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# SURGERY SPECIFIC INFORMATION Partial Knee Replacements

#### What caused my knee to become arthritic in this compartment?

Knees can become arthritic for a variety of reasons. Because they bear significant stress over the course of our life, some degeneration is simply the result of wear and tear on the knee, especially the cartilage. This can also be due to trauma to the knee, malalignment of the knee, or genetic predisposition.

#### What happens during a partial knee replacement surgery?

A vertical incision, is made in the front of the knee. Focusing on the compartment being replaced, the damaged bone and cartilage in the knee joint are removed and the worn ends of the bone are shaped to fit the implant, which is inserted and attached to the bones with cement. The exact type of implants used is called MAKOplasty for medial and lateral replacements, and Zimmer for the patellofemoral replacement. The implants are made of cobalt chrome and high molecular weight plastic. The incision is then closed with absorbable sutures and Dermabond, a surgical glue and tape. Unlike the total knee replacement (TKR), you will keep your ACL (anterior cruciate ligament), PCL (posterior cruciate ligament), and other compartments of your knee.

#### How long will my implants last?

The lifetime of the implants varies, depending on the patient's lifestyle and compliance with postoperative instructions, the fit of the implants, and, of course, chance. However, 90% of patients have functional implants 15 years after their partial knee replacement surgery. The reasons for failure include infection, implant instability, conversion to TKR, or fracture.

#### How long will I stay in the hospital?

This surgery is an in-patient procedure, meaning you will stay in the hospital after surgery. You will then be discharged home.

#### What are the possible risks and complications of surgery?

As with any surgery there is a risk of DVT, nerve damage, and postoperative infection. Specific risks and complications include but aren't limited to infection, fracture, post-op stiffness, hardware complications, and conversion to TKR if arthritis develops in the other compartments of the knee.

#### Do I need to attend a pre-operative education class?

No. The pre-operative education class provided is for TKR's only. For additional questions please reach out to our office. Additionally, you may be contacted by PA Tina Ramchandani, she is the HSS Clinical Care Coordinator for partial knee replacements, 646-714-6224.

# When can I drive? When can I go back to work?

You may not drive while taking the pain medication. Most patients can drive after 3-4 weeks, but it is very important that you make sure you have full control of your injured leg prior to returning to driving. The recovery time needed before returning to work varies depending on your type of work, but is at least 3 weeks for office work and 8 weeks for manual labor.

# Can I return to jogging, skiing, and other high-impact or contact sports?

If you comply with your physical therapy and post-operative instructions, achieving total muscle recovery, then there are no restrictions on any type of activity. However, studies have shown that, because the implants are mechanical devices, high loads cause them to wear out more quickly, resulting in a higher risk of needing a revision. You should avoid running activities.

#### Will I need antibiotics?

Yes. After surgery you will be given several doses of IV antibiotics in the hospital to prevent infection. Additionally, you will always need to take antibiotics prior to going to the dentist.

# Will I need to be on blood thinners after surgery?

During your pre-operative clearance at HSS, this will be discussed.

# What is the recovery period like?

- Brace
  - For patellofemoral replacement only, you will use a brace initially after the surgery.
- Weight bearing precautions
  - You will be able to put as much weight on the leg as comfortable while using an ambulation assistive device (walker, crutches, cane).
  - You will eventually wean off the assistive device once your Physical Therapist and doctor determine you have adequate strength and stability.
- Kneehab (quad stimulator)
  - The quadriceps muscle will become very weak and atrophied following surgery. To limit and prevent the extent of this disuse weakness, you will use the kneehab quad stimulator. This consists of a neoprene sleeve with electrodes that stimulates the quadriceps muscle to keep it in shape.
    - Use for 20 minutes twice daily for 6 months
- Physical Therapy
  - You will start formal PT in the hospital and continue when you are discharged. We <u>DO</u> NOT recommend PT in the home after discharge. It is better to go to a facility.
    - You will go 2x/week for about 3-6 months.
      - Prior to surgery, you should have an idea of the PT facility you plan to go to.
        Please contact the office for recommended PT offices.
    - Dedication and attendance to your sessions are critical to your recovery.
  - In addition to formal PT, do the following home exercises:
    - Quad strengthening: start with quad sets, then transition to straight leg raises
      - Quad sets: 3 sets of 10 performed four times a daily.
        - Sit or lie on your back with leg straight. Tighten your quadriceps muscle on the front of the thigh. Hold for 3 seconds, relax.
        - Straight Leg Raises: 3 sets preformed four times daily.
          - Lie on your back with leg straight, flat on the bed. Start by tightening your quads, lift your leg off the bed until your heel isn't touching it anymore. Lower your leg down. Repeat as tolerated, work up to 10.
      - Heel pumps: 3 sets preformed four times daily.
        - Sit or lie on your back with leg straight. Bend your foot up and down at your ankle joint, pumping the foot. Complete 10 pumps.

# **INSTRUCTIONS FOR IMMEDIATELY AFTER SURGERY:**

- Activity
  - Apply ice to your knee but keep the bandages dry
  - Place a rolled up towel under the <u>heel</u>. This will help achieve full extension of the knee. **Avoid pillows under the knee**.
  - For the first 1-2 weeks after surgery, the **most important goal is to regain the ability to fully straighten the knee**. Initially, it is much more important than bending the knee.
  - You can put full weight on your knee.
  - Start your home exercise program and formal PT.
- Bandage and Incision Care
  - The bulky ace wrap dressing will be removed while you are in the hospital. You may go home with a small dressing over the knee, or no dressing at all.
    - If you have a dressing on the knee, you may remove it 2 days after surgery. For further questions, contact the office.
  - Dermabond is a surgical glue and tape, this, along with absorbable sutures, is keeping the incision closed. Do not touch or peel the Dermabond.
  - Once home, keep the incision clean and dry. Do not get the incision wet. While showering, apply saran wrap over the knee and incision for the first 2 weeks. Do not apply creams, ointments, or lotions to your incisions.
- Showering
  - You may shower once you are home. Wrap the leg in saran wrap to provide waterproof barrier. Continue the waterproofing for 2 weeks.
  - **Be careful in the shower.** Use a shower chair, or if you have a bathtub-shower, you can sit in the tub. If you take a bath, keep the leg out of the bath. The leg should not be submerged.
- Pain Management and Cold Therapy
  - See <u>POST-OP PAIN MANAGEMENT</u> handout. By 2-3 weeks after surgery, you should only be taking the pain medication at night and before physical therapy.
- Normal sensations after surgery
  - o Pain
  - o Swelling and warmth lasting 6-8 weeks after surgery
  - Small amounts of bloody drainage for first few days
  - Numbness around the incision area
  - Bruising
  - Low grade temperature less than 100.8 F lasting up to a week after surgery.
  - IF ANY OF THE FOLLOWING OCCUR, CONTACT THE OFFICE IMMEDIATELY
    - Calf pain in either leg
    - Change is noted to your incision (i.e. increased redness or drainage)
    - Temperature greater than 101.0
    - Fever, chills
    - o Sutures become loose or fall out and incision becomes open
    - o Drainage after the first 3 days
    - o Increased pain unrelieved by medication or measures mentioned above.
- Post-op visit
  - Please ensure that you have a post-op visit scheduled for 4-6 weeks after surgery.
  - Please arrive 30-45 minutes prior to your appointment time to obtain X-rays.