**Robotic Total Knee Replacement**

**Surgery Packet**

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**Why Am I Having A Total Knee Replacement?**

Patients who are preparing for total knee replacement typically have pain while ambulating, difficulty going up and down stairs, and complain that their knee gives way. The pain that is coming from your knee is due to the loss of cartilage in your knee. The term *knee arthritis* refers to the loss of cartilage from the knee. Cartilage is the bearing surface for your knee. When cartilage erodes from the ends of your knee, you have bone rubbing on bone. The three areas of the knee that are affected by arthritis is your patella (the knee cap), tibia, and femur. Below is an illustration of a healthy and arthritic knee.

Conservative treatment for knee arthritis includes anti-inflammatory medication (e.g. Ibuprofen, Aleve, Mobic), injections such as cortisone or hyaluronic acid, and physical therapy. When these conservative measures fail to relieve pain, knee replacement is definitive treatment.

Figure Arthritic Knee

Figure Healthy Knee

**What Is Total Knee Replacement (TKR)?**

Total Knee Replacement, also known as total knee arthroplasty, is surgical procedure performed to resurface the knee joint. TKR involves a surgical incision over the front of the knee, and an incision into the knee joint. After exposing the knee joint, I will make cuts over the femur, tibia, and patella. I will cement implants that cap the surfaces of the femur, tibia, and patella. After a knee replacement, a patient does not have arthritis because the joint has been resurfaced.

**What Is Total Knee Replacement (TKR)?**

Robotic Total Knee replacement involves the use of Stryker Mako Robot to make surgical cuts on your femur and tibia to correct the alignment of your knee and for placement of implants. Prior to surgery, you will be going to the hospital to get a CT scan of your knee so that I can plan your surgery on the computer.

**What Are The Risks Associated With Total Knee Replacement?**

The risk of total knee replacement include damage to nerves, arteries, and veins in the area of surgery. There are risks of infection, development of blood clots, and stiffness postoperatively. With any surgical procedure, there is a risk of anesthesia which can include death.

**Going To The Dentist After Total Knee Replacement?**

I recommend no dental work for 6 months after surgery to decrease risk of infection of hip prosthesis post total knee replacement. After 6 months, whenever you visit your dentist, please let he or she know that you have a prosthetic joint and you will be given antibiotics to be taken 30 minutes to cleaning or any dental procedure. The oral cavity is well vascularized and bacteria from the mouth can travel to your joint replacement and infect it. Taking antibiotics prior to dental procedures can reduce this risk, so I always recommend taking antibiotics prior to any dental procedure.

**Can I Have an MRI after Total Knee Replacement?**

Yes.

**So, I am Scheduled for Surgery, What’s Next?**

* Preoperative tests include lab work, chest x-ray, and electrocardiogram within 30 days of surgery
* Preoperative Exam with your primary care physician within 30 days of surgery
* Preoperative Exam by myself within one to two weeks of date of surgery
* No anticoagulants, such as Plavix, Xarelto, Ibuprofen, etc, for 10 days prior to date of surgery
* Nothing to eat or drink after midnight on night prior to surgery. However, you may have your medications with a sip of water
* Prior to your surgery date, you will need to go to the hospital admitting department for preadmission
* If you feel sick or have an active infection, ***please call my office at 310-644-1151***. Total knee replacement is an elective procedure and cannot be done if you have an active infection.

**Day of Surgery: What Should I Expect?**

Our staff will have given you the time of your surgery, and you will need to come to the hospital approximately one and a half hours prior to surgery. You will go to the admitting department where a hospital staff member will lead you to the preoperative area. You will change into a gown and leave your valuables with your family. You will need to remove any piercings and notify hospital staff of any metallic implants that you may have. If you have a pacemaker, please alert your nurse. A nurse will be inserting an IV. The anesthesiologist will come by and discuss with you regarding an adductor canal block and spinal anesthesia. An adductor canal block is a form of regional anesthesia that can keep your knee pain free for up to three days if a catheter is inserted. Spinal anesthesia is another form of regional anesthesia where an anesthesiologist injects pain medication into lower back to make legs completely anesthetized for several hours while the surgery is being performed.

I will meet you in the preoperative area where I will again discuss the procedure and mark the leg that is having surgery. I will confirm the site of surgery with you. Soon thereafter, you will be taken into the operating room, where the procedure will be performed.

After surgery, you will go to the recovery room where you will be monitored till the spinal anesthesia wears off. Your pain may be minimal due to spinal anesthesia and adductor canal block. You may even start physical therapy in the recovery room. After leaving the recovery room, you will go to your room in the hospital. The physical therapist will come by to teach you how to walk. You will work on walking on the floor at the hospital, and you will also learn how to climb stairs. I recommend working on quadriceps strengthening exercises, such as straight leg raises, while in bed. The physical therapist will make an assessment on when you can go home or if you may need additional rehabilitation at rehabilitation center. While in bed you will have a continuous passive motion (CPM) machine which will help bend your knee in bed.

**Postoperative Day One**

On the first day after surgery, you will be working with physical therapy. I will come by to see you and take out the drain. A phlebotomist will be by to draw blood work from you. Based on physical therapy recommendation, you may be able to go home. Prior to leaving home, you will have an ultrasound of both your legs to ensure that there is no blood clots prior to leaving the hospital. You will be discharged on Lovenox for 14 days and pain medication.

**At Home**

At home, you will need to continue to work on your knee range of motion. You will either have home physical therapy or outpatient physical therapy sessions scheduled. It is important to walk while you are at home and perform knee range of motion exercise. Wound care is equally important. I recommend **daily** betadine to dry dressings. You will either get dressings at the hospitals or you can purchase betadine, gauze, and tegaderm from your local pharmacy. If there is some issue with wound care or physical therapy, ***please call my office at 310-644-1151***.

**Postoperative Instructions**

1. Wound Care: After postoperative day 2, your dressing needs to be changed. To change the dressing with sterile technique, wash your hands, wear gloves, and remove the current dressings. Apply betadine to sterile gauze. Then, cleanse wound by rubbing betadine-soaked gauze on the wound. Then, apply gauze directly over wound, and secure gauze with tape.
2. Showering: Keep the wound dry till 2 days after staples are removed. Staples will be removed 10-14 days after surgery
3. Blood thinners: You will be issued a prescription for lovenox with your discharge medications. Please take lovenox once daily as directed for 2 weeks after surgery. The only exception to this is if you were on prior anticoagulants, such as Plavix or Xarelto. In this case, I will have you resume this anticoagulant on discharge. Under no circumstances take two anticoagulants at the same time as this can unnecessarily increase your risk of bleeding. If you have questions, do not hesitate to call me.
4. Physical therapy: If you are discharged home from the hospital, a home health physical therapist should be visiting you 3 times a week to work on knee range of motion and gait training. If the therapist has not contacted you, **please call my office**. If you do not have therapy immediately after surgery, you could lose range of motion with your knee. If you have been discharged to a rehabilitation center, you should have therapy daily. You will be working a continuous passive motion (CPM) machine after surgery whether you are at home or at a rehabilitation center. The initial settings should be 0-90 degrees advance 10 degrees daily as tolerated.
5. Postoperative Appointment: If you do not have a postoperative appointment please call my office to have one setup 10-14 days from surgery.
6. Pain Medications: After being discharged from the hospital, you will be issued a prescription for a narcotic pain medication. If you notice that your pain is not being relieved by the pain medication prescribed or you are running out of pain medication, please contact my office during business hours prior to Friday afternoon as new pain medications will not be issued after hours or during the weekend. Narcotic prescriptions cannot be refilled over the phone and will not be refilled on weekends. Our office routinely prescribes narcotic pain medication for 4-6 weeks after surgery. If you require pain medication beyond this interval you may be referred to your PCP or to the Pain Clinic for further evaluation.
7. Pain catheter: if you are discharged home with an adductor canal block, you may pull the pain catheter from your leg on postoperative day 3. Please place a bandaid over catheter site.
8. Please call Dr. Chandran's office, your PCP or report to the ED if you have any nausea, vomiting, fever greater than 101.4, swelling, chest pain, shortness of breath, increased pain/redness/drainage from your incision sites, numbness/tingling, or any other concerning symptoms.
9. Activity: You can put as much as weight as you can tolerate on your knee. You may wean off supportive devices, such as walker, cane, etc, as tolerated and as stated by your physical therapist.
10. Postoperative swelling: After a knee replacement, both your legs can swell. This swelling can continue for several months after surgery. If the swelling is painful, please contact my office and go to the emergency room because that could be a symptom of a deep venous thrombosis.
11. Postoperative shortness of breath: If you experience shortness of breath, this could be a symptom of pulmonary embolism. Other symptoms of pulmonary embolism include rapid pulse, sweating, and chest pain that worsens with inspiration, coughing up blood, lightheadedness, feelings of apprehension. If you experience any of these symptoms call the office or go to the closest ER.