



TOTAL KNEE INFORMATION

General Information

Total knee replacement is a common surgical procedure to relieve the pain associated with knee arthritis. It is a major surgical procedure that requires the following:

- General or spinal anesthesia
- A hospital stay of several days
- Commonly a stay at a rehabilitation hospital is needed after discharge.

The success rate for total knee replacement surgery is in the 98% range. Over 300,000 knee replacements a year are performed in the United States.

Dr. Joseph Vernace and Dr. Eric Smith are both fellowship-trained orthopaedic surgeons in joint replacement surgery. This means that after the completion of their required orthopaedic training, they each spent additional time in the study of hip and knee replacement surgery. Both completed this training at the Rothman Institute in Philadelphia. Dr. Vernace is the co-director of the Total Joint Program at Bryn Mawr Hospital.

Preoperative Information

***Pre-admissions Testing**

Preoperative testing is necessary before your surgery. The extent of the testing depends on each patient's age, gender and medical condition. Everyone needs at least a history and physical examination. This will be performed at Bryn Mawr Hospital, unless you have a specific medical condition that requires the attention of your primary care doctor or a specialist at another hospital. Women patients need a blood count and may need other tests. Many patients, male and female, will need other blood work or a cardiogram. Our office will order the specific tests needed on an individual basis.

***Scheduling your preadmission meeting:**

Instructions for scheduling your preadmission testing (PAT's) are included in a separate instruction sheet from our office.

****Meeting Your Anesthesiologist**

In addition to testing, everyone will meet with one of the board certified anesthesiologists at Bryn Mawr Hospital. This usually happens at the same time as your preadmission testing. An anesthesia team member will discuss:

- The different types of anesthesia
- The risks and possible complications
- Recommendations for your surgery, based on your individual needs

****Prior to your anesthesiologist meeting:**

The anesthesia sheet you fill out prior to this meeting is essential to help them make your surgery as smooth as possible.

The Knee Notebook

The knee notebook contains every thing you need to know about total knee surgery. There are a few exceptions to this. This booklet is a general outline for knee replacement. Specifics for our doctors may vary from these general guidelines.

Most questions will arise concerning donating blood prior to your surgery. Some surgeons still carry on with this procedure with little evidence to support its usefulness. No blood is lost during the surgery as a tourniquet is routinely used for all knee replacement surgeries. Postoperatively, a unit or two of blood can be lost. The chance of needing blood from the blood bank under these circumstances is less than 2%, which is the same chance of needing a blood transfusion when pre-donating.

What is a Total Knee Replacement?

As shown to you during your office visit, the cartilage cushion on the ends of the bones has worn out and there is now no smooth space between the bone ends. This results in rough surfaces scraping and rubbing against each other causing your arthritic pain. In addition, because the wear is usually uneven, the knee joint, in many cases, begins to bow and curve, resulting in an abnormal shape to your lower leg (bow-legged or knock-kneed). Total knee surgery relieves the pain by resurfacing the ends of the bones with smooth metal and plastic. In addition, the ligaments are rebalanced, resulting in straightening of your leg during the surgery.

The surgery is done through an incision in the front of your knee. The length of the incision varies with the size of the knee but is generally about 7 inches in length. During the surgery, the worn ends of the bones are removed and replaced with the three parts of the knee prosthesis. The kneecap portion (patella) is a small button made of durable plastic. The top surface of your shinbone is covered with the tibial component. This is a smooth flat metal tray, which is covered with smooth plastic like the undersurface of the kneecap. This large piece of plastic functions as your “new cartilage”. The end of the thigh bone (femur) is capped with a strong metal piece known as the femoral component. All the parts come in various sizes so that each prosthesis can be customized to fit your needs, insuring maximum stability and range of motion. When put together, these new surfaces rub together providing smooth, pain-free motion.

About Bryn Mawr Hospital

Bryn Mawr is recognized as one of the foremost total joint hospitals in the Philadelphia area. We were recently, once again, recognized as one of the 100 best orthopaedic programs in the country. More joint replacements are performed at Bryn Mawr than any other suburban hospital. Last year, nearly 1000 hip and knee replacements were carried out at Bryn Mawr. There is a fully integrated orthopaedic floor with nurses who specialize in the care of joint replacement patients. A full time physical therapy staff is located on the orthopaedic floor. In the operating room we have a full team of orthopaedic nurses who are dedicated to performing joint replacement surgeries.

The hospital was recently awarded the best overall program in orthopaedics in the state of Pennsylvania in 2005.

The Day of Surgery

You will be admitted to the hospital the day of surgery. There is no need to come in the day before as all your preadmission testing is done the week before surgery. Remember to not eat or drink anything that morning. **You should have nothing by mouth from midnight the night before until the time of your surgery.**

You will be seen in the preoperative area before your surgery to answer any questions you may have. Your surgeon will mark your knee with his initials to identify the proper knee for surgery. From the time you leave the preoperative area to go to the operating room, to the time you are in the recovery room will be approximately 90 minutes. The surgery itself takes 45 to 60 minutes. You will be in the recovery room for approximately 1 to 1 ½ hours.

