



KNEE REPLACEMENT

PATIENT SURGERY PACKET

For patients of Jonathan Christy, MD
Orthopedic & Joint Replacement Surgery



optim
orthopedics

210 East DeRenne Avenue • Savannah, GA 31405
p. 912.644.5318 • f. 912.721.2263 • OptimOrthopedics.com

00488-123019-Knee

CONTENTS

Medications to Stop Before Surgery	1
Anesthesia	2
Medications for Use Before Surgery	3
How to Prepare for Your Surgery	4
Pre-Operative Exercise Program	5
Mini Wall Squat.....	6
Quad Set	7
Supine Knee Extension	8
Seated Knee Extension	9
Straight Leg Raise	10
What to Do the Day of Your Surgery	11
Physical Therapy	12-14
Range of Motion Chart	15
What to Expect After Surgery	16
Ways to Decrease Bruising and Swelling	17
Post-Operative Medications	18
Pain Scale for Pain Medications	19
FAQ.....	20-22

****Please read this information in its entirety once it has been provided to you.
Please retain it to use as a reference before & after surgery****

MEDICATIONS TO STOP BEFORE SURGERY

10 DAYS BEFORE SURGERY YOU NEED TO STOP:

- Aspirin

7 DAYS BEFORE SURGERY YOU NEED TO STOP:

- Plavix, Xarelto, Eliquis, Pradaxa, Brilinta
- Any anti-inflammatory medications (i.e. Ibuprofen, Aleve, meloxicam, diclofenac, Celebrex)
- Any herbal supplements
- Any Vitamins (including the vitamins Dr. Christy started you on prior to surgery)

5 DAYS BEFORE SURGERY YOU NEED TO STOP:

- Coumadin

****If you are currently taking any immunosuppressants (i.e. TNF inhibitors, chronic steroids, chemo) – please notify Dr. Christy's office ASAP. Failure to do so could result in cancellation of your surgery****

You can continue to take the following medications:

- Tylenol
- Ultracet
- Glucosamine Chondroitin
- Ultram (Tramadol)

Take a moment to speak with your medical doctor about your prescription medications (blood pressure, heart, cholesterol) and what effect they may have on your surgery.

If you are having a second surgery, please refer to this list to stop appropriate medications pre-operatively.

ANESTHESIA

General Anesthesia with Block

Advantages:

Patient is "asleep" and thus is unaware of surroundings in operating room.

Disadvantages:

Patient will typically have slightly more pain post-operatively, typically more nausea, sore throat from intubation, delays rehab as anesthesia wears off.

After reading through the packet please write down any questions you have regarding the anesthesia options and we will discuss in the office right before your surgery.

MEDICATIONS FOR USE BEFORE SURGERY

Prior to surgery:

- Start the vitamin and supplement regimen that has been provided by Dr. Christy. There will be a prescription for the items in the folder provided with this packet. Take this prescription to your pharmacy. If there is not, please contact our office so they can be sent to your pharmacy. The vitamins are as follows:
 - 1. Vitamin C 500 mg (aids in healing and pain relief)**
 - 1 tablet by mouth once daily starting one month prior to surgery
 - 2. Vitron-C, 65mg iron- 125 mg Vitamin C (or similar product)**
 - 1 tablet by mouth THREE times a day starting one month prior to surgery (it is ok to gradually increase to THREE times a day)
 - 3. Vitamin B12 1000 mcg**
 - 1 tablet by mouth once daily starting one month prior to surgery
 - 4. Vitamin D2 / ergocalciferol 50,000 IU capsule (prescription strength, has to be filled by pharmacy)**
 - 1 capsule by mouth three days a week (M, W, F) one month prior to surgery, continue for 4 weeks after surgery

2 DAYS BEFORE SURGERY

- Start Senokot. If you experience loose or watery stools, **STOP** using Senokot and resume it the night of surgery.

THE NIGHT BEFORE SURGERY:

- Do not eat or drink anything after midnight.
- Get a good night's sleep.

THE MORNING OF SURGERY:

- Plan to arrive at the hospital 2 1/2 hours before your scheduled surgery time.
- Bring a photo ID and your insurance card with you.
- Leave all your valuables at home.

