



### Will Kurtz, M.D.

[kurtzwb@toa.com](mailto:kurtzwb@toa.com)

[www.toa.com](http://www.toa.com)

[www.nashvillejointreplacement.com](http://www.nashvillejointreplacement.com)

[Add Dr. Kurtz's contact info to your phone](#)

## One and Only Rule

### Don't Fall

- Avoid slippery surfaces (icy sidewalks, wet floors, slippery grass hills, etc).
- Be careful getting in and out of the shower.
- Use a walker until your balance has returned to normal.
  - Using a walker helps prevent falls better than using a cane.
  - Using a cane helps prevent falls better than not using any support devices.
- Ask for help from your support person when you need it.
  - Do not try to go to the bathroom by yourself at 2 am in the dark without your walker if you have not been walking independently during the day.

## Caring for your incision

- When you leave the hospital, your incision will be covered with a waterproof bandage. You may immediately shower (in the hospital or at home) with the waterproof bandage on your incision.
- Contact Dr. Kurtz if your incision is draining more than 72 hours after surgery or if you are changing your bandage more than once a day.
- If your incision is draining or looks inflamed, please take a picture of your incision with a smartphone and email the picture to Dr. Kurtz. ([kurtzwb@toa.com](mailto:kurtzwb@toa.com))
- Please remove your hospital bandage on post-operative day #5.
- If your incision is dry, then you do not need to put another bandage on your incision, but you can do so if you want.
  - [Telfa Island Dressing](#).
- After the bandage is removed, you may shower without covering your incision. You can let water run over your incision. Do not scrub your incision.
- Your incision may feel warm for 3-4 weeks. If there is no drainage or redness, then that is ok.
- Do not submerge your incision in water for 3 weeks (bath, pool, hot tub, lake, etc.).
- There is no need to apply any creams or anti-scarring agents to your incision; however, if you want to apply these types of agents, please allow your incision to completely heal and then wait one more week before applying any lotions to your incision (typically 3-4 weeks after surgery).

- Bruising will often appear around your ankle a few days after surgery as gravity pulls blood from your knee down to your ankle. This is normal and not a problem.
- Dr. Kurtz closes all incisions with dissolvable suture.
  - Vicryl sutures hold the deep tissues together.
  - Monocryl suture hold the skin edges together.
- These sutures dissolve around 4-6 weeks.
  - Occasionally, patients will see a small piece of suture stick out of their incision around 4-6 weeks as part of the suture has dissolved, and part of the suture has not.
  - If this occurs, email Dr. Kurtz a picture of your incision.
  - Use some tweezers to remove the piece of suture.

## Activity after surgery

### Knee Range of Motion

- Knee range of motion (i.e. full flexion and full extension) is the most important goal during the first two months after a knee replacement.
- Physical Therapy (3 times a week) will help you achieve your full range of motion, but you need to do your exercises at home each day.
- Work on achieving full extension at home by elevating your leg with pillows under your ankle, not under your knee. This is the perfect time to apply ice packs to the top of your knee to add a little weight to help your knee get more extension.
- Work on achieving full flexion at home by sitting in a chair, bending your knee back as far as it will go, firmly planting your foot on the ground so that your foot will not slide, and then sliding your bottom forward in the chair so that your knee is forced to flex more. Hold that position for 10 seconds and then relax by sliding back in your chair. Repeat that process 10 times every 1-2 hours while you are awake.
- A stationary bike is one of the best ways to achieve full flexion. You usually need about 110 degrees of flexion to get all the way around on the bike pedal. Warm up on the bike with the bike seat as high as possible and then lower the bike seat down to force more flexion in the knee to get a full rotation.
- You should elevate and ice your leg as much as possible to decrease swelling.

