

Pierre Bruneau, MD
Post-Operative Instructions
Total Knee Replacement
Guidelines after Total Knee Replacement surgery

Congratulations on your new Total Knee Replacement (TKR). I am excited to guide you through your recovery as you begin to regain your active lifestyle. This document will attempt to help you through your recuperation with activity guidelines, as well as answer some of the most common questions that patients have after undergoing this procedure.

Incision Care

The incision is closed with absorbable sutures and covered with a mesh tape and glue (Prineo Dermabond Tape). If there is no drainage, there is no need to cover the mesh tape. The external surface of the tape will accumulate dust and turn gray overtime which is expected. It will start to peel at the edges but should be left in place for a minimum of 4 weeks after surgery. The dressing was applied in the operating room with your knee maximally bent, so there is no worry that the incision will tear or open up if you work aggressively on motion.

Less than 1% of patients may have an allergic reaction called a dermatitis to the glue tape. If you notice redness and itching around the mesh tape, contact the office. Occasionally patients get small blisters on the edges of the tape, in that instance it is best to cover the blisters with gauze when dry and to apply Neosporin or bacitracin if they have ruptured and contact the office.

You may shower 72 hours after surgery; it is alright if the water runs over the wound, but don't submerge it. Pat it dry when you are done. I expect the incisions to remain dry without any bleeding or drainage. If you notice drainage or bleeding or have any questions regarding the dressing, contact the office. You may not take a bath or go swimming until the incision is completely healed usually 6 weeks from surgery.

Swelling and bruising

After surgery swelling and bruising of the operative leg is normal and will gradually decrease over time. It is not uncommon to have bruising of your thigh, leg or foot on the operative side that may worsen over the 1st week. Both the bruising and swelling will gradually resolve over the course of 2-4 weeks. If activity and exercise worsen your swelling, take time to lie down and elevate your leg above the level of your chest. Using a thigh high compression stocking (TED hose) or an ACE wrap will also help to minimize the swelling. If the compression stockings provided in the hospital cause significant discomfort over your thigh, they may be discontinued.

I advise using ice packs regularly during your recovery. In the first few weeks, you will probably need to ice your knee 3-4 times per day; after about 1 month, it may be only at night; after 2 months, it may only be after physical therapy sessions. As the healing progresses and your knee gets stronger, your swelling will diminish.

It is also common to experience swelling below the knee, into the calf. Most times this is a result of gravity (standing on your feet and walking). This type of swelling should go away in the morning if you elevate your leg at night. Wearing a compression stocking that goes above the knee can also help. If the swelling in your calf persists despite elevation, please call my office to have this checked.

Activity / PT / Home Exercises

For the first few weeks after surgery, walk as much as possible without overdoing it. Try walking at least 2-3 times per day and gradually increase your distance walked. Do not perform any strenuous activity for the first 6 weeks after surgery. By two weeks after surgery, you may be able to walk 1 mile at a time. Be sure to let pain be your guide, keeping in mind that you just had surgery. If you are having increasing pain, then back off your activities and call the office for any concerns or questions.

You are weight bearing as tolerated which means you are allowed to put as much weight on the operative leg as is comfortable. You will not hurt your new knee by walking on your leg.

You will be given home exercises to be done on a daily basis by the physical therapist in the hospital. After the initial post-operative phase, we will gradually progress your activities. However, initially, it is extremely important that you exercise your new joint by walking. Remember that exercise and activity is important to prevent the formation of blood clots.

For the first several weeks after TKR, you will likely climb or descend stairs one foot at a time. The pattern to follow is: “Up with the good leg, down with the bad (operated)”. As you get stronger, I encourage you to try to climb stairs alternating one foot per step; holding on to the banister will help. It is easier to go up first, rather than down because descending stairs requires more strength.

By the time you have left the hospital/rehab facility, you should be able to get in-out of bed by yourself, walk with the cane, and go up and down stairs. The biggest challenge in the early recovery of a TKR (up to 3 months postoperative) is the regaining of knee motion.

Knee motion is extremely important to work on during your recovery. Scar tissue begins to form immediately after surgery, and if the knee doesn't regain its motion within a set amount of time, it will become permanently stiff. You must work on both extension (straightening) and flexion (bending) of the knee several times daily and not just rely on your time with physical therapy.

For extension, I recommend placing a rolled-up towel under the heel of your operated leg, in an attempt to suspend the knee like bridge. Then, perform a quadriceps contraction to press your knee downward, in order to straighten the knee. Hold for 10 seconds, and then repeat. I recommend doing this exercise 10 times per hour

For flexion, I recommend sitting in a chair and bending your operated knee as far back as possible. You can use your other leg to help push the knee to bend more. Your goal for flexion is to bend beyond 90 degrees within 2 to 3 weeks of surgery.

We will send a physical therapist to your house to help you with the walking, knee exercises, and gentle manipulation of the knee. The therapist will likely come to your residence 2 to 3 times per week. On the days that the therapist does not come, it is still important for you to continue walking and performing your exercises. Most patients will continue to need the cane for walking until I see you in the office at 6 weeks postoperative.

As soon as your home therapist feels that you are ready for outpatient PT, please call my office and we will supply a prescription for you. I do not want there to be any gaps in your physical therapy regimen.

Assist devices

You will be discharged from the hospital with a walker, crutches or a cane depending on how well you walk with physical therapy as an inpatient. You will typically use these aids anywhere from a few days to a few weeks and stop using them when you are stable and strong on your feet. Some people who have used these devices for years may require prolonged use for reasons unrelated to the surgery.

You should make sure that you obtain a walker prior to surgery. We will provide you a prescription if you don't already have a walker.

You may be discharged with a knee immobilizer on the operative leg. This is utilized as a safety measure to be worn when walking only. It should be removed to work on motion when not walking. Its purpose is to prevent your knee from buckling resulting in a fall that could jeopardize your wound. You may discontinue the knee immobilizer with ambulation when you are able to perform a straight leg raise against gravity. I expect the need for a knee immobilizer not to be more than 2 weeks from surgery.

DVT prophylaxis

You will be prescribed medication to lower your risk of forming blood clots. This medication is important to take until the prescription is finished. In addition, being active and performing your exercises properly can minimize your risk of developing a blood clot.

If you have never had a blood clot before and don't have an allergy to aspirin, then you will most likely be placed on one baby aspirin (81mg) twice per day for 6 weeks.

If you have had a prior history of a blood clot or pulmonary embolism or are determined to have a higher risk of a blood clot, then you will be given either an injectable medication such as Arixtra SQ or Lovenox SQ for 4-6 weeks or oral blood thinning medication such as Warfarin or Xarelto, Eliquis or other agent for 4-6 weeks. If you have drainage from your incision after surgery and are on these types of blood thinners, call the office for guidance.

10 Exercises After Knee Replacement Surgery



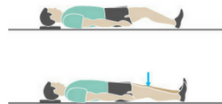
Straight Leg Lifts

Lie on your back with your legs fully extended. Lift your leg about six inches and hold for 10 seconds.



Ankle Pumps

While lying flat on your back, bend both ankles up and point your toes toward you. Then bend your ankles down and point your toes away from you. As you do this, rotate your foot clockwise and then counterclockwise, keeping your toes pointed toward the ceiling.

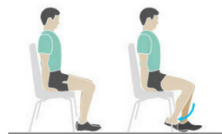
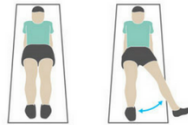


Thigh Squeezes

Lie flat on your back and tighten the muscles in front of your thigh by pushing the back of your knee down toward the floor. Hold for five seconds and relax.

Leg Slides

Lie on your back and slide your leg out to the side while your kneecap is pointed upward. Then slide your leg back to the starting position.

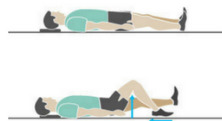


Knee Bending

Sit in a stable chair and bend your leg so that it is underneath the seat, bending your knee back as far as possible. Hold it for five seconds and then return it to the resting position.

Prolonged Knee Stretch

Sit in a chair, bend your knee back as far as possible, and hold for 15-30 seconds. As you gain range of motion, scoot forward in the chair to increase the stretch. Over time and as tolerated, increase the duration of the stretch to 60 seconds and repeat several times per day.

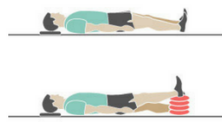


Heel Slides

Lie flat on your back and then bend your hip and knee by sliding your foot and heel upward toward your buttocks. Then slide your foot and heel back to the starting position. Keep your kneecap pointed toward the ceiling during the entire exercise.

Lying Kicks

Lie on your back on the floor or a bed and place a rolled blanket or large coffee can under your knee. Straighten your lower leg and hold the position for 5 seconds. Slowly lower your leg and rest. Make sure the back of your knee stays in contact with the object the entire time and that the small of your back is on the floor.

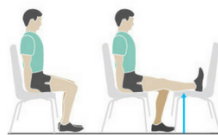


Passive Hamstring Stretch

Lie on your back with your leg fully extended. Place your foot on a stack of pillows, allowing your leg (the one with your new artificial knee) to hang freely. Staying in this position, allow your knee to gently stretch for 10 minutes.

Knee Straightening Stretch

Sit upright in a chair and place the leg with the artificial knee as straight as possible on an opposite facing chair (opposite chair not shown). Keep the leg extended and straight for 10 minutes; your toes can remain relaxed. Slowly take your leg out of this position as it will be a little sore. Let it rest but keep it moving. After this stretch, it's a good time to do your heel slides.



Celebrex and NSAIDs

You may be given a prescription for Celebrex (celecoxib) or another non-steroidal anti-inflammatory (ibuprofen, Advil, Motrin, naproxen or Aleve) after your total knee replacement. The purpose of this medication is to help with pain and swelling and increase the effectiveness of the opiate (narcotic) pain medications.

Narcotic Pain Medication

It is normal to have some pain after surgery. Pain medications have been prescribed. It should be noted that pain medications take about one-half hour to start working, so take them prior to the pain becoming severe. DO NOT drink alcohol while taking prescribed pain medication. It is dangerous and illegal to drive while taking pain medicine. If you need a refill on pain medication before your first scheduled appointment, please call our office during regular office hours.

If you are experiencing side effects, the pain medications may be changed to a slightly less potent pain medication or other medications can be added to address nausea as needed.

As you get further out from surgery, you may try to wean yourself off of the pain medication to avoid the side effects of taking narcotics. I suggest that you try decreasing the amount of pain medication or increase the interval between doses during the day.

If you have completed your Celebrex or Indocin, you may start taking over the counter anti-inflammatory medication such as ibuprofen (Advil / Motrin) or naproxen (Aleve), provided that your stomach can handle this and there is no contraindication from your primary physician.

Additionally, you can add acetaminophen (Tylenol) and take between 3000-4000mg per day. Please be aware that your pain medication may already contain Tylenol and you would need to subtract this from your total daily dose of Tylenol.

Driving

You may drive when you have good control over the operative leg and are no longer on pain medicine.

Diet

Typically, with adequate protein intake for promotion of healing, there are no special diet restrictions. Make sure you eat a well-balanced meal, drink plenty of fluids and incorporate fiber into your diet as oral pain medications have a tendency to cause constipation. It is also a good idea to take a stool softener such as Colace, Citrucel or Mirilax daily until your system becomes regular after surgery.

Dental work after joint replacement

Artificial joints can become infected after simple procedures such as dental cleaning. Preventative treatment is extremely important and should be followed prior to receiving any dental treatment from now on. Please call us, or your dentist ahead of time so that an antibiotic can be prescribed before you have your dental work done. You should not have dental work performed for 3 months following your joint replacement due to the increased risk of infection. If a dental crisis occurs within this time period, please call our office for instructions.

Post-operative office appointment

For patients that live in the area you will be seen 2 weeks, 6 weeks and then 1 year after surgery. For those that live out of town the typical schedule is 6 weeks, 4 months and 1 year after surgery. Your first post-operative visit should be set prior to your surgery.

Post-operative X-rays

X-rays are obtained immediately after your surgery in the hospital. You will typically get additional X-rays at your subsequent visits to evaluate the hip replacement components for wear, loosening and other possible abnormalities.

Call the office if you notice any of the following:

Fever above 101° Fahrenheit
Persistent swelling, redness, or uncontrolled pain in the surgical area
Persistent bleeding or drainage from the wound
Severe calf pain or tenderness
You are unable to do the exercises

Call 911 if you have a sudden crisis such as symptoms of a heart attack, stroke, dizziness or confusion, or chest discomfort or pain.

My best advice to you during your recovery is to listen to your body – that is, if you overdo it on one day, you may have more pain in the knee the next day.

Other frequently asked questions (FAQ):

I feel “clicking” inside the knee, is this normal?

The clicking is a result of the artificial parts coming into contact with one another. This sensation can be unnerving at first, but is totally normal for TKR.

There is a numb spot on the side of my knee, next to the incision, is that normal?

Yes, this is normal after TKR. There will be patch of skin on the outside of the knee, next to the incision, that has diminished sensation to the touch. This generally gets smaller and smaller as you recover, but there will likely always be a numb patch around the knee.

Can I work out in the gym?

You can go to the gym and resume upper body workouts, as long as the knee is in a non-loaded position (you should be sitting, not standing, when using weights).

When can I return to work?

It depends on your occupation. It is never a mistake to take more time off in the beginning of your recovery, as it will give you time to focus on your knee. I recommend taking at least 6-8 weeks off for a single TKR, and 8-10 weeks for a double. Keep in mind that you may still be using a cane and it may be difficult to commute.

Can I travel?

In general, I like to see you before you fly. If you are traveling by car, you should be sure to take frequent breaks so that you don't feel too stiff when getting up. On an airplane, I like you to wear compression stockings (if within 6 weeks postop) and take a couple of walks during the flight. Having an aisle and bulkhead seat will help you get more space.

When can I kneel?

Kneeling will be painful for several months after TKR. It may take up to 1 year postop to regain the ability to kneel, and you should always kneel on something well-padded.