HOW TO PREPARE FOR YOUR SURGERY

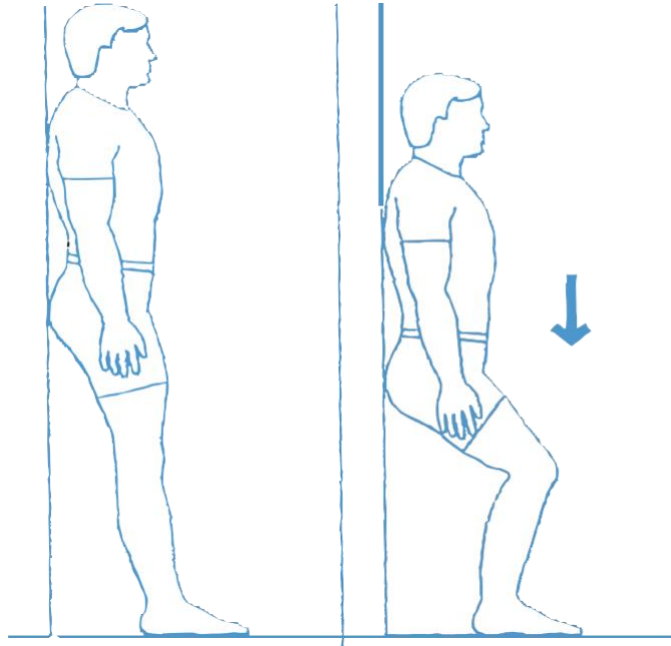
- **CANCEL ANY DENTAL APPOINTMENTS THAT FALL BETWEEN 3 WEEKS PRIOR TO SURGERY AND 3 MONTHS AFTER SURGERY.**
- **AVOID ANY INJECTIONS INTO YOUR SURGICAL JOINT FOR 3 MONTHS PRIOR TO YOUR SURGERY.**
- **Inpatient rehab, nursing care facilities, and home health physical therapy are NOT standard protocol with a total joint replacement. Please do not inquire about this prior to your surgery. If something arises during your surgery stay that requires this type of aftercare, it will be set up by the facility. THIS CANNOT BE DONE PRIOR TO SURGERY**
- Arrange for a family member or friend to accompany you to the hospital the day of your surgery.
- You will be discharged from the hospital as discussed previously, so plan ahead for transportation home the day of your planned discharge. A one-night stay is standard for most total joint replacements.
- Plan for someone to stay with you the first couple of nights you return home after your surgery.
- Adjust your work/social schedule accordingly during your anticipated recovery time.
- Remove small throw rugs or other small obstacles that may be in your path.
- If you have pets, you may want to arrange for someone to assist in caring for them for a few days after you return home.
- While taking narcotic pain medications you will NOT be permitted to drive. Norco (Hydrocodone) is a narcotic. You may need to arrange for transportation to your initial follow up visit.
- You will need to follow up with Dr. Christy approximately 2 weeks after surgery. This appointment will be made for you. The details will be provided to you during discharge from surgery.
- In order to stay well-hydrated after surgery, pick up some alternatives to water. For example: Gatorade, juice or vitamin water.

****Your surgery time is determined by the facility and not set until the day before your scheduled procedure. You will receive a phone call from the facility, later in the afternoon, the day prior to your surgery to let you know what time to arrive. Please refrain from calling Dr. Christy's office for your surgery time. ****

PRE-OPERATIVE EXERCISE PROGRAM

- If you are currently performing an exercise program, continue doing so.
- If you are not currently performing an exercise program, you may incorporate exercises as directed on the handouts in the binder.
- After surgery, your physical therapist will give you an exercise program and progress you appropriately.

MINI WALL SQUAT



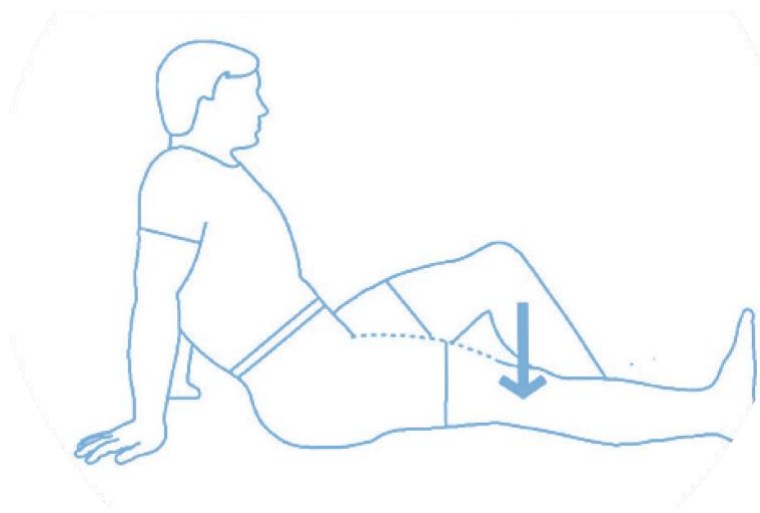
- Lean on wall, feet approximately 12 inches from wall, shoulder distance apart.
- Bend knees to 45 degrees
- Hold 5 seconds
- Return to starting position

SPECIAL INSTRUCTIONS:

Perform 3 sets of 10 repetitions, once a day. Rest 1 minute between sets.