While you are in surgery, your family may wait in the green room just around the corner from the operating room. They will be contacted following your surgery to let them know that you are in the recovery room and that all is well.

You will be placed in a special machine in the recovery room that moves your knee for you. This CPM machine is designed to start your motion exercises as soon as possible. You will spend many hours during your hospitalization in this machine. It is a very important part of your recovery.

You will be taken to the Orthopaedic floor from the recovery room where you will be given appropriate pain medication as needed. The remainder of your day of surgery is spent resting in bed in the CPM machine. We often use a special device known as an On-Q Pain Buster to help control postoperative pain. This is a tiny catheter that is placed in your knee at the time of surgery that continuously delivers small amounts of long acting Novocain over the first 48 hours of your recovery. This lessens the need for narcotic pain medicine.

For more information, please visit www.CustomFitTotalKnee.com.

Risks and Potential Complications

As with any major surgery, knee replacement carries certain risks and complications. The most significant are infection, blood clots, anesthesia risks and the possibility that the knee implant may not last forever.

- You will be given antibiotics in the preoperative area to help prevent infection. The risk never goes to zero, but our infection rate is approximately one half of one percent which is at or below the national average.
- In order to try to prevent a blood clot, you will be placed on blood thinners for 4 weeks. This medicine is in pill form and is called Coumadin (warfarin). This medicine requires that blood tests be done once or twice a week to monitor the dose of this medication.

Our office will monitor this medicine and its' dosage for you. We prefer to do this ourselves and do not need your primary care doctor to do this for you.

- The anesthesia risks are minimal for a healthy individual. You will fill out an anesthesia questionnaire that will help the anesthesiologist discuss risks directly with you, as well as discuss your options for the type of anesthesia to be used.
- The implants used today are very long lasting. Studies show that 95% of knee replacements last at least 10 years, while up to 85% will last twenty years.

Your Postoperative Program and Physical Therapy

Details of your hospital course are described in **the Knee Notebook**. In brief, you will be out of bed the morning after surgery (postoperative day 1), go to the gym on the orthopaedic floor that afternoon and should be walking in the hallway with a walker or crutches by the next day. You will receive two therapy sessions on that second postoperative day. For most patients the third postoperative day will be discharge day. If you are doing very well and have help at home, you will most likely be discharged home with home physical therapists coming to the house to continue your rehab. If you require further inpatient rehabilitation, the case managers at Bryn Mawr Hospital will discuss this with you and make arrangements for a transfer to another inpatient setting.

Once you are home, **we want you to start outpatient physical therapy as soon as possible**, as it is much more beneficial than home therapy. For those of you who live close enough to the office, **we strongly recommend** our therapy center, **Founders' Physical Therapy**. We have chosen our three therapists and two therapy assistants for their experience, expertise and their warm and friendly manor in which they conduct their therapy sessions. They have over 40 years of combined experience and have been recognized by many patients as the best therapy group on the main line.

You will receive individualized therapy, tailored to your needs. We work closely with them throughout your recovery. If you are having any difficulties, you will be right next door and the therapist and you will have easy access to your surgeon to promptly address any concerns. Our facility is arranged for your comfort and needs, with a full service bathroom and shower, plasma screen televisions and private treatment rooms to be used as needed by the therapists.

The phone number for the therapy office is **610-527-3300**.

Questions?

Most of the information about your knee replacement surgery was included in your office discussion and outlined in this information sheet and the Knee Notebook. If you should have further questions about your surgery, please call the office at **610-527-9500**. If you have a simple question or two ask the staff member who answers the phone to take a message. After a conversation with your surgeon, a prompt response from the staff can be expected. If your questions are more extensive, ask for a return call. Your doctor or one of our highly qualified physician assistants will call you to discuss your concerns or questions.

If you have questions regarding scheduling or preadmission testing consult your instruction sheet regarding those processes. If you still have questions, call the office and ask for Carol, our surgical scheduler. If she is busy with another patient, leave a message with a staff member and she will return your call.

*Summary

Hospital Stay	2-4 days (counting the day of surgery)
Further Inpatient Stay (if needed)	3-7 days
Time on Walker or Crutches	0-2 weeks
Time on Cane	1-3 weeks
Length of Physical Therapy	6-12 weeks
Time to “good” recovery (50%)	6 weeks
Time to “very good” recovery (85%)	8-12 weeks
Time to “full” recovery	4-6 months
“How Long Does It Last”	95% - 99% of all knee replacements last 10 years 90% of them will last 20 years!!
Long Term Check-ups	You will need to come in once a year for two to three years for an x-ray and check up. After that, once every two years. We will send you a reminder!!
Antibiotic Prophylaxis	After joint replacement surgery, you will need to take antibiotics when you go to the dentist or when you have other surgical procedures. You will be given a separate instruction sheet regarding this.

Please Note: The general information provided in this document and on the website is provided as a service for Main Line Orthopaedics patients and their caregivers. It is not intended to substitute for medical advice. An individual total knee replacement patient’s experience may vary, depending on a number of factors, including, but not limited to age, general health and compliance with your physical therapy regimen. Please consult your doctor with specific questions related to your total knee replacement or other surgery.

Copyright 2007 Main Line Orthopaedics