Knee Replacement

Preoperative Information Session

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Topics
Class length: approx 1 ½ hours

- Review Handouts
- Anatomy of Knee
- Understanding Knee Replacement Surgery
- Anesthesia
- Recovery in Hospital
- Pain Management
- Physical/Occupational Therapy
- Risks of Surgery
- Incision Care
- Preparing for Surgery
- Discharge Plan
- Contact Phone Numbers
- Prescription Instructions
Anatomy of Knee

- Femur
- Tibia
- Patella
Understanding Knee Replacement Surgery

Preparing the Femur & Placing prosthesis

Preparing the Femur

Placing the Femoral Component
Understanding Knee Replacement Surgery

Preparing the Tibia
Understanding Knee Replacement Surgery

Placing Tibial Prosthesis (Metal & Plastic Spacer)
Understanding Knee Replacement Surgery

Preparing the Kneecap (Patella)
Completed Knee Replacement
Completed Knee Replacement

Before

After
Partial Knee Replacement

Unicompartmental  Patellofemoral  Bicompartmental
Understanding Knee Joint Replacement Surgery

• Your KNEE implants are cemented.
• You will be able to put full weight on it after surgery.
Recovery in Hospital

- Operation takes about 1-2 hours
- Recovery room for 3-4 hours
- Hospital stay is 1 night on average
- Physical Therapy (PT) will see you the 1st day after if your surgery.
  - Occupational Therapy (OT) will see you the 1st or 2nd day after surgery
  - Nurse Case Manager will discuss discharge needs and help with transition home
Anesthesia

• Most patients receive “Regional Anesthesia”
  – Nerve Block in your Spine
  – IV medicine to keep you asleep and comfortable

• Rarely patients require “General Anesthesia”
  – Anesthetic gases through a breathing tube (intubation)
  – Heavier sedation

  ▪ Adductor nerve catheter– placed in thigh before surgery to help numb leg

  ▪ What type of anesthesia you need is based on your medical and surgical history which is reviewed at the Prepare appointment
    • The final decision is between the patient, and the anesthesiologist before the surgery.
Pain & Pain Scale

- We will give you sufficient pain medicine and maintain your safety.

- Pain Scale
  - 0 means no pain and 10 means the worst pain you have ever known or felt.
  - Our goal is for your pain to be managed so you can do your physical therapy.
  - Don’t wait to ask for pain medicine, Ask before you become too uncomfortable so you don’t “chase” your pain.
Pain Management

• Nerve Block in your Spine (prior to start of surgery)
• Nerve catheter in the leg (stays in for about 1 day)

• Multimodal Pain Management which is three oral medicines given before surgery and for two weeks after surgery
  – Tylenol/acetaminophen (pain reliever)
  – Celebrex or Mobic (Brand name anti-inflammatory)
  – Neurontin/gabapentin (nerve pain medicine)

• Narcotic pain medication by mouth

• We do not routinely use a Patient Controlled Analgesia (PCA) as it causes nausea and vomiting
Pain Management

- Most of the narcotic pain pills have Tylenol/acetaminophen in it, however, we usually give Oxycodone (contains no Tylenol)

- High amounts of Tylenol/acetaminophen can cause Liver or Kidney problems.

- Maximum Tylenol/acetaminophen per 24 hours is now 3000mg.
Constipation

- Pain medicine causes constipation
- We will provide you with medicine to help keep you regular, while in the hospital and at home
  - Docusate/Colace
  - Senna
  - Miralax
- Don’t go too many days before taking action
Knee Replacement FAQ

- When can I drive?
  - You must be off narcotic pain medicine, and be able to react quickly with your leg(s) to use brake

- When will I be able to return to work?
  - Depending on your job, and recovery, in a matter of weeks.