Perform 1 repetition every 4 seconds.

QUAD SET



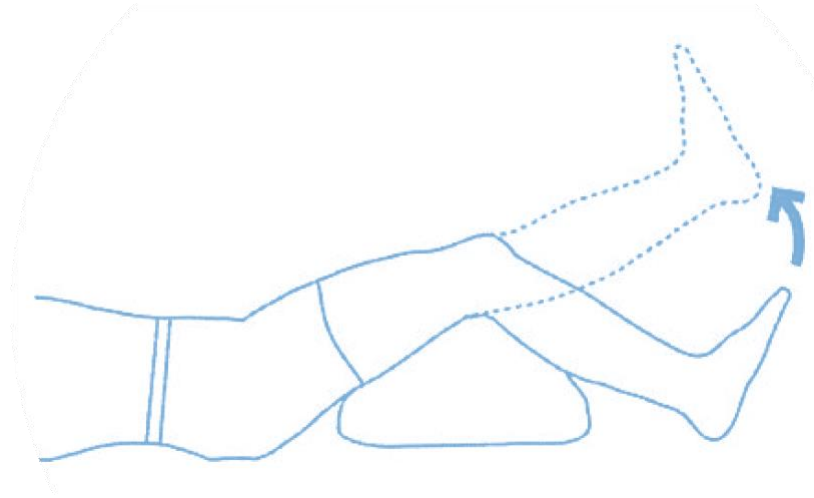
- Sit with leg extended.
- Tighten quad muscles on front of leg, trying to push back of knee downward

SPECIAL INSTRUCTIONS:

Do not hold your breath.

Perform 1 sets of 10 repetitions, once a day. Hold exercise for 10 seconds.

SUPINE KNEE EXTENSION



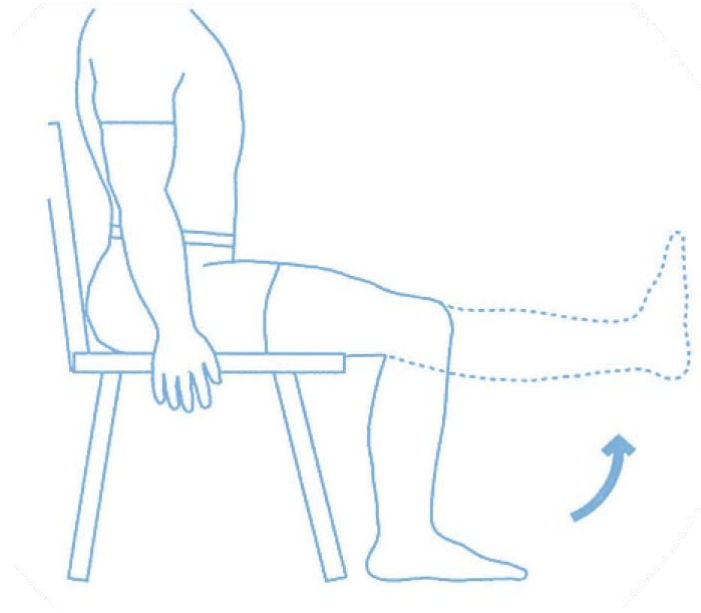
- Lie on back, with involved leg bent to 45 degrees, supported with a pillow, as shown.
- Straighten leg at knee.
- Return to start position.

SPECIAL INSTRUCTIONS:

Perform 3 sets of 10 repetitions, once a day. Rest 1 minute between sets.

Perform 1 repetition every 4 seconds.

SEATED KNEE EXTENSION



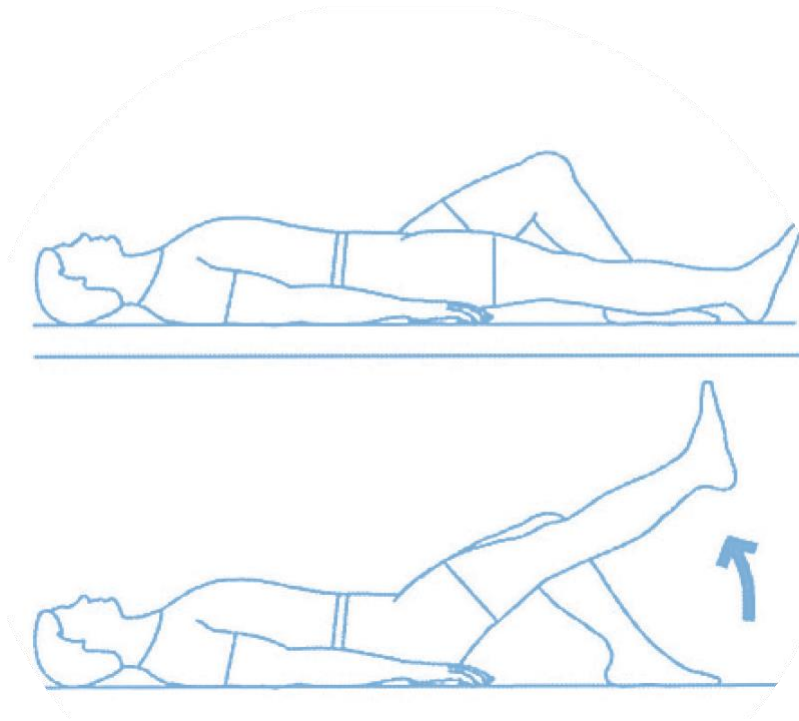
- Sit against a wall, chair, or on a firm surface with your knee bent.
- Keep a proper curve in the low back, as shown.
- Flex left foot upward, while straightening knee.
- Repeat stretch with other leg.

SPECIAL INSTRUCTIONS:

Do not allow low back to lose the curve. It is common to experience shaking in the leg. Perform 1 sets of 4 repetitions, once a day.

Hold exercise for 20 seconds

STRAIGHT LEG RAISE



- Lie on back with uninvolved knee bent, as shown.
- Raise straight leg to thigh level of bent leg.
- Return to starting position.

SPECIAL INSTRUCTIONS:

Perform 3 sets of 10 repetitions, once a day. Rest 1 minute between sets.

Perform 1 repetition every 4 seconds.

WHAT TO DO THE DAY OF YOUR SURGERY

- Take any medications as instructed by the Pre-Op nurse, Dr. Christy's staff, or your internist.
- Arrive at the hospital as instructed. See page 4 regarding surgery times.

What do I need to bring with me the day of my surgery?

1. Photo ID and insurance card.
2. Cane or walker. If you don't have these devices, they will be given to you the day of surgery by the physical therapist.
3. Dress appropriately.
 - Loose-fitting pants, with an elastic waist band.
 - Shoes with a non-skid sole, that you can put on easily. Keep in mind, swelling may be present.
4. Friend or family member.

What should I leave at home?

1. Jewelry
2. Money/valuables
3. Contact lenses

PHYSICAL THERAPY

Therapy in the Hospital

You will receive a session of occupational therapy prior to physical therapy. The occupational therapist will teach you how to get in and out of bed and how to dress yourself. You will also be instructed on how to get in and out of your car.

All patients will receive physical therapy **before** being discharged from the hospital. The session will consist of getting in and out of bed, standing, walking and going up and down stairs.

You will be allowed to put full weight through your leg.

You will leave the hospital on a walker/cane. At some point during your hospital stay, you will walk without an assistive device.

Goals to Achieve by 2 Weeks

1. Ambulate 2 blocks without an assistive device.
2. Independent with activities of daily living.

PHYSICAL THERAPY AFTER BEING DISCHARGED

What will physical therapy be like after discharge from the hospital?

There are certain positions you want to put your leg into to ensure you receive maximum range of motion.

1. Your physical therapist will give you exercises to achieve bending (flexion). You need to get at least 100 degrees of flexion (knee bend) by three weeks.
2. The goal is to keep your leg straight.
 - a. Never place anything under your knee (i.e.: pillow)
 - b. You may place a pillow/blanket under your ankle
 - c. When sitting longer than 20 minutes, you need to keep your leg elevated

Goals to achieve by 3 Weeks

1. Bend your knee to at least 100 degrees (flexion)
2. Straighten knee to 0 degrees (extension)
3. Ambulate at least 2 blocks without an assistive device
4. Independent with activities of daily living (i.e. showering, dressing, etc.)

Use the chart on page 12 to keep track of your range of motion progress.

PHYSICAL THERAPY AFTER BEING DISCHARGED

CONTINUED

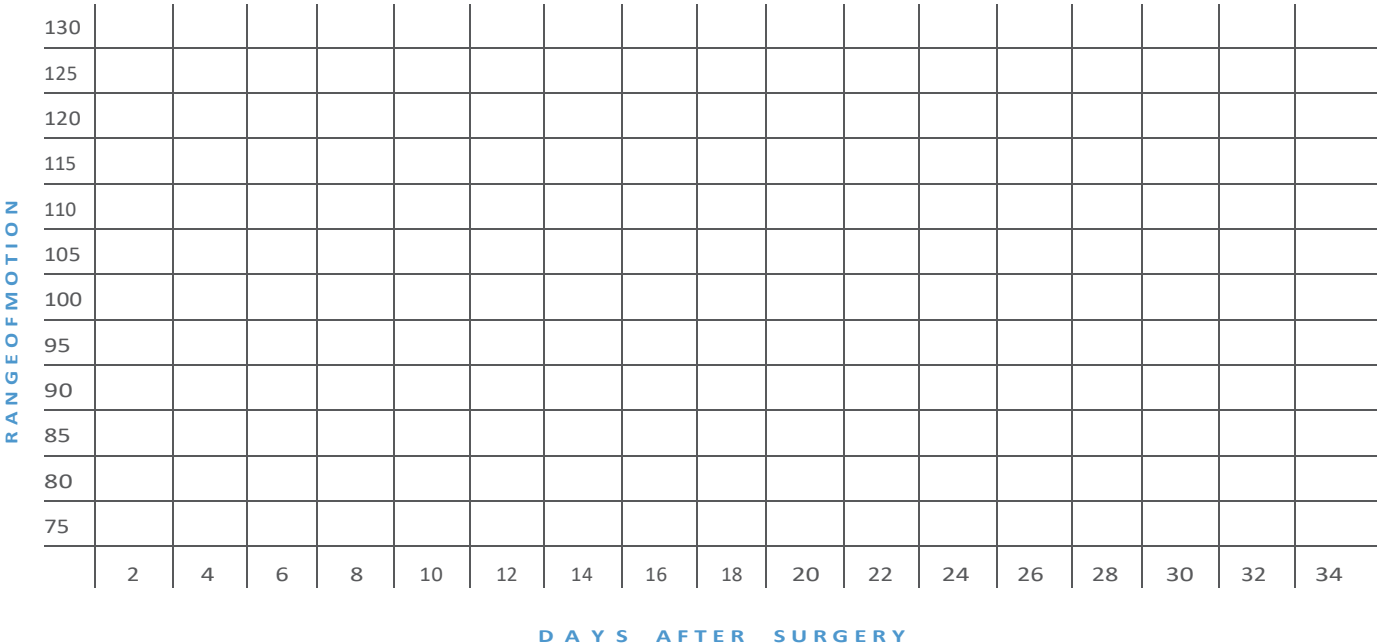
Outpatient Physical Therapy

- Physical therapy scheduling will be discussed at your surgical consult appointment prior to surgery. You will be given an outpatient therapy prescription at the time of discharge – this will accompany you to your first physical therapy appointment. Starting 2-3 days post op, you will go to outpatient physical therapy 3 times a week for 6 weeks or until you meet your goals.
- Select an outpatient facility which is convenient for you and takes your insurance. You may also want to work with a physical therapist that you have worked with previously. If you need a recommendation, we can provide you with a list of facilities.

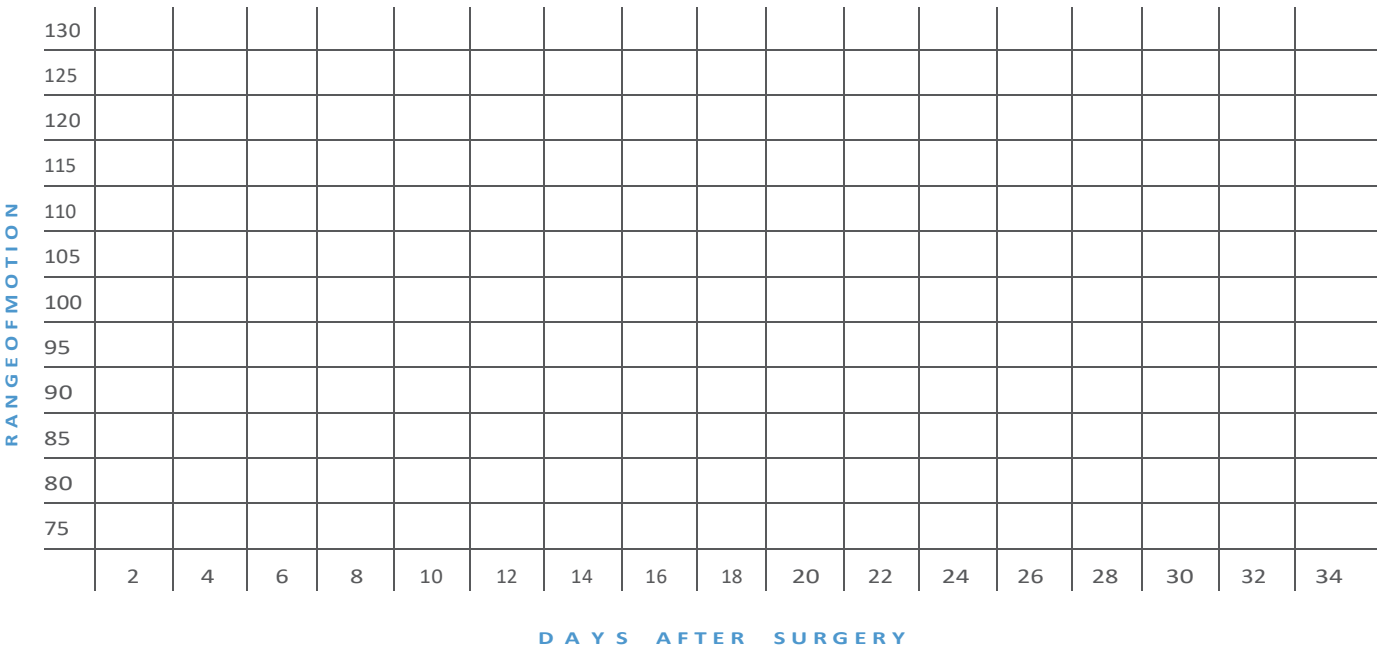
Home Health physical therapy is NOT standard with a total joint replacement - please refer to page 4 for details

RANGE OF MOTION CHART

FLEXION (BEND)



EXTENSION (STRAIGHT)



WHAT TO EXPECT AFTER SURGERY

	DAY 1	DAY 2-3	DAY 4-5	DAY 5-7	DAY 8-16	WEEK 3
SWELLING AND BRUISING	Mild swelling and bruising	Increase in swelling and bruising	Swelling and bruising may increase or stay the same as the 2 previous days	Swelling and bruising about the same as the 2 previous days or may decrease	Swelling and bruising should be decreasing	Minimal swelling which will last for about 3 months
WAYS TO MINIMIZE SWELLING AND BRUISING	Use ice, wear TED hose during the day (off at night) and elevate leg	Use ice, wear TED hose during the day (off at night) and elevate leg	Use ice, wear TED hose during the day (off at night) and elevate leg	Use ice, wear TED hose during the day (off at night) and elevate leg	Alternate heat and ice, wear TED hose during the day (off at night) and elevate leg	Alternate heat and ice, wear TED hose during the day (off at night) and elevate leg
PHYSICAL THERAPY AND ACTIVITY	Focus on gentle range of motion with your Physical Therapist and use ice for swelling	Use ice and focus on gentle range of motion with your Physical Therapist. You may find that with increased swelling your motion is decreased	Use ice, focus on range of motion activities and increase walking distance. You may find that with increased swelling your motion is decreased	Use ice, focus on range of motion activities, increase walking distance	Focus on range of motion exercises, initiate strengthening and increase walking distance	Progress strengthening program
GOAL		Start outpatient physical therapy	You should be walking without an assistive device		Initiate functional activities to return to work	
PAIN MANAGEMENT	As directed when discharged	As directed when discharged.	As directed when discharged	As directed when discharged.		

- You will have mild bruising and swelling initially (day 1) that will start at the surgical site.
- Bruising and swelling are normal after surgery and vary from one individual to another.
- Bruising and swelling will continue to increase over the first 2 weeks after your surgery.
- Bruising may travel up as high as your groin area and will eventually move down to your toes.
- Expect swelling in your entire leg including your foot.

WAYS TO DECREASE BRUISING AND SWELLING

WEEK 1: RICE



REST

We want you to be up and moving but do this in moderation. We recommend you rest for the first 5-7 days after surgery. **DO NOT OVERDO IT.** Increased activity means increased swelling. By decreasing the swelling early, you will recover quicker. We recommend small bouts of activity throughout the day. Get up and walk around the house a little bit every hour to hour and a half that you are awake.



ICE

Ice as much as possible the first week. Ice is a great anti-inflammatory and helps minimize swelling. You may apply ice packs or ice massage over the knee, the quadriceps muscle (the muscle located on the front of the thigh), the hamstring muscle (the muscle located on the back of the thigh) and calf.



COMPRESSION

The TED hose compression stockings provide compression and help minimize swelling. Keep the stockings on during the day and take them off at night for the first 3 weeks after your surgery.



ELEVATE

Elevating your leg will help reduce swelling. To reduce significant amounts of swelling elevate your leg 4-5 times a day for 15-30 minutes each time. Do this with your ankle above your knee and your knee above your heart.

WEEK 2: USE HEAT

You may start using heat to help decrease bruising. Place a hot pack/heating pad over the front and back of the thigh (quadricep and hamstring muscles) and on the calf muscle. Try heat 3 times a day for 20 minutes each time. Using heat will increase your flexibility and make exercising easier.

Alternate the heat and ice. Heat before you stretch/exercise and use ice after activity.

POST-OPERATIVE MEDICATIONS

1. **Oxycodone (Roxicodone):** Narcotic pain medication to be used as needed for pain. Please refer to pain scale for dosing instructions.
2. **Celebrex (Celecoxib):** Anti-inflammatory. Take once a day for a total of 3 months after surgery. Make sure to take this medication with food. ****If you were taking blood thinners prior to this surgery – this medication WILL NOT be prescribed for you due to contraindications****
3. **Senokot-S (Senna Plus):** Stool softener/laxative for constipation. Take 1-2 tablets twice day, starting 2 days before surgery until you are off your Norco after surgery.
4. **Aspirin (EC ASA):** 81 mg tablet to be taken twice daily for 3 weeks after surgery to thin your blood slightly to help against blood clots. ****If you were taking blood thinners prior to this surgery – please do not resume until you are instructed to do so by Dr. Christy****
5. **Zofran (Ondansetron):** To prevent nausea. You have 30 tablets with an additional refill if nausea persists.
6. **Duricef (Cefadroxil):** Antibiotic to be taken twice daily for 1-week post-op.
7. **Acetaminophen (Tylenol):** Over the counter pain medication to be used as needed for pain. Please refer to pain scale for dosing instructions.

THESE MEDICATIONS ARE FOR POST OPERATIVE USE ONLY. PLEASE DO NOT PUT YOUR MEDICATION IN PILL BOXES.

****These medications will be discussed with you during your pre-surgery consult appointment with Dr. Christy. All post-operative medications will be sent to your pharmacy a couple of days prior to surgery. You may pick these up early but do not start taking them early. ****

IMPORTANT – Please ensure that you receive all of the post-operative medications BEFORE leaving the pharmacy. If you do not have something – please speak with the pharmacist first BEFORE calling the office. Some insurance plans have quantity limits and will only allow you to obtain a certain amount under your coverage. In this scenario – you may take the covered amount OR ask the pharmacist for a self-pay price.

Pain Scale for Pain Medications

- Severe Pain (Pain Scale of 7-10)
 - **Oxycodone** – 10mg (two tablets) every 6 hours as needed for pain
- Moderate Pain (Pain Scale of 4-6)
 - **Oxycodone** – 5mg (one tablet) every 6 hours as needed for pain
- Mild Pain (Pain Scale of 1-3)
 - **Acetaminophen (Tylenol Extra Strength)** – one to two tablets every 6 hours as needed for pain. ****DO NOT TAKE MORE THAN 6 CAPSULES IN 24 HOURS****

FREQUENTLY ASKED QUESTIONS

If you have concerns or questions, please read the following information before calling the office. At some point, most patients over do with activities and therefore take a few steps back in their recovery. You may have increased swelling or discomfort if this happens. You need to become concerned if you cannot control your pain, or if you have difficulty bearing weight through your surgical leg.

What if my leg swells after surgery?

It is very common to experience swelling after surgery. Sometimes you will not swell until several days after your surgery. Remember that your body is healing from the surgery and some swelling is normal. The more activities and physical therapy you perform, the more swelling you may experience.

We do want you to remain active and participate in therapy, but when sitting and resting, you can decrease the swelling by elevating your surgical leg above the level of your heart and use ice.

You should be alarmed if you have swelling for several days that is accompanied by redness and heat, or coolness in your surgical leg, or if the swelling does not resolve after elevating. If this is the case, please contact the office.

Will I have bruising after my surgery?

Yes, you will have some degree of bruising after surgery, but everyone is different. Some will only experience redness around the incision; others will have bruising down the entire leg. Both are considered normal and will resolve over 10-14 days.

How much weight can I put through my leg after surgery?

Put as much weight as you can tolerate through your surgical leg immediately after surgery. The term is "weight bearing as tolerated". Your physical therapist will instruct you on how to use your walker or cane in order to perform this properly.

What should I expect my activity level to be?

Every patient is different. Every day you should be increasing your activity level, but let your pain level and swelling be your guide. You will make 90% of your recovery in the first 4-6 weeks, and the remaining 10% will come within the next year.

What if I am having problems sleeping?

Make sure that your pain is well controlled throughout the day. During the day, be careful about taking naps. Try to plan activities as near normal as possible. Please refrain from using sleep aids during your recovery.

What should I do to avoid constipation?

You should start your stool softener 2 days before surgery and continue it twice daily until you have a normal bowel movement or while taking narcotics. Stop the stool softener if you start to experience loose or watery stools. If you continue to have symptoms of constipation you can take Milk of Magnesia which is a mild oral laxative, or use Magnesium Citrate, which is much stronger. You can also try Dulcolax suppositories or a Fleets enema. All of these medications can be bought over the counter at a pharmacy.

FREQUENTLY ASKED QUESTIONS

CONTINUED

When can I shower or bathe?

You will have a Prevena wound vac system in place after surgery. This is a disposable, battery powered, negative pressure wound care system. With this device in place, you are **NOT** to shower – sponge bath only. Once you have completed the wound vac period and switched to the Aquacel bandage, you may shower but DO NOT let water directly hit the bandage. To ensure that your incision heals properly, we do not want you to bathe (submerge) or get into a swimming pool for 6 weeks. If you have scabs on your incision after that time, you cannot get into a pool until it is healed.

How long do I have to wear the stockings?

You should wear them for 3 weeks. During the 3 weeks you must wear the stockings during the day, but may remove them at night. These should be worn on **BOTH** legs after your surgery. You will be issued an extra pair before you are discharged from the hospital.

What positions can I sleep in?

You may sleep on your back or on either side. If you choose to sleep on your side, make sure to put a pillow between your legs for the first 3 weeks. You cannot sleep on your stomach for 3 weeks. Your physical therapist will assist you initially into this position. Do not try it on your own the first time. The physical therapist will give you cues on how to do so safely on your own.

When can I restart the meds I was told to stop before surgery?

Usually as soon as you are discharged from the hospital, but check with Dr. Christy's office if there are any medications in question.

Now that I am no longer requiring narcotic pain medication, what can I take if I should experience discomfort?

You may take Tylenol or Extra-Strength Tylenol. Because you are already taking anti-inflammatory (Celebrex), **you may not take over the counter medications, such as Advil (Ibuprofen) or Aleve (Naproxen).**

What should I do if I think my joint is infected?

As stated above, you will experience some bruising and swelling after surgery. In addition, you may notice a small amount of yellowish or pinkish drainage. You should call the office if:

- You have a large amount of drainage that has saturated through your clothing.
- If the drainage is yellowish/cloudy
- If you are running a consistent temperature of 101.5
- If you have a new onset of pain that is not controlled by your pain medications.

FREQUENTLY ASKED QUESTIONS

CONTINUED

When should I take antibiotics? Who will give me the antibiotics? How long should I take the antibiotics?

You should take antibiotics for the following procedures:

- ANY dental procedure, including teeth cleanings
- If you have been advised to pre-medicate before a procedure by another physician, please contact our office.

Please contact the office to obtain the antibiotic from Dr. Christy. You will receive either Amoxicillin or Clindamycin. You will take this one hour prior to the scheduled appointment

****THIS IS A LIFELONG PRECAUTION****

****Do not schedule any of the above appointments/procedures starting 3 weeks BEFORE surgery and until 3 months AFTER surgery.**

What about using a hot tub or whirlpool?

Because of the heat and bacteria in the water, we do not want you to use a hot tub or whirlpool for 6 weeks.

When to call Dr. Christy's office:

- Fever consistently above 101.5 degrees
- Increased drainage or swelling
- Pain not controlled by pain medication
- Inability to bear weight on your operative leg
- Severe insomnia
- Swelling in foot or calf that is accompanied by coolness or decreased sensation in foot
- Confusion/disorientation



optim
orthopedics

210 East DeRenne Avenue
Savannah, GA 31405
p. 912.644.5318 • f. 912.721.2263
OptimOrthopedics.com