



# Cartilage Repair Center

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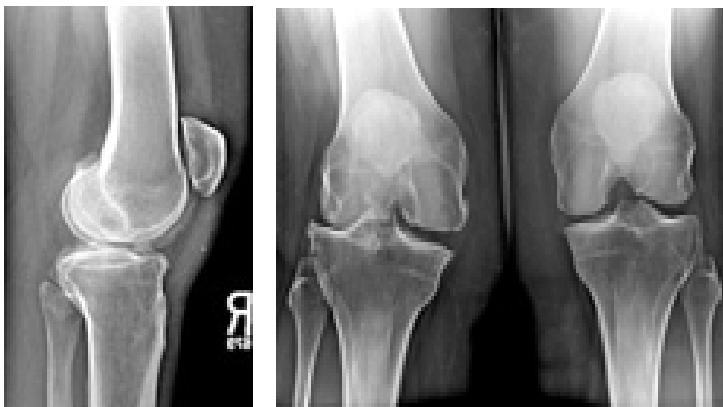
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## What is a Total Knee Replacement (TKR)?

A total knee replacement is a surgical procedure used to treat patients with moderate or severe, “bone on bone” osteoarthritis of knee. This is the joint surface between the “shin bone” (tibia) and the end of the “thigh bone” (femur), as well as between the “knee cap” (patella) and the femur. Total knee replacement is a complete resurfacing of the diseased articular surfaces of the knee joint, and replacement of the diseased surfaces of the knee joint with metal components and a polyethylene spacer.

## Who is a candidate for a Total Knee Replacement?

Patients who are candidates for a TKR are those with moderate-to-severe osteoarthritis of the knee, who have failed conservative/non-operative treatment. These treatments include weight loss, physical therapy, braces, ambulatory aids, and anti-inflammatory therapy. Patients with moderate-to-severe arthritis often present with symptoms of knee pain with activity that may improve with rest, swelling, stiffness, and decreased mobility. Patients may also experience a crunching or grinding sensation when the knee moves. Total knee replacements are most commonly performed in patients age 50 and older. We do, however, perform this procedure in other patient populations based on medical necessity. In order to determine whether or not you are a candidate for a TKR, your surgeon will first obtain plain x-rays to assess areas of bone on bone osteoarthritis. Your surgeon may then have you get an MRI to evaluate all other areas of your knee.



## What will happen during my surgery?

Your surgery will be performed using either a general anesthetic or a spinal anesthetic depending on your and your surgeon's preference. During your surgery the surgeon will make an open incision along the front of your knee running up and down your leg. Through this incision the surgeon will be able to access the damaged area of your joint. The femoral and tibial side of your knee will be resurfaced with a metal implant made from cobalt chrome. The back side of your patella will be resurfaced with a "button" made of polyethylene plastic. All of these components are held in place using cement. A polyethylene spacer will be placed between the tibial and femoral components. Once the cement is hardened and your implant is well fixed your surgical incision will be closed. This will be done using all subcutaneous or "dissolving" stitches. This means that you will not have any stitches that need to come out.



## What can you expect post-operatively after a Total Knee Replacement?

When you awake from surgery depending on your surgeon you may have a brace on your leg that will keep your leg straight. It will be important for you to wear this brace at all times when you are up and about. You do not have to wear your brace to sleep. You will also be given crutches. You will be able to fully weight bear on your operative leg immediately following surgery however, it is a good idea to use your crutches for support as your muscles will be weak following surgery. You will use your crutches anywhere from 1-2 weeks depending on your muscle strength. Depending on your surgeon and how you are feeling you will spend anywhere from 1-3 nights in the hospital. Do plan on spending at least one night. This is in order to make sure that you are comfortable and that your pain is well controlled. This time in the hospital also allows you to also meet with physical therapy and get some early exercise and crutch training. You will begin working with a physical therapist in the first few days following surgery. You can elect to have a visiting physical therapist come to your home for the first few weeks OR you may make arrangements at an outpatient physical therapy office. After surgery you will also be on a blood thinning medication. The type of medication is dependent on various factors, and will be patient-specific. This is done as a preventative measure for all of our patients to help prevent blood clots following surgical intervention.

On average, you will be required to take this medication for a period of **3 weeks time**. When you go home from the hospital a visiting nurse may be coordinated for you.

### **How will my pain be controlled after surgery?**

Immediately following surgery during your inpatient stay your pain will be controlled using IV pain medication. During your inpatient stay one of the goals of your care will be to transition you from IV pain medication to oral pain medication. This is often achieved by day one or two after surgery. You will be sent home from the hospital with a prescription for oral pain medication to be filled at your local pharmacy. The most commonly prescribed post-op pain medications include Oxycodone, Norco, or Dilaudid. Most patients will require regularly scheduled doses of pain medication (every 4-6 hours) for the first two to three weeks. Following week three you will begin to decrease your pain medication use to prior to physical therapy and prior to bedtime. Most patients will not require any pain medication past week 6-8. You will be provided with detailed instructions on how to obtain pain medication refills from your surgeon's office. This information will be provided to you with your surgical packet once a surgical date has been scheduled. It is important to know how to obtain your pain medication refills appropriately and in a timely manner.