- Will I set off metal detectors?
  - Yes, give yourself extra time at the airport. Choose the body scanner line if possible.
Fall Prevention

- Prevent falls in the hospital

- Always call for help before getting out of bed while in the hospital
  - You may experience some pain, nausea, and/or dizziness
  - Your healthcare team will work to treat these issues, to avoid delaying ambulation and PT

- Tips to prevent falls:
  - Be careful of tubes, oxygen or IV tubes
  - Use the bathroom before it becomes an emergency
  - Sit up as much as possible when in bed so the change from lying to sitting to standing isn’t so great.
Importance of Early Mobility

- Ambulating within 2-6 hours of your surgery is beneficial because:
  - it helps decrease the risk of **blood clots**
  - increases **quality of life**
  - shortens **length of stay** in the hospital
- Your orthopedic nurse will help you get up on the day of your surgery

**ALWAYS CALL FOR HELP WHEN GETTING UP**
What Counts as Early Ambulation?

You and your nurse can decide what combinations of the following are appropriate for you

- Bed mobility to sitting and standing
- Marching in place near the bed
- Sitting out of bed for 15-30 minutes
- Walking 15-30 feet or more if you tolerate

GO AHEAD, TRY OUT YOUR NEW JOINT!
Physical Therapy

Bridge leg in straight position to promote knee extension.

Folded pillow or towel under ankle (not knee, calf or heel).

Great position to work on ankle pumps and quad activation (unless otherwise instructed by your doctor or physical therapist).

[Diagram showing the described physical therapy position]
Discharge Plan from the hospital

The therapy ordered will depend on your progress with physical therapy & insurance

Hospital with Inpatient Physical Therapy

Home with home health physical therapy

Home with outpatient physical therapy

Some individuals with special needs will require rehab placement
Occupational Therapy
Equipment (AKA DME Durable Medical Equipment)

- A walker or crutches will be provided based on preference and physical therapy evaluation
  - If you have a walker or crutches please have support person bring to hospital on discharge day.
  - 3-1 Commode, Raised Toilet Seat, Shower Chair – optional – can purchased prior to hospital.

There are DME recycler programs in many communities which offer new or gently used equipment.
Goals for Discharge Home

- I know how to manage my post-operative symptoms (pain, nausea, dizziness).
- I can get into and out of bed with minimal assistance.
- I am walking the minimum distance for my home setting (with walker/crutches if needed).
- I can manage stairs with assistance.
- I understand use of blood thinner medication prescribed to me.
- I have arranged for support upon arrival home.
- I know how to manage many of my regular daily activities such as bathing, grooming and dressing.
Risks of Surgery

- Infection
- Blood Clot
- Loosening/Wear

Each of these risks are 1% chance
Infection

- To decrease the risk of infection, wash with Hibiclens soap 2 nights before surgery and the morning of surgery (packets given in Prepare)
- You will be given IV antibiotics before the start of surgery again after surgery
- Do not do any dental procedures for 6 weeks after surgery
- Monitor your incision for signs of infection once you are discharged from the hospital
  - Call our clinic with any concerns about redness, drainage, warmth, fever or chills. If you are concerned we want to hear from you.
Preventing infection after surgery

- We follow guidelines made by the American Academy of Orthopedic Surgeons

- The recommendations about taking prophylactic antibiotics (to prevent an infection) before routine dental work has recently changed.

- Antibiotics are no longer recommended before dental work unless you have a history of immunosuppression or susceptibility to infection. You may discuss this with the surgeon’s office and dentist.
Incision Care

- You may remove your surgical bandage after 5 days.

- If you have sutures or staples: keep incision clean and dry until staples/sutures are removed at 2 weeks post op. You need to cover/seal the incision (Plastic wrap or a bag and tape) when you take a shower or you may take a sponge bath.
  
  • You no longer need to cover the incision in the shower after the sutures or staples are removed.
  
  • Do not submerge the incision in water (bathtub, pool, etc) until the incision is fully healed with no open areas or scabs.

Staples/Sutures removed at approximately 2 weeks after surgery

Please follow your surgeon specific incision care instructions
Bruising

- Bruising is normal after surgery
- There is a lot of difference between patients with how much bruising you may have.
- Some patients have bruising just around the incision, some have bruising by the ankle.