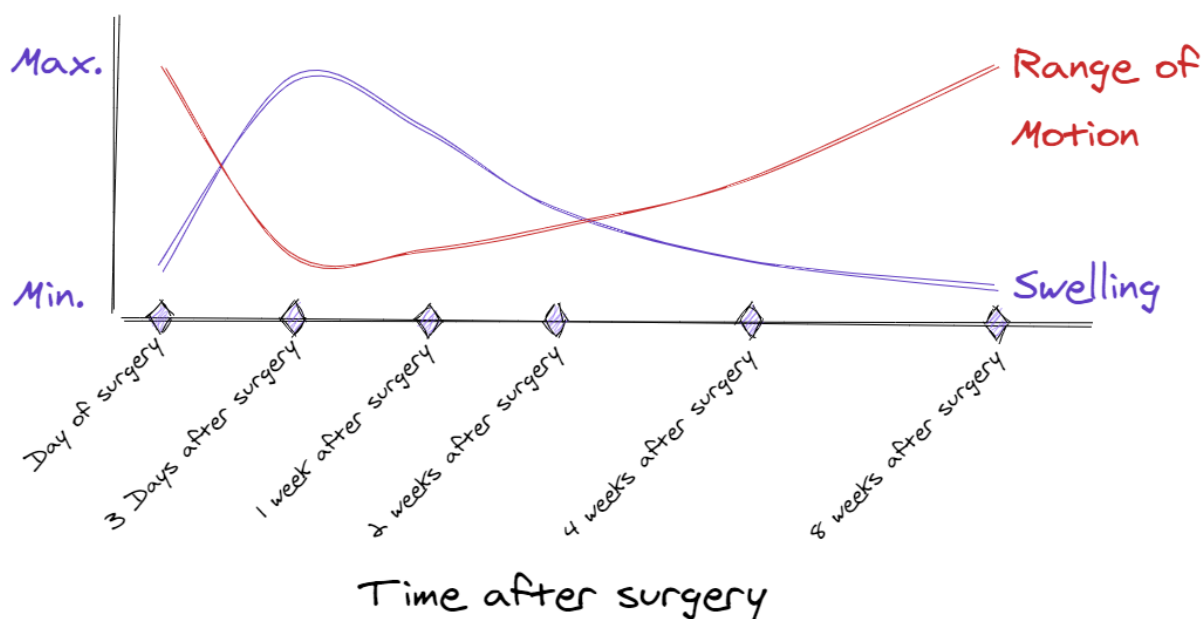
### Walking and Standing

- You can bear full weight on your knee replacement and bend your knee without restrictions *unless Dr. Kurtz has told you otherwise.*
- Walking and strengthening muscles are not important in the first two months of recovery.
- During the first two months, you should walk **frequently** but only for **short** distances.
  - Frequent walks can help prevent blood clots.

- Only walking short distances limits the initial stress on your bone. As your bone adapts to your knee replacement, you can increase your distance.
- During the day, you should change rooms or move chairs every 1 to 2 hours to help prevent blood clots.
- Avoid walking for long distances. Too much walking or standing can cause more swelling, stiffness, and achy pain. You do not need to try to get extra walking in.
- If you overexert yourself with too much walking or standing, you may experience increased swelling, decreased knee range of motion, and increased achy pain for a few days after the activity. With rest, this achy pain will subside in a few days.
- If you have considerable achy pain while lying in bed at night, you should decrease your activity the next day by standing and walking less.
- Add up the cumulative minutes you spend standing and walking throughout the day. Stand and walk for less than 20 minutes each day during the first week. That means walking inside your house 4-5 times a day for 4-5 minutes (i.e. to go to the bathroom or get in the car to go to therapy). By the 4th week, you can probably stand or walk for about 60 minutes a day. By 2 months, you can probably stand or walk for 3-4 hours a day. Your endurance will increase with time.
- You should avoid high impact activities like jumping, aerobics, tennis, and skiing during the first three months after your knee replacement.

## Swelling

- As shown on the graph below, on the day of surgery, your knee will likely have good range of motion and minimal swelling. A few days after surgery, your knee will likely have significant swelling and feel stiff (poor range of motion). Three or four days after surgery is often the most painful time in the recovery. Over the ensuing 2-3 months, your swelling will slowly diminish, and your range of motion will gradually improve.



