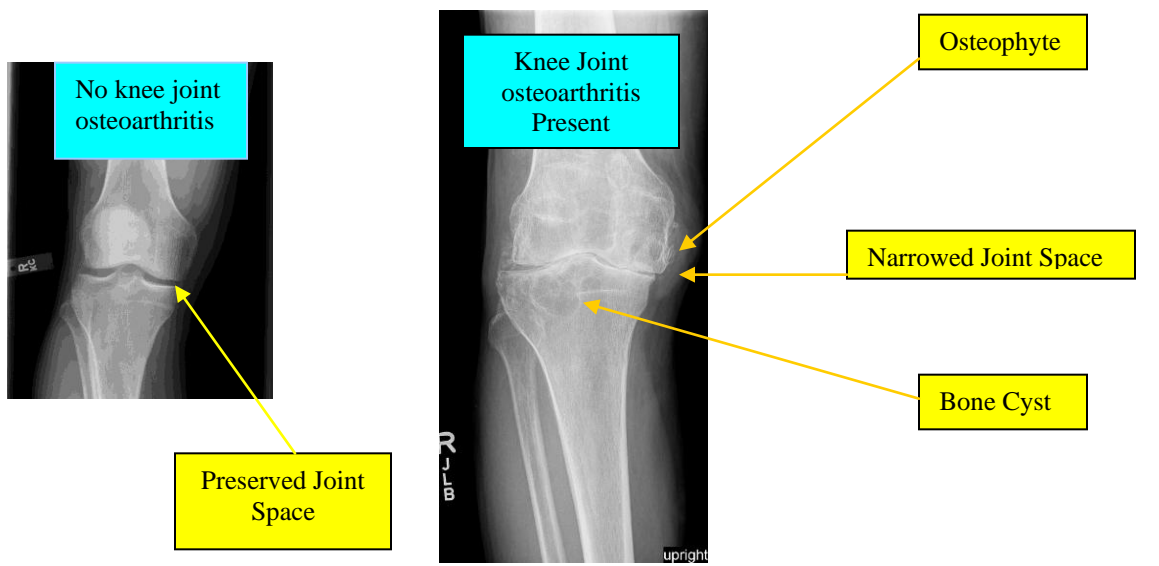


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 Patient Information Sheet: Total Knee Replacement

This is a general information packet for patients undergoing Total Knee Replacement.

Osteoarthritis (OA) is a degenerative disease of joints caused by a breakdown and eventual loss of articular cartilage. Articular cartilage lines the bony joint surfaces and allows the joint to move in a near frictionless environment. There are many reasons for cartilage loss including, wear, trauma and genetics. Once the knee joint cartilage is worn away, patients start to experience pain, stiffness and loss of function. The knee joint may assume an altered alignment such as a bowlegged or knock-kneed position.

Osteoarthritis is diagnosed primarily by history and physical examination. The knee will be assessed for loss of range of motion, joint space narrowing, presence of osteophytes (bone spurs) and changes in alignment. X-rays are utilized to reveal the osteoarthritic changes to the knee joint.



Medical management for osteoarthritis consists of weight loss, physical therapy, activity modification, viscosupplementation and cortisone injections. Once these medical treatments have been exhausted Total Knee Replacement (TKR) is recommended.

Total Knee Replacement involves resurfacing the knee joint with both metal and plastic. This produces a smooth well gliding knee joint. Low impact activities such as golf, swimming, bicycling and doubles tennis are permitted after knee replacement surgery. High impact activities that involve running and jumping such as basketball should be avoided as they may decrease the lifespan of the implant. Most TKR last 15-20 years until revision is required

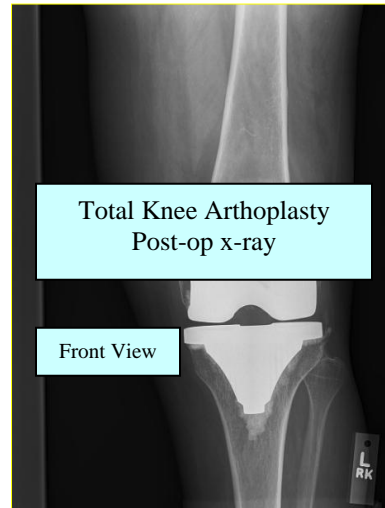
As with any surgical procedure, there are risks to total knee replacement. These risks include but are not limited to infection, blood clot (DVT), bleeding, stiffness and nerve injury



Pre-Surgery:

Before surgery, patients are instructed to continue to be as active as the knee permits. The following are specific instructions leading up to total knee replacement surgery.

- Pre-op testing will take place at the New England Baptist Hospital. Our office will make this appointment with you when your knee replacement is scheduled.
- New England Baptist Hospital offers a total knee replacement preoperative class for patients and family members please call 617-754-5565 to register.
- An appointment will also be made for you to donate 2 units of blood. If needed, the blood will be available for you after the surgery
- Anti-inflammatory medications such as ibuprofen or aspirin and Tylenol must be stopped 10 days prior to surgery. Utilize ice and elevation to control pain and swelling during this period
- On the night before surgery, do not eat after midnight (no chewing gum or lozenges)
- On the morning of surgery you may take your daily pills with a sip of water
- Your surgery time will be confirmed the day before the surgery by the New England Baptist Hospital The original time may be adjusted secondary to patient needs
- Patients should bring their MRI and/or X-rays to the surgery



Surgery:

The length of the procedure is approximately 2 hours. Your nurse will bring you into the pre-op area where you will have an IV placed and met with your anesthesiologist. The anesthesiologist will discuss the different types of anesthesia. General anesthesia is often utilized to assure a comfortable surgery. This means that you will be “asleep” and completely unaware of the surgery until you wake up in the recovery area.

Post-Surgery:

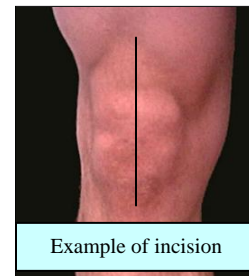
After the surgery is completed, you will awaken in the operating room and be moved to the recovery area. Once in recover you will meet your recovery nurse who will take care of you until being transferred to the hospital unit. Expect to stay in the hospital for 3-5 days. Upon discharge from the hospital some patients either go home and receive home based physical therapy or attend a rehabilitation facility. This decision will be made in the hospital.

Pain Control:

Femoral Nerve Block: Upon your consent, a femoral nerve block will be provided by an Anesthesiologist for pain control. This consists of an injection of Marcaine (like Novacaine) into the region around the femoral nerve and may decrease leg pain for up to 12 hours.

PCA pump: Shortly after you are transferred to the hospital unit, you will be provided a pain button that will deliver a set amount of pain medication at your control. This pump will be discontinued the next morning

Oral pain medicine: Oral pain medicine will be provided once the PCA is discontinued on post-op day one. A pain pill will be selected that best controls your pain. A pain medication prescription will be provided to you prior to discharge. You may take the prescribed medication as directed. You should expect to experience minimal to moderate knee discomfort for several days and even weeks following the surgery. Pain is extremely variable and some patients require more medication than others.



Example of incision

- Coumadin or Aspirin will be utilized for blood clot prevention. If coumadin is used, your blood will be drawn daily in the hospital and twice a week after discharge. A visiting nurse will come to your house and provide this service. The New England Baptist Hospital Coumadin Hotline (617 754-6754) nurse will instruct you daily on the amount of coumadin to take.
- IV antibiotics will be provided for 24 hours after completion of the surgery
- Ice is utilized to decrease pain and swelling. During the first several post-op days utilize as much ice as possible. Keep ice on for 20 minutes every 2-3 hours and following exercises.
- A CPM (Continuous Passive Motion) or a Camoped unit will be provided both in the hospital and at home. These machines are utilized to increase knee range of motion. Your physical therapist will explain how to use this equipment
- Physical Therapy: You will receive PT while at the hospital. PT will work on ambulation, functional mobility and leg exercises. You should be comfortable walking independently with crutches before leaving the hospital. You will be able to put as much weight as tolerated on your knee. You should participate in the home exercise program provided until physical therapy is started. A physical therapist will come to your house to continue to progress the strengthening, range of motion and functional gains achieved while in the hospital.
- If you notice drainage from the incision past post-op day 5 please contact Dr. McKeon's office.
- Skin numbness often occurs around the incision. This usually returns but may be permanent
- You may shower on post up day two. Keep incision covered when showering for up to four days post-op
- Eat a regular diet as tolerated and please drink plenty of fluids.
- First post-op appointment is 4 weeks after the surgery. Call the office once you arrive at home to schedule this.



CPM Unit



- Please call the office if you have any problems or questions.
- You may drive once you establish full control of your extremity (able to perform a straight leg raise, etc.). If your right knee was operated on, this may take a one –two months to achieve
- Please call the office once you arrive at home to schedule this.
- Call office for Temperature >102 degrees, excessive swelling, pain or redness around the incision sites.
- Maximal improvement from surgery can be up to a year; typically patients are extremely mobile at 6-8 weeks.
- Plan at least 3-4 weeks away from work or school. Utilize this time to decrease swelling and participate in your home exercise program. You may resume work once the pain and swelling resolves (this varies based on job activity).

Early Post-operative Exercises

Start the following exercises as soon as you are able. You can begin these in the recovery room shortly after surgery. You may feel uncomfortable at first, but these exercises will speed your recovery and actually diminish your post-operative pain.

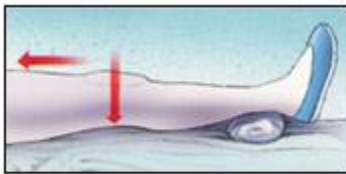
Quad Sets - Tighten your thigh muscle. Try to straighten your knee. Hold for 5 to 10 seconds. Repeat this exercise approximately 10 times during a two minute period, rest one minute and repeat.



Straight Leg Raises - Tighten the thigh muscle with your knee fully straightened on the bed, as with the Quad set. Lift your leg several inches. Hold for five to 10 seconds. Slowly lower. Repeat until your thigh feels fatigued.



Ankle Pumps - Move your foot up and down rhythmically by contracting the calf and shin muscles. Perform this exercise periodically for two to three minutes, two or three times an hour in the recovery room. Continue this exercise until you are fully recovered and all ankle and lower-leg swelling has subsided.



Knee Straightening Exercises - Place a small rolled towel just above your heel so that it is not touching the bed. Tighten your thigh. Try to fully straighten your knee and to touch the back of your knee to the bed. Hold fully straightened for five to 10 seconds. Repeat until your thigh feels fatigued.



Bed-Supported Knee Bends - Bend your knee as much as possible while sliding your foot on the bed. Hold your knee in a maximally bent position for 5 to 10 seconds and then straighten. Repeat several times until your leg feels fatigued or until you can completely bend your knee.