- Please let us know if you have bruising larger than a piece of paper
Swelling

- Post operative swelling is normal
- You may have swelling from your thigh to your toes
- You may have swelling up to 6 weeks after surgery
- Decrease swelling by elevating your legs and using ice
Ice

- Use of ice is important to help reduce swelling and inflammation.
- Place towel between ice and skin surface to make sure incision does not become wet.
Blood Clot

- Blood clot can form in the leg and move to lungs, heart or brain

- Signs/symptoms of a blood clot are:
  - Pain in the calf that doesn’t go away
  - Swollen calf that does not improve with elevation
  - Redness in calf
  - Shortness of breath
Blood Clot Prevention

- Blood thinner medication prescribed will be determined by your physician.
- Aspirin
  - 81 mg tablets taken twice daily for 30 days
- Enoxaparin/lovenox – Injection for a total of 10 days after discharge from hospital
  - Injection into abdomen once every day
  - Nurses will teach you in the hospital
  - Lovenox “kit” from the hospital contains:
    - Teaching DVD, Sharps box, Alcohol swabs
- Sequential compression devices while in hospital
- Be Active
- Avoid flying for 6 weeks
Loosening/Wear

- 90% of Implants may last an average of 30 years.

- High impact activities, like basketball or running, decrease the life of the implant.

- Find alternative non-impact and low-impact activities, ie bicycle or swimming, as your regular exercise.
Preparing for Surgery

- Which medications you need to stop or continue will be reviewed at Prepare anesthesia appointment

- Stop taking medications that may increase bleeding 7 days before surgery
  - Over-the-counter anti-inflammatory NSAIDS, such as:
    - Ibuprofen (Motrin or Advil), Naproxen (Aleve)
  - Glucosamine
  - Garlic/Ginko Biloba/Ginseng supplement pills
  - Vitamin E, Fish Oil

- For some individuals (high cardiac risk) Aspirin may be continued through the surgical period

- For patients on blood thinners, a plan will be determined on the safe stopping/starting as determined by a discussion between cardiologist vs neurologist vs primary care physician and your surgeon

- Tylenol, Celebrex, and narcotics are okay to take until day of surgery
Preparing Your Body for Surgery

- Increase iron in your body
  - Eat food rich in iron
  - Green leafy vegetables, meat, beans
  - Iron supplements if indicated by your primary care physician or your surgeon

- Maintain fitness
Packing for Your Hospital Stay

• What to bring:
  • A list of your medications on paper so we can make sure you receive the medications you normally take at home.
  • Books & magazines to keep you busy when you are resting.
  • A set of clothes and shoes to wear when you leave the hospital.

• What not to bring:
  • Your own medications – The hospital will provide you with medications you normally take.
  • Cash & credit cards
  • Jewelry
Preparing For Discharge Home

- Prepare your home
  - Set aside loose rugs, rearrange furniture to make clear pathways free of clutter
- Buy or prepare food that can be readily available, ie microwavable food
- Arrange for someone to drive you home and help you pick up medication
- Set up sleeping accommodations on a single floor if needed
- Evaluate bathroom set up for safety
Preparing for Surgery

- Shower 2 nights before and the morning of surgery with special soap called Hibiclens (given to you by PREPARE Staff) from neck down
  - Avoid using Hibiclens on face and genitals
  - Do not apply lotion or deodorant after shower

- **STOP EATING and DRINKING MIDNIGHT BEFORE YOUR SURGERY**

- Review surgery information

- Take routine medications with sip of water (as instructed by PREPARE staff)
Contacting Our Office

- Call our clinic or reach us electronically with either Healthloop or MyChart anytime you have questions
  - See contact sheet for who to call
  - If you need assistance registering for MyChart or Healthloop please contact our office
- Narcotic prescription refills must be picked up in our clinic during normal business hours.

- After hours, weekends and holidays
  - Call 415-353-2808 for Orthopaedic Answering Services
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