to procedure

GI Cefazolin 60 minutes prior to procedure

Head/Neck Cefazolin or Neomycin 60 minutes prior to procedure

Ob/GYN Cefoxitin, Cefazolin, or Ampicillin/Sulbactam 60 minutes prior to procedure

Urology Ciprofloxacin 500 mg 60 minutes prior to procedure

Some patients are allergic to penicillin-type medications. In that case, one of the following medications might be used...

- Clindamycin 600 mg (2 tabs of 300 mg) orally one hour before the procedure
- Biaxin or Zithromax 500 mg orally one hour before the procedure

These guidelines are crafted to assist physicians and dentists in deciding on preventive antibiotics for patients with artificial joints. They do not serve as a definitive standard of care or replace the clinical judgment of the physician or dentist. It is imperative for healthcare professionals to apply their clinical judgment in determining the appropriateness of preventive antibiotics. Additionally, the use of antibiotics comes with inherent risks, some of which may not be fully understood at present.

As of now, Dr. Mercuri recommends full doses of antibiotic prophylaxis within the initial 2 years following joint arthroplasty. This recommendation is grounded in literature concerning blood flow to the artificial joint and aligns with the practices of fellow professionals at Geisinger. Beyond the initial 2 years, further prophylaxis is deemed unnecessary. If you have any questions or if your physician or dentist wishes to engage in a direct discussion, please do not hesitate to contact my office.

Last Update: 3/7/2024

Patient Disclosure: Consulting Agreements with Orthopaedic Companies

Dear Patient:

As you get ready for your upcoming surgery, we would like to share information about Dr. John J. Mercuri's collaborations with orthopaedic companies.

Dr. Mercuri actively contributes to medical research, develops new products, and enhances surgical tools and techniques. In doing so, he collaborates with multinational orthopaedic companies and fellow surgeons who practice around the world. He also teaches instructional lectures. For his expertise as a fellowship-trained arthroplasty specialist, Dr. Mercuri receives consulting fees and teaching payments.

Dr. Mercuri frequently utilizes products from five major orthopaedic companies: Medacta, Stryker, Zimmer Biomet, DePuy Synthes, and Smith & Nephew. Currently, Dr. Mercuri serves as a clinical and educational consultant for Medacta. We want to reassure you that the choice of products for your care is based solely on what is best for you, not the company manufacturing the product. Dr. Mercuri's consulting agreements are explicitly designed to remain independent of his product selection, and they are regularly reviewed by Geisinger.

Dr. Mercuri upholds high ethical standards. He is certified by the American Board of Orthopaedic Surgery, and he is a fellow of both the American Academy of Orthopaedic Surgeons (AAOS) and the American Association of Hip and Knee Surgeons. The AAOS, in particular, mandates its fellows to disclose all consulting agreements, ensuring transparency in their interactions with patients, the public, and colleagues.

The AAOS Standards of Professionalism guide orthopaedic surgeons in their collaborations and compensation from orthopaedic companies. You can find more details on these standards on the AAOS website:

http://www.aaos.org/member/profcomp/SOPConflictsIndustry.pdf

We prioritize your well-being at Geisinger, and it is important to us that you are informed about Dr. Mercuri's consulting agreements. If you have any questions, we are here to help.

Sincerely,

Michael Suk, MD, JD, MPH, MBA, FACS

Chief Physician Officer, Geisinger System Services

Chairman, Musculoskeletal Institute and Department of Orthopaedic Surgery

Your Recommended Surgery:

Total Hip Replacement Revision Hip Replacement

Total Knee Replacement Revision Knee Replacement

Partial Knee Replacement

Dr. Mercuri's Typical Surgical Days:

Tuesday and Friday starting at 7:00 AM

Dr. Mercuri's Typical Office Days:

Monday, Wednesday and Thursday from 8:00 AM to 4:00 PM

Operating Room Schedulers:

Christine Palmer (Cvpalmer1@geisinger.edu)

Geisinger Orthopaedics and Sports Medicine 300 Lackawanna Avenue, Suite 250 Scranton, PA 18503

Phone: 570-904-2975 Fax: 570-207-5988

Tramai Osborne (tsosborne@geisinger.edu)

Geisinger Orthopaedics and Sports Medicine 300 Lackawanna Avenue, Suite 250 Scranton, PA 18503

Phone: 570-703-2004 Fax: 570-207-5988

Patient Financial Counselor:

Cynthia Reynolds (<u>cmreynolds@geisinger.edu</u>)

Geisinger Orthopaedics and Sports Medicine 300 Lackawanna Avenue, Suite 250 Scranton, PA 18503

Phone: 570-209-7614 Fax: 570-558-1498