

# **Your Reference Guide for Total Joint Replacement**

**The Outpatient Surgery Center**

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# **GENERAL INFORMATION**

## **Welcome**

Thank you for choosing Dr. Salyapongse and his team for your upcoming surgery. Our goal is to help return you to a higher level of function with your new prosthetic joint. We've assembled this notebook to provide an introduction to joint replacement surgery, a guide for preparation, and a reference for your post-operative rehabilitation.

In the United States, over 600,000 people elect to have total joint replacement surgery each year. It is most commonly recommended for patients when pain in their joint has become severe. Hip and knee disease can affect individuals ranging in age from 16 to 106; we have taken care of them all. Although age is an important factor in deciding when you should consider surgery, it's not the most important. When your life has been severely affected by a bad hip or knee, it's important to discuss surgery with your primary care doctor and your surgeon; it may be the best option.

A good indicator that you may be ready for joint replacement surgery is when pain interrupts daily activities, such as walking, dressing, driving, sleeping, exercising, participating in recreational activities, and working. Some people may even have pains that are severe with rest or during sleep; this suggests a serious problem. Some may experience stiