

What to Expect after Knee Replacement

Pain Control

Pain after joint replacement has multiple sources. A major contributor to pain is swelling. Consistent and constant elevation of the operative extremity above the heart will reduce swelling. Placing your leg on a chair or stool is usually not enough right after surgery. We recommend placing a sofa cushion, towels, or pillows under the foot of your mattress to keep the leg above the level of the heart. Having your leg down in a dependent position will increase swelling and pain. Additionally, the application of ice may also offer relief. Please apply ice in 30 minute intervals while awake. Insure that your skin is protected from direct contact with the ice and never fall asleep with ice on your skin as it may result in frostbite.

Please use the listed pain medications in this priority (e.g., Tylenol, anti-inflammatory, Ultram, Neurontin, narcotics) for maximal pain relief and minimal systemic side effects. As your pain improves, please wean yourself off these pain medications using the opposite priority (e.g., narcotics, Neurontin, Ultram, anti-inflammatory, Tylenol).

1. **Acetaminophen (Tylenol)** 1,000 mg by mouth four times daily
NOTE: Do not take more than 4,000 mg in a 24-hour period
AVOID: History of liver disease
2. **Celecoxib (Celebrex)** 100 mg by mouth twice daily
NOTE: Do not take more than 400 mg in a 24-hour period
AVOID: History of kidney disease or serious cardiac events
3. **Tramadol (Ultram)** 50 mg by mouth four times daily
NOTE: Do not take more than 400 mg in at 24-hour period
AVOID: Psychiatric Medications (i.e., SSRI)
4. **Gabapentin (Neurontin)** 300 mg by mouth three times daily
NOTE: Do not take more than 2,400 mg in at 24-hour period
5. **Oxycodone (Roxicodone)** 5 mg by mouth every 4 hours
Note: This medication is responsible for many uncomfortable side effects, including drowsiness, fatigue, nausea, vomiting, and constipation

Medications to Control Side Effects

1. **Omeprazole (Prilosec)** 40 mg by mouth daily while on anti-inflammatory
2. **Odansetron ODT (Zofran ODT)** 8 mg by mouth up to three times daily for nausea
3. **Docusate (Colace)** 200 mg by mouth twice daily while on narcotics

Wound Care

You may need to return to clinic to have sutures/staples removed. If you have dissolving sutures, you do not. You are free to shower at home, if your wound is dry and without drainage for 24 hours. Please do not use soap. Let the water run over the wound and pat it dry. Refrain from touching, rubbing, or massaging your wound. If you have a cast or brace, please refrain from adjusting the cast/brace yourself, placing objects inside the cast/brace to scratch, or getting your cast/brace wet. Small amounts of liquid (e.g., less than 8 ounces (about the size of a can of soda) can be blow dried **without** using heat. New pain that develops inside your cast/brace should be reported to Dr. Amanatullah's Office at (650) 723-5643.

When there is no scab on the wound and only a scar remains, it is safe to immerse your wound in water (e.g., bath, pool, hot tub); to apply creams, salves, or lotions to your wound; and rubbing or massaging your wound. Application of vitamin E or other over-the-counter products can help reduce the appearance of the scar. Application of SPF 50 or greater sunscreen to your scar can prevent discoloration and reduce the appearance of the scar once there is no scab on the wound and only a scar remains. Scar massage with or without lotion can help to desensitize the surgical area.

Blood Clots

After leaving the hospital, you should continue your anti-coagulant (e.g., Aspirin, Xarelto) for 6 weeks as ordered to prevent blood clots. It is common to have swelling in your leg for up to one year after surgery. New swelling in operative leg that does not resolve with 30 minutes of elevation and/or any difficulty breathing should be reported to Dr. Amanatullah's Office at (650) 723-5643.

Infection and Antibiotics

It is common to have redness and warmth near the incision for up to one year after surgery. However, swelling of the entire knee that limits motion, redness extending beyond the local wound area, persistent or new onset drainage from the wound, or a fever above 103°F/39.4°C may indicate an infection. If you are concerned about any of these symptoms, please call Dr. Amanatullah's Office at (650) 723-5643.

It is also important to remember that **anytime** you have a systemic bacterial infection it needs to be treated immediately with antibiotics to prevent infection of your joint replacement. This applies to the bladder, teeth, skin, etc. Colds and the flu are viral infections and do not require antibiotics.

Should you require any type of invasive procedure in the next two years such as colonoscopy, dental procedures, or genitourinary surgery you should be covered with antibiotics one hour before the procedure. Your doctor or dentist should be able to

prescribe the appropriate pre-operative antibiotic: Amoxicillin 2 g, Cephalexin 2 g, or Clindamycin 600 mg by mouth for oral procedures; Amoxicillin 2 g or Ciprofloxacin 500 mg by mouth for gastrointestinal or genitourinary procedures.

Follow-up

We will see you at two weeks and six weeks after surgery to check in on your progress. We want to know how your pain is coming along, what medications you need for pain, how your wound is looking, your range of motion (knees only), how far you are walking, if you need an assistive device (e.g., cane, stick, crutch, walker), and answer any questions. These visits can be done via the telephone if you prefer. You should see Dr. Amanatullah for at three months, one year, then two years, and every five years after surgery. You will have x-rays at each visit and new instructions may be given at each appointment based on your progress. If any questions or concerns arise, please feel free to contact Dr. Amanatullah's Office at (650) 723-5643.

Expectations Video

<http://stanfordhealthcare.org/medical-treatments/k/knee-replacement/what-to-expect.html>

Note: In general, Dr. Amanatullah does **NOT** use drains, continuous passive motion, knee immobilizers, patient controlled anesthesia or intravenous pain medications, or place a urinary catheter. Your planned follow-up will be 3 months, not 6 weeks, after surgery.

Exercises After Knee Replacement

A continuous passive motion (i.e., CPM) machine inside the hospital and/or formal physical therapy outside of the hospital are **NOT** required after routine knee replacement. Do not allow anyone to move your knee during physical therapy; you should move it under your own power. There are three simple steps you can do at home to regain the motion and strength of your knee.

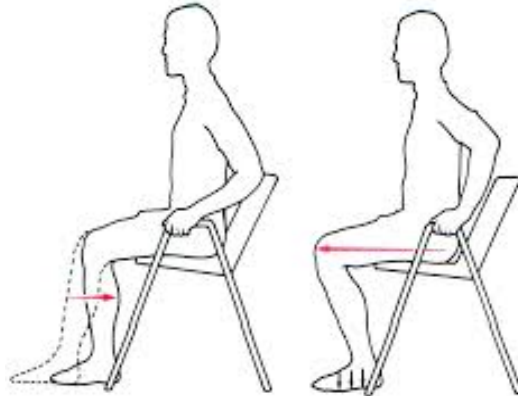
1) Bend Your Knee

This will be hard at first because of swelling and bleeding in the knee. Do not push it excessively in the first week or two. After two to six weeks, there is a race between mobility of your knee and scar formation in your knee. Now is the time to push it, if needed. Everyone is different, but our expectation is that you will have more than 90 degrees of bend at your knee six weeks after surgery. If this is not the case please notify Dr. Amanatullah's office at (650) 723-5643. Your ability to bend your knee will continue to improve for a year (see phases of recovery).

Knee Flexion

Phase 1: Sit in a chair and bend your knee toward you.

Phase 2: Scoot yourself forward to increase the bend of your knee. A rolling chair may be helpful.

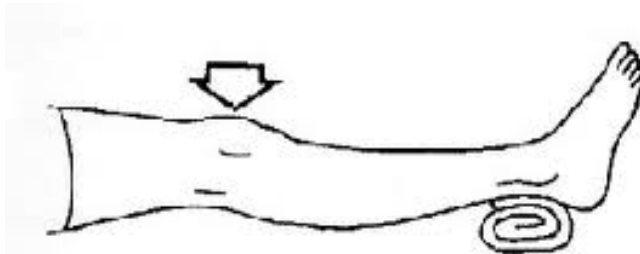


2) Straighten Your Knee

This will also be hard at first because of swelling and bleeding in the knee. It is OK to push your knee in this direction. After two to six weeks, there is a race between mobility of your knee and scar formation in your knee. Everyone is different, but our expectation is that your knee will be straight two weeks after surgery. If this is not the case please notify Dr. Amanatullah's office at (650) 723-5643. Your ability to straighten your knee will continue to improve for a year (see phases of recovery).

Knee Extension

Phase 1: Place a towel or pillow under your heel and allow your knee to rest/sag until the space below. You can facilitate this with some gentle downward force using your hands.



Phase 2: Stabilize your body against a wall or dresser. Place the operative knee in a bent position slightly behind you. Straighten then knee by gently bending forward at the waist.

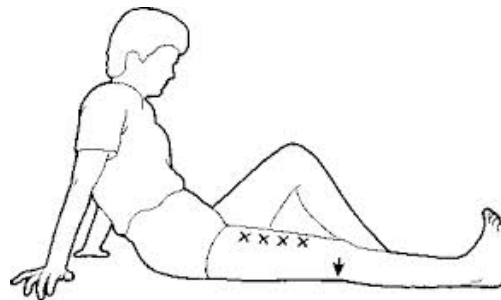


3) Strengthen Your Quadriceps Muscle

This will also be hard at first because of swelling and bleeding in the knee that will inhibit the quadriceps muscle. The best exercise for your knee is **WALKING**. Please use the appropriate ambulatory assistive device (e.g., cane, stick, crutches, walker) for your level of function. With time and practice the function of this key muscle group will return. Performs these exercises two to three times a day until you are walking pain free without the use of an ambulatory assistive device.

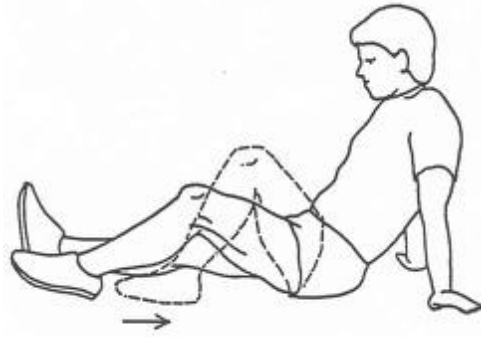
Quad Sets

The operative leg is flat and the thigh muscle is repetitively contracted to push the knee into the table/bed.



Heel Slides

The operative leg is flat and knee is flexed toward the chest keeping the heel on the table/bed.



Straight Leg Raises

The operative leg is flat and entire leg is lifted off the table/bed at the hip keeping the entire leg straight.



Weight Bearing After Knee Replacement

You may bear weight as tolerated. This should be done initially with a **both arm support device**, like a walker or two crutches, as instructed. You can transition to a **single arm support device**, like a cane, one crutch, or walking stick, when you are able to put all of your weight on your operative leg and ambulate in a pain free manner; this may take one to six weeks, everyone is different. You may discontinue the use of a cane when you can walk without a limp.

Avoid Falling After Knee Replacement

Initially do not feel like you have to do everything. Ask for help and request support. Even if you feel good, remember **you just had surgery!** Your leg may fatigue quickly leading to weakness and limping, so there may be a period of time where you feel strong enough initially, but still need to use the appropriate assistive device to avoid falling when you fatigue.

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|| **Proper Use of a Cane** ||
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|| Use a cane in the hand **opposite** to the operative leg. This will help coordinate the ||
|| function of your hip and knee preventing the development of a limp. You should move the ||
|| cane when you step with your operative leg. ||

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|| **Driving After Knee Replacement** ||
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You may resume driving once you are no longer using a walker, are off all narcotic pain medications, and able to press firmly on the brake without pain. This may take between two and six weeks for a primary joint replacement.