

## **TOTAL KNEE ARTHROPLASTY (REPLACEMENT):**

A total knee arthroplasty (TKA) is a surgical procedure to remove the arthritic knee joint and replace it with an artificial hinge to provide improvement in pain and function.

### **PURPOSE OF A TOTAL KNEE ARTHROPLASTY:**

- This procedure should be used when you have tried all other treatments and your knee pain is too severe to carry out the activities of your daily life with ease
- Some other common treatment options to try prior to a knee replacement include:
  - Use of pain-relieving medications (acetaminophen/Tylenol) and anti-inflammatory medication (ibuprofen/Advil/Motrin, aspirin, naproxen/Aleve, meloxicam/Mobic, celecoxib/Celebrex)
  - Braces or shoe inserts to unload the part of your knee most affected by the arthritis
  - Injections into the knee to relieve the inflammation
  - Altering your activities, including things like squatting and heavy lifting, or using a cane/walker to reduce stress on the knee

### **PREPARING FOR A TOTAL KNEE ARTHROPLASTY:**

- If you plan to return home following your procedure:
  - Make modifications to your home in order to ensure your safety
    - Construct ramps over stairs
    - Set up a living quarters (usually the living room) on the main floor. Some people find sleeping in a recliner/lift chair for the first weeks following surgery easier than sleeping in a bed.
    - Add a toilet riser to your toilet seat
    - Add bars or handrails to stairs or bathrooms
    - Remove area rugs, cords/wires, and furniture to make a clear walking path
  - Prepare meals that can easily be reheated
  - Talk with friends and family to determine who can be with you in the weeks following surgery. **THIS IS NOT OPTIONAL.** You will need someone to assist you following surgery.
  - Attend your pre-op appointment approximately 2 weeks before your surgery date. Your post op caregiver must be present during this visit. At this time you will:
    - Attend a pre-operative informative physical therapy appointment with New West PT
    - Watch an informative video about knee replacements and ask any further questions you may have
    - Have a CT scan completed at Kearney Regional Medical Center to obtain measurements used during your surgery
  - Determine where you will do therapy after surgery and call to schedule the appointments
    - Your first session will begin 2-4 days following your surgery day
    - Make sure you have someone who can drive you to these appointments
    - Talk with your insurance company about therapy coverage
- If you plan to go to a care facility following your procedure, talk with your insurance company about coverage for this and their necessary requirements. You will also need to talk to your Primary Care Provider to assist in setting up arrangements.

- If you are a smoker, you need to stop about 6-8 weeks before surgery, as smoking causes issues with healing post-operatively and puts you at higher risk of complications during your surgery.
- You will need to meet with your primary care provider to have a full history and physical before your surgery to make sure you are healthy enough to undergo surgery. If you have a heart history, you will also need to meet with your cardiologist.
- One week before surgery stop all NSAIDs (ibuprofen, Aleve, Advil, etc.) and blood thinners (Coumadin, Eliquis, Plavix, etc.)
  - Please discuss this with your primary care provider or your cardiologist during your pre-op exam
- The hospital will call you one to two days prior to your surgery date to go through pre-admission questions and give you an arrival time
- On the night before surgery eat a light meal before bed, but DO NOT eat or drink anything after midnight on the day of your procedure (this includes water, coffee, tea, mints, chewing gum, etc.)
- Iovera<sup>o</sup> is a newer pain relief method that you may choose to have done prior to your surgery to ease your post-operative pain and improve your ability to carry out your post-operative therapy
  - It is an in-office procedure used to freeze the sensory nerves around the knee to ease pain and improve pain for up to 3 months
  - Technique:
    - A device is used to make a line of small pin pricks into the skin of the thigh and inside of your shin, then small ice balls are formed next to the nerves that give the skin of the knee sensation
    - When the ice meets the nerve, it causes the nerve to “go to sleep” allowing you to no longer feel pain in the distribution of the affected nerve. This results in numbness in the area, but also reduces, or even eliminates, the sensation of pain
    - We recommend the procedure be completed about 2 weeks before your operation
    - Please contact New West Sport Medicine for names of providers in the area who perform this procedure if you are interested in learning more or having it completed

## **WHAT TO EXPECT THE DAY OF SURGERY:**

- Please arrive at your designated time and check in at the front desk. A pre-op nurse will take you to the pre-op holding area where they will place an IV and get you ready for surgery.
- An anesthesia provider will meet with you to discuss options for anesthesia during surgery. If you are spending the night in the hospital, we recommend using a spinal anesthetic with sedation. If you are going home on the same day as your procedure, you will be given a general anesthetic.
  - Spinal anesthesia: the anesthesia provider will place a needle in your back to inject medication that will make you numb from the waist to the toes, and then give you medication that will allow you to sleep through your procedure (if they are unable to place the spinal block, or you choose not to have one placed, you will be put under general anesthesia)
- Once you have been prepped in the pre-op holding area, you will be taken to the operating room where a team will prepare you for surgery
  - Your anesthesia provider will perform your agreed-upon anesthesia
  - A tourniquet will be placed on your upper thigh to prevent significant blood loss. This can sometimes cause bruising and swelling in the upper leg.
  - Your leg will be prepped with a chlorhexidine prep