### **When will I follow-up with my surgeon after surgery?**

Your first post-operative visit will be with your surgeon's Physician Assistant. **This appointment will take place 2 to 3 weeks after your surgery.** The appointment is critical for checking your incision healing and range of motion as well as to answer any questions you may have in the first few weeks following surgery. You will then follow-up with your surgeon 6 weeks after surgery (if necessary), **12 weeks after surgery, 6 months after surgery, and one year after surgery.** After the first year you will follow up with your surgeon on a yearly basis.

### **What restrictions will I have following this procedure?**

Once you have fully recovered from your surgery, you will return to activities as tolerated. You will still be able to be very active following surgical intervention. Approved activities include things such as walking, swimming, biking, elliptical trainer, golf, doubles tennis, hiking, skiing, and skating.

## Frequently Asked Questions:

### 1) **What are other common symptoms after total knee replacement surgery?**

**Numbness** – the area to the outside of your knee cap and the incision will be numb. Due to the position of the sensory nerves running from the inside to the outside of the knee, they are cut when we make the incision expose the knee. This is **normal**, and may or may not resolve, but will continue to improve over the next 12 months.

**Swelling** – Everyone heals differently post-operatively. It is normal for you knee to be swollen, and maybe even bruised up to 4 weeks post-operatively. In most people the swelling begins to subside in 4 weeks. In some people, the knee will remain swollen up to 3-6 months. If the swelling doesn't hinder your range of motion, and isn't painful, it is not a concerning sign.

**Stiffness** – stiffness due to pain is normal post-operatively, and can be improved with early movement and physical therapy. You will be encouraged to move your knee as much as you can tolerate, and you will receive physical therapy in the hospital. A stiff knee is a painful knee, and the more you move it, the better your overall outcome will be.

- 2) **When will I start physical therapy?** You will start physical therapy beginning the day after surgery in the hospital this will be continued once you are discharged either on an in-home basis, or at an outpatient clinic.
- 3) **What will I do during physical therapy?** The primary goal of physical therapy is to initially increase ROM so that you do not get stiff following surgery. You will then begin to work on increasing strength after surgery. You will be provided with protocols for each phase of the post operative period.
- 4) **I've heard about a CPM machine, what is this and will I use one?** A CPM machine is a Continuous Passive Motion machine that is used following knee surgery to help patients regain range of motion. We will arrange for the CPM machine to be sent to your home for post-operative use.
- 5) **How long will I need to use my crutches?** Depending on how quickly your muscle strength returns you will likely only need to use your crutches for a period of approximately 1-2 weeks. You may come off your crutches sooner than 2 weeks if you feel comfortable to do so. You will transition to 1 crutch/cane for weeks 2-4, and then work your way to walking normally by week 4-6.
- 6) **When can I drive?** For patients undergoing right leg surgical intervention you may not return to driving until you have discontinued using your crutches (approx. 3 weeks). For patients undergoing left knee surgery that do not drive standard transmission vehicles you may return to driving between 1 and 2 weeks when you are no longer taking pain medication.

- 7) **When can I shower?** You may shower 5 days after surgery but may not submerge your incision in a pool, hot tub, bathtub, lake or the ocean for 3 weeks.
- 8) **When can I go back to work?** This will be different for each patient and depends largely on the type of work you do. Most patients who work in a sedentary position or desk work will be back to work by 6 weeks. Those patients who work in more labor intensive jobs may be out of work for up to 12 weeks.
- 9) **When can I resume my regular activity?** Return to regular activity depends highly on each individual patient's definition of regular activity. Non-impact activity such as walking, swimming, bike riding, and elliptical trainer can all be resumed by 3-4 months. Higher level activity such as hiking and skiing may require 6-9 months before they can safely be resumed.
- 10) **Will I need to stay in the hospital?** Most patients require a 1-3 night stay in the hospital.
- 11) **I don't like how narcotic pain medication makes me feel, can I take something else?** You may use Tylenol (acetaminophen) for pain control following surgical intervention. However, you should refrain from using any anti-inflammatory for the few months following surgery as it can slow the healing of your bone. These anti-inflammatory medications include medications such as Advil, Aleve, Ibuprofen, Naproxen, and Celebrex.
- 12) **How long do I take my anticoagulation medicine for?** Anticoagulation medicines prescribed are commonly Aspirin or Lovenox, and less commonly, Xarelto or Coumadin. Aspirin is usually 325 mg twice daily x 3 weeks. Lovenox is usually 40mg injected subcutaneously x 3 weeks. These medications are subject to change from patient to patient, and are evaluated on a case by case basis. Follow the instructions given to you when you are discharged from the hospital.
- 13) **Will I need antibiotics for dental procedures?** Yes, you will be given your first prescription for 2 gram Amoxicillin/Ampicillin, (1 gm Erythromycin if you have a penicillin allergy), one hour prior to any dental procedure. After that, your PCP or dentist can cover the prescription. Currently, we have you take the antibiotics for as long as you have a total joint.
- 14) **Who do I call if I have a question prior to my appointment?**  
If you have questions regarding your upcoming surgery you may call your surgeon's physician assistant. For Dr. Minas please call Kiet Le, PA-C at 617-732-9687, or Tim Bryant, RN, BSN at 617-732-9710.