- TEDs or compression hoses are available by request to wear after surgery to decrease swelling. Most patients do not like to wear compression hoses, so we only provide them to patients who express a desire to wear them.
- [Video](#)

## Sleeping

- You may sleep on your back, side, or stomach.
- If you sleep on your back, placing two or three pillows under your ankle can help with obtaining full extension, elevating the leg, and decreasing swelling.
- Do not place a pillow under your knee at any time as that position keeps your knee flexed and may cause you to develop a flexion contracture in your knee.
- If you sleep on your side, you may place a pillow between your legs for comfort but try to keep your operative leg as straight as possible.
  - A [knee immobilizer](#) may be worn if you are a side sleeper and having trouble getting your knee straight.
- An over the counter or prescription sleep aid can be taken if you have difficulty falling asleep. (see medication section)
- If you are prone to insomnia, then limit your naps during the day, sit by a window during the day to help your body return to its normal circadian rhythm, and turn off all electronic devices an hour before bedtime.

## Recliners/chairs

- Please avoid sitting in recliners after your knee replacement. Recliners keep the knee bent 20 to 30 degrees and may cause you to develop a flexion contracture in your knee.
- The ideal sitting position is to place two or three pillows under your ankle to elevate your leg and get your knee fully straight/extended. There should be nothing but air under the back of your operative knee. You need to keep your toes pointed straight up as your leg will often want to external rotate to allow your knee to flex. You may place additional weights on the top of your knee to assist in achieving even more extension.

## Driving

- You can drive when you are off narcotics medicine, able to bear full weight on your leg, and able to quickly move your foot off the gas pedal and onto the brake pedal. There is nothing for Dr. Kurtz to sign, do or say that will determine when you can resume driving. If you are in doubt about your ability to drive, then please refrain from driving.
- If you want a temporary handicapped placard, please fill out this [form](#). You can hand deliver or email your completed form to Dr. Kurtz. He will sign it and return the signed form to you. You can then take the signed form to the TN county clerk to get your temporary handicap placard.
- [Video](#)

## Cold Therapy

- Cold therapy (i.e. ice machine) is applied to your knee while you are in the hospital.
- You can buy a [cooling machine](#) from Amazon for your recovery at home (\$150).
- You can buy [ice packs](#) from Amazon for your recovery at home.
- You can rent a cooling machine from [Game Ready](#) (\$300/14 days). Contact Dr. Kurtz to set this up.
- Try to use cold therapy for 30 minutes on / 30 minutes off during the day for 3 weeks.
- Try to use cold therapy constantly at night for the first three weeks.
- Protect your skin while using cold therapy by putting a layer of clothing between the ice and your skin.

## Physical Therapy

- Prehab involves doing one or two physical therapy visits before your surgery to learn some knee exercises and get a jump on your knee recovery.
- Dr. Kurtz strongly recommends that you get some Prehab before your surgery.
- Please email [getPT@toa.com](mailto:getPT@toa.com) if you want to schedule for prehab or post-operative physical therapy.
- You will likely do physical therapy three times a week for four to six weeks after surgery.
- You may continue physical therapy for more than six weeks if you so desire.
- You will continue your home exercises for 3-4 months.
- TOA has physical therapy locations at:
  - Clarksville: (931) 221-4743
  - Franklin: (615) 823-8256
  - Gallatin: (615) 567-5024
  - Hendersonville: (615) 724-9271
  - Lebanon: (615) 321-0200
  - Murfreesboro: (615) 278-1634
  - One City: (615) 263-0178
  - Skyline: (615) 823-8816
  - Smyrna: (615) 278-1660
  - St. Thomas West: (615) 234-7221
- If there is not a TOA physical therapy location near your house, then we will assist you in scheduling their therapy close to your home.

## Home Exercise Program

- While you are awake, you should do the following exercises every hour.
  - Do 10 ankle pumps. Contract your calf muscle by pushing your foot down. Hold the contraction for 5 seconds and then relax your calf muscle for 5 seconds. Repeat 10 times.

- Do 10 butt slides (knee flexion exercise on discussed on page 2) by keeping your foot on the floor and sliding your butt forward in your chair. Holding that knee flexion for 5 seconds and then relax for 5 seconds. Repeat that process 10 times.
- Do 10 Quad contractions. Pretend there is an egg under your fully extended knee and contract your quads to drive the knee down into the bed and crush the imaginary egg. Hold that contraction for 5 seconds and then relax for 5 seconds. Repeat 10 times.
- Do 10 knee extension stretches. Put your foot up on an ottoman or coffee table. Push down on the top of your knee to force full extension. Hold for 5 seconds and then relax for 5 seconds. Repeat 10 times.
- Walk to the kitchen and set a timer for 60 minutes.
- Ice your knee in between your hourly exercises for the first 3 weeks.

## Diet

- Eating a healthy diet with plenty of protein after surgery can promoting good wound healing.
- High fiber diets and drinking plenty of water can help prevent post-operative constipation.
- Avoid processed foods. Food that comes in a box or bag is typically processed carbohydrates which temporarily spike your blood sugars. An hour or two later, your blood sugar falls, and you crave more processed carbohydrates. Obtaining your necessary calories from proteins, lipids, and naturally occurring carbohydrates helps smooth out your blood sugar curve and limits the high spikes in blood sugar that can harm wound healing.
- Try to eat mostly whole foods (fruits, vegetables and proteins).
- Drink mostly water and low-calorie electrolyte drinks. Avoid sugary soda drinks.
- If you are a diabetic, make sure to keep your blood sugars below 140 to promote good wound healing.
- Avoid drinking excessive alcohol while taking narcotics as this can increase falls.

## Post-operative Medicines

### Filling your post-operative prescriptions before or after your surgery

- Most patients fill their post-operative prescriptions at their local pharmacy after they leave the hospital or surgery center. Dr. Kurtz (or his assistant) will typically e-prescribe the same pain medicine that the patient was receiving in the hospital or surgery center.
- Some patients prefer to fill their prescriptions before surgery, but this approach can sometimes cause a problem if the patient changes their pain medicine during their hospital stay.
  - For instance, some patients may start out taking Percocet 5's to manage their pain. The Percocet 5's may make the patient nauseated or dizzy, and therefore the patient might switch to Tramadol while still in the hospital. If the patient has already filled the Percocet 5's before their surgery, then the pharmacy may be unwilling to fill a new prescription for Tramadol.

- Some patients may also start with Percocet 5's in the hospital and then decide they need Percocet 7.5's. If the patient has already filled their prescription for Percocet 5's before surgery, it can be difficult to get the pharmacy and/or insurance to authorize another prescription for the Percocet 7.5's.
- Dr. Kurtz is willing to listen to your situation and work through these issues with you, so please communicate your needs to him.
- Please confirm with Dr. Kurtz's team your pharmacy name and location where you want your post-operative medicines called in.

## Blood Thinners

- If you do not have a history of blood clots, you will take [aspirin](#) (81 mg twice a day) for 4 weeks after your knee replacement.
- If you have a history of blood clots (DVT, PE), then you will take Coumadin (Dosage varies), Xarelto (10mg once a day), or Eliquis (2.5 mg once a day) for at least 4 weeks.
- If you are on a blood thinner before surgery, we will likely resume your normal blood thinner after surgery.
  - You may also need to be bridged with Lovenox for a few days before and after your surgery.

## NSAIDs

- If you are regularly taking NSAIDs before surgery, you may continue taking your NSAIDs up until the day before surgery.
  - i.e. [Aleve](#), [Ibuprofen](#), Celebrex, or Mobic.
- If you normally tolerate NSAIDs before surgery, you can start taking NSAIDs after your surgery.
- Dr. Kurtz will prescribe an NSAID for you or you can take an over the counter NSAID.
- Patients with a history of GI bleeds, kidney problems, or uncontrolled blood pressure should not take NSAIDs unless Dr. Kurtz or their PCP says otherwise.
- NSAIDs and aspirin bind to the same receptor on platelets, so patients should not take both medications at the same time. Patients should take their aspirin and then wait at least 2 hours before taking their NSAID.
- NSAIDs and aspirin should not be taken on an empty stomach.
- Patients usually take OTC [Pepcid](#) (Famotidine 20 mg twice a day) for one month after their surgery to prevent stomach irritation from aspirin and/or NSAIDs.
- If you are taking an NSAID and develop the symptoms of a GI bleed (blood in stool, low blood pressure, extreme fatigue, anemia, abdominal pain) then please go to the ER and contact Dr. Kurtz on the way.

## Narcotic Pain Medicine

- Most patients will take tramadol (Ultram), hydrocodone (Norco), or oxycodone (Percocet) for a few weeks after surgery.

- For the 1-2 weeks, many patients will use narcotic pain medicine every 6 hours.
- After 1-2 weeks, most patients have decreased their narcotic pain medicine to just twice a day (right before physical therapy and bedtime).
- Narcotic medicine can cause nausea, vomiting, constipation, and loss of appetite.
- All narcotic refills require an electronic signature from Dr. Kurtz.
  - If you need a refill, please email Dr. Kurtz ([kurtzwb@toa.com](mailto:kurtzwb@toa.com))
- [Video #1](#) & [Video #2](#)

## Non-narcotic pain medicines

- In addition to taking narcotic pain medicine, many patients will also take non-narcotic pain medicines to help control their pain and limit their use of narcotics.
- [Tylenol](#) (i.e. acetaminophen) can be taken every 6-8 hours.
  - Patients should not take more than 4 gms of [Tylenol](#) (acetaminophen) a day.
  - Percocet (oxycodone/acetaminophen) and Norco (hydrocodone/acetaminophen) have 325 mg of acetaminophen in each tablet, so you must include the acetaminophen in your narcotic tablets when calculating your total daily acetaminophen usage.
- **Prednisone** (i.e. steroids, Medrol dose pack) can help with swelling, inflammation, range of motion, and pain control.
  - Side effects of prednisone are increased appetite, blood sugars, and activity.
  - Diabetics must be careful with taking prednisone.
  - Prednisone requires a prescription so contact Dr. Kurtz if you want to a prescription.
- **Neurontin/Gabapentin** can help with nerve pain.
  - Neurontin works on the Gaba receptors in nerves to decrease nerve inflammation.
  - Side effects of Neurontin are drowsiness and not feeling like yourself.
  - Neurontin requires a prescription, so contact Dr. Kurtz if you want to a prescription.
- **NSAIDS** are helpful adjuncts to pain control as discussed above.
- **Toradol** is a strong NSAID can help with post-operative pain.
  - It is administered as an injection into the muscle in clinic.
  - It is usually given through your IV during your hospital stay.
- [Voltaren Gel](#) is a topical ointment that can be applied to the sides of your knee. Do not put it directly on your incision for the first 3 weeks.
- [Lidocaine patches](#) (Salonpas) can be applied to the sides of your knee to help with nerve pain.

## Stool Softeners

- Most stool softeners are available over the counter. If you are prone to constipation, it is helpful to start taking them a day or two before your surgery and continue as long as you are taking narcotic pain medicine.
  - [Colace/Docusate](#)
  - [Senokot](#)
  - [Smooth Move](#)
  - [Miralax](#)



- [Milk of Magnesia](#)
- [Mag Citrate](#)

## Sleep aids

- Some patients benefit from taking a sleep aid.
- Dr. Kurtz recommends trying an over the counter sleep aid before trying a prescription sleep aid.
- Over the Counter Sleep Aids
  - [Melatonin](#)
  - [Diphenhydramine](#)
  - [Doxylamine Succinate](#)
- Prescription Sleep Aids
  - Ambien
  - Lunesta
  - Restoril
- If you feel like you need a prescription sleep aid, please email Dr. Kurtz, and he will consider prescribing a few tablets to get you back to your normal circadian rhythm.

## Disposing of un-used narcotics

- Leaving un-used narcotics in your medicine cabinet can be dangerous and lead to an inadvertent narcotic overdose by another individual.
- After you have fully recovered from your knee surgery and no longer need pain medicine, it is advisable to dispose of your un-used narcotics in an eco-friendly manner.
- Dr. Kurtz recommends placing the un-used pills in a small plastic bag and adding some fluid (coke, coffee grounds, etc.) to the plastic bag and throwing the bag away in the trash.

## Things to watch out for

### Falls

- Falls are the most common complication after surgery.
- About one in every 50 patients will have a fall after knee replacement surgery.
- About a third of falls cause serious bodily harm that may require a hospitalization and/or another surgery.
- Fall prevention includes:
  - Use your walker until your balance has returned to normal.
  - Ask your support person for help when needed.
  - Improve the lighting in your bedroom and bathroom.
  - Removing all cords and loose rugs from the floor.
  - Do not walk your large dog on a leash until your strength has returned to normal.

- Avoid small bathrooms that cannot accommodate a walker.

## Infection

- All patients get IV antibiotics (Ancef or Vancomycin) before and after their surgery.
- If you are high risk for infection (diabetes, immune-compromised, smoker, or obesity), then Dr. Kurtz may send you home from the hospital with an oral antibiotic (Keflex) for a week.
  - Please ask about an oral antibiotic for home if you feel like your immune system is weakened.
- The rate of infection after a knee replacement is about 1 in 400.
- If a patient were to get a post-operative infection, the earliest the knee infection would present would be four or five days after surgery. Most infections don't present until two or four weeks after surgery.
- Infections usually present as persistent drainage from the incision, redness around the incision, and/or a body temperature above 101.5.
- A low-grade temperature (100.5 and lower) is common for 4-5 days after surgery especially if you had a general anesthetic.
- If an infection were to occur in the first 4-6 weeks, Dr. Kurtz would wash out your knee, put you on IV antibiotics for 6 weeks, and then oral antibiotics for months.
- If an infection were to occur months after your surgery, then Dr. Kurtz may have to remove the implants, put you on IV antibiotics, implant a new knee in 2 months, and keep you on oral antibiotics for months.

## Blood Clots

- Blood clots (DVT) can cause calf pain with stretching, swelling, and tenderness to palpation in the calf. Unfortunately, calf pain and swelling are very common after knee replacement for obvious reasons.
- If a patient suspects they have a DVT, then they should contact us so we can order a doppler ultrasound.
- Chest pain or difficulty breathing could represent a pulmonary embolus and should be evaluated in the emergency room asap.

## Constipation / Post op ileus

- Multiple factors can slow down your bowels after surgery.
  - Not eating on the day of your surgery.
  - Anesthesia and narcotic medications.
  - Decreased activity and bed rest.
- Most patients do not have a bowel movement for 2 -3 days after surgery.
- If you have not had a bowel movement in 3-4 days, your belly gets distended, or you develop nausea and vomiting, then you may be getting a post op ileus.

- If you are constipated (post op ileus) then,
  - Drink plenty of water.
  - Limit your food intake and only eat soft foods.
  - Move around as much as possible
  - Take one or more of the stool softeners listed above.
  - If you feel nauseated, contact Dr. Kurtz and go to the hospital. You would likely be admitted and have an NG tube placed in your stomach to suck out the contents until your bowels wake up.

## Urinary Retention

- Some elderly men are prone to urinary retention after surgery because of their enlarged prostate.
- If you are concerned about urinary retention, Dr. Kurtz can start you on Flomax a few days before surgery and continue the Flomax for a week or so after surgery.

## Blistering





- Swelling can cause blistering around your knee.
- When blistering occurs, it usually starts around post-operative day #3-4.
- Blistering can occur when severe swelling stretches the skin and separates the epidermis from the dermis.
- Shear stress on the skin from adherent dressings can increase the likelihood of blistering.
- If blistering appears,
  - Remove any bandages that are adherent to your skin. (i.e. the waterproof bandage.)
  - Elevate your leg as much as possible to decrease the swelling.
  - Do not pop or rupture the blister. The blisters will rupture on their own in a few days.
  - You may wrap your leg in an ACE wrap to help compress the swelling out of the leg.
- These blisters may take 3-4 weeks to heal.

## Equipment for home

- You will likely use a walker and/or cane for the first one to two weeks after your knee replacement. TOA and/or the hospital can provide you with a walker if you need one. If TOA provides you with these products, then TOA will bill your insurance.
- Amazon has many products that can be helpful during your knee replacement recovery. Products bought on Amazon are self-pay and not billed to your insurance company.
  - [walker](#),
  - [cane](#),
  - [shower chair](#),

- [cold therapy machines](#),
- [knee pillow](#),
- [Telfa Island dressing](#),
- [OTC pain medicines](#),
- [OTC laxatives](#),
- [OTC Sleep Aids](#)
- My website has a detailed list of curated Amazon products for knee surgery.
  - <https://www.nashvillejointreplacement.com/amazonknee>

## Our Team

			
<b>Dr. Will Kurtz</b>	<b>Katie</b>	<b>Kristie</b>	<b>Amanda</b>
Surgeon	Physician Assistant	Medical Assistant	Scheduler
<a href="mailto:Kurtzwb@toa.com">Kurtzwb@toa.com</a> Text with GetWell App.		<a href="mailto:shepardkl@toa.com">shepardkl@toa.com</a> 615-963-1437	<a href="mailto:smithal@toa.com">smithal@toa.com</a> 615-695-7728

- Dr. Kurtz and his team are always happy to answer your questions and help guide you through your surgery and recovery. We are available both before and after your surgery.
- Please email or text Dr. Kurtz for clinical questions and narcotic refill requests.
- Please email or call Kristie for employer or disability paperwork and non-narcotic refill requests.
- Please email or call Amanda for information about insurance authorizations and date/time of surgery.

## Post op clinic appointment

- Patients can schedule a clinic visit anytime with our online appointment scheduling:
  - <https://toa.myhealthdirect.com/DecisionSupport>

- Post-operative patients are welcome to come into clinic anytime. Dr. Kurtz is in clinic on Mondays, Wednesdays, or Fridays.
  - Just call or email us ahead of time so we know you are coming.
- Arrangements can be made if you need to be seen by one of Dr. Kurtz's colleagues on Tuesday or Thursdays if there is an emergency.
- We can schedule a telehealth visit most days of the week.
- The routine post-operative appointment is scheduled for 4 weeks after surgery. We will take an x-ray of your knee replacement and give you a copy of your x-ray.

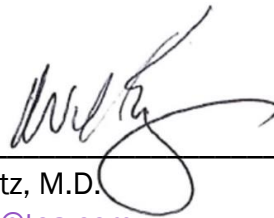
## Helpful Videos

- Dr. Kurtz's personal website has an extensive list of educational videos or you can select one of the titles below that relate to knee replacements.
  - <https://www.nashvillejointreplacement.com/post-op-knee-education>
- Can I go home on the day of surgery?
  - <https://vimeo.com/429043684>
- Lateral numbness
  - <https://vimeo.com/430763797>
- Kneeling
  - <https://vimeo.com/436996816>
- Activities
  - <https://vimeo.com/429039164>
  - <https://vimeo.com/430232587>
- Pain medicine
  - <https://vimeo.com/429068052>
  - <https://vimeo.com/430235831>
- Concerns
  - <https://vimeo.com/430232587>
- Driving
  - <https://vimeo.com/430749899>
- Leg Discoloration
  - <https://vimeo.com/430749899>
- Swelling and stiffness
  - <https://vimeo.com/430749899>
- Travel after surgery
  - <https://vimeo.com/430695653>
- Knee replacements make noise
  - <https://vimeo.com/430693736>
- Follow up visits
  - <https://vimeo.com/430237615>
- Post op wound care
  - <https://vimeo.com/430236676>

- Drive, Work, Travel
  - <https://vimeo.com/429041927>
- How to optimize your knee recovery
  - <https://vimeo.com/429031163>
- Watch Dr. Kurtz perform a knee replacement
  - <https://vimeo.com/441881538>

Thank you for reading this material. Our team is here to help you with your recovery. If you have questions, we will provide you with the answers. Maintaining a positive attitude and staying engaged in your recovery are the best ways to ensure a great outcome.

Best wishes for a speedy recovery,



---

Will Kurtz, M.D.

[kurtzwb@toa.com](mailto:kurtzwb@toa.com)

Hip and Knee Replacement Surgeon  
Tennessee Orthopaedic Alliance