- The procedure:
  - An incision is made from just above your knee cap to just below your knee cap to expose the joint
  - The end of the thigh bone, the top of the shin bone, and the back of the knee cap are resurfaced, then metal caps are placed on the end of each bone with a plastic liner between the bones and on the back of the knee cap
  - Once complete, the knee joint is closed with many layers of suture, and the skin is closed with staples. The wounds are covered with a sterile dressing that will stay in place until your follow up appointment at the clinic.

### **WHAT TO EXPECT AFTER THE PROCEDURE:**

- You will be taken to the PACU area where nurses will help you wake up.
- Your anesthesia provider will place a sensory nerve block in your leg (adductor canal block) to help with your post-operative pain for up to 24 hours
- If you are spending the night in the hospital:
  - Once you are awake and comfortable, you will be taken to your hospital room where you can meet your family.
  - Physical therapy will work with you on the night of surgery to walk with a walker, and will work with you on exercises the following day.
  - Occupational therapy will meet with you to help you shower and dress, and provide tips on how to do these things safely at home.
- If you are going home on the same day as your procedure, you will be discharged home after you are awake and your pain is well controlled. You will meet with a physical therapist prior to discharge to learn to safely ambulate and to ensure you are safe to be at home.
- You will be fitted with TED hose and an IceMan® machine to help control swelling
  - The IceMan® is a cooler attached to a specialized wrap to surround the knee and provide a convenient way to apply ice
    - Add ice to fill line inside the device.
    - Add cold water to fill line.
    - Place lid on the device making sure the lip inserts in groove. Then press front of the lid down to close and secure.
    - Connect the IceMan® CLEAR3 hose to the cold pad hose. To ensure a reliable connection, “snap” or “click” hoses together into place so that the fit is tight and snug.
    - To turn device on, insert cord into the connection port on the back of the device and plug the power supply into the wall outlet.
    - Visit <https://www.djoglobal.com/products/donjoy/donjoy-iceman-clear3> for further instructions

### **THE BELOW WILL OUTLINE POST-OPERATIVE INSTRUCTIONS:**

#### **ACTIVITY:**

- Physical therapy appointments should start soon after discharge
  - If you are going home after discharge, you will begin physical therapy about 2-4 days after your surgery. You need to schedule this appointment BEFORE the day of your surgery. You will

receive a prescription for the therapy at your pre-op visit that you need to bring on your first therapy session.

- If you are going to a rehab facility after discharge, the orders for your therapy sessions will be given directly to the facility.
- You can bear all of your weight on the operative leg with the assistance of a walker. Your therapist will help you wean from the walker as your strength improves.
- Refrain from holding your knee in a position of comfort with it flexed; never place a pillow behind the knee. Rather, we encourage you to place a pillow under the ankle to allow gravity to help put your knee into full extension.
- The goal for your knee range of motion at your first follow-up appointment is from full extension to about 90 degrees of flexion. Your therapist will help monitor that progress.

### **DRESSING (BANDAGES):**

- A sterile dressing will be applied in the operating room. Please do not remove this dressing. It is waterproof, but please cover the dressing while showering for added protection.
  - If you notice your dressing is becoming loose, or if you have significant drainage through your dressing, please contact New West Sports Medicine & Orthopaedic Surgery at 308-865-2570.
- Continue to wear your thigh-high TED hose over the dressing until your follow up appointment. If a TED hose was placed on the non-operative leg during your hospital stay, you can remove that once you are home.
- Continue to use your Icedman machine frequently throughout the day. Please wrap this over your TED hose to prevent cold injuries or blisters.
  - For about the first 72 hours post-op, use the machine as much as possible. After that time, you should use it at least a few times/day and after every physical therapy session.

### **DEEP VEIN THROMBOSIS (DVT):**

- Prophylactic Medication:
  - If you did not routinely take a blood thinner prior to surgery you will be sent home with a prescription for a medication to thin your blood and help prevent clot formation.
  - If you routinely take a blood thinner, please resume that per medication discharge instructions. You do not need an additional medication unless otherwise instructed by your doctor.
- Continue use of your thigh-high TED hose on the operative extremity daily until your follow-up appointment. These will improve swelling and reduce your risk of blood clot.
- Notify New West Sports Medicine at 308-865-2570 and report to the nearest medical facility if you have persistent calf pain or if you experience shortness of breath, as these may be signs of a DVT or a pulmonary embolism (PE).

### **MEDICATIONS:**

- You will receive a nerve block in your leg immediately after surgery to help control pain. This can stay in effect for up to 24 hours, but the duration of the effects varies significantly among patients. It is not uncommon to experience a very significant increase in pain once the block has completely worn off, so

it is important to begin taking your medications before the block has completely worn off to ensure that you do not “get behind” on your pain.

- Commonly prescribed pain medications include:
  - Oxycontin (oxycodone ER)
    - Strong pain reliever that you take before bedtime for 3 nights
  - Dilaudid (hydromorphone)
    - Strong pain reliever that you take as you feel your pain begin to worsen
    - May need to be used routinely 1-2 days following surgery
    - Cannot be taken any sooner than every 4 hours
    - Spread the doses out as soon as possible
  - Ultram (tramadol)
    - Milder pain medication that you can take every 4-6 hours
    - Begin taking it routinely in the first few days post-op to stay on top of pain, but then increase the time between doses as soon as possible
  - Tylenol (acetaminophen)
    - Prescription for 650mg Tylenol that you take every 6 hours around the clock for the first week after surgery
    - Never exceed 4,000mg of acetaminophen from all sources in a 24-hour period
- Commonly prescribed medication to reduce muscle spasms:
  - Valium (diazepam)
    - Used in conjunction with pain medication if you have cramps in the thigh or calf
    - Can be used every 8 hours as needed, but it is most often used around therapy appointments and before sleep.
- PAIN MEDICATIONS AND MUSCLE RELAXERS WILL ONLY BE PRESCRIBED FOR SIX WEEKS FOLLOWING SURGERY, EXCEPT IN EXTENUATING CIRCUMSTANCES
- Blood clot prevention medications include:
  - Aspirin
    - Prescription for 325mg
    - Take two times/day
  - Eliquis
    - Take two times/day for 2 weeks
- An Antibiotic is used only if you are at a higher-than-average risk of infection:
  - Keflex (cephalexin)
    - Take two times/day for 1 week
  - Cleocin (clindamycin)
    - Take three times/day for 1 week
  - Bactrim (sulfamethoxazole/trimethoprim)
    - Take two times/day for 1 week

- Nausea medication:
  - Zofran (ondansetron)
    - Can be used every 6-8 hours as needed
- Constipation medication:
  - Colace
    - Take three times/day for 3 weeks or as long as you are taking your pain medication
- If you experience new-onset itching or a rash while taking these medications, contact our office for instructions.
- If you experience swelling of your face/tongue while using these medications, report to the nearest ER or call 911.
- Do not drive a vehicle, operate heavy machinery/appliances, make important decisions, or sign legal documents while taking these prescription pain medications. Do not drink alcohol while taking these medications.
- Prescription pain medications are potentially addictive. We encourage you to wean from the prescription medications to over the counter Tylenol as soon as your pain allows.

### **WHAT TO EXPECT WITH FOLLOW-UP APPOINTMENTS:**

- Appointments at New West Sports Medicine & Orthopaedic Surgery:
  - Your first 3 post-operative appointments will be scheduled during your pre-op visit and will occur at 2 weeks post-op, 6 weeks post-op, and 12 weeks post-op
- Appointments with your Primary Care Physician:
  - This appointment should be scheduled 5-7 days after surgery and is often scheduled by the hospital at the time of discharge. If you do not receive an appointment, please contact your PCP directly.
  - This will address any non-orthopedic issues that can arise following anesthesia, such as rashes, urinary symptoms, or respiratory symptoms
- If you have any concerns prior to your follow-up, please contact New West Sports Medicine and Orthopaedic Surgery at 308-865-2570.
- Contact New West Sports Medicine & Orthopaedic Surgery immediately if you run a fever of 100.4 degrees or higher, if you have significant redness and/or warmth around the knee, or if there is any concern for infection of the knee.
- Appointments with your Dental Provider:
  - Please wait 2 months before returning to the dentist for regular cleanings
  - If you have a dental emergency, please see the dentist as soon as possible
  - You will need antibiotics before all dental visits
  - The antibiotics need be taken 1 hour prior to your dental appointment
  - Please contact our office prior to first dental appointment and we will prescribe the medication to your pharmacy

**IF YOU HAVE QUESTIONS OR CONCERNS AFTER YOUR PROCEDURE:**

- If you have any questions or concerns, including questions about your post-operative instructions, medications, or your level of pain, please contact New West Sports Medicine & Orthopaedic Surgery at (308) 865-2570.
- If you have any emergency situations, such as shortness of breath or chest pain, please go directly to your nearest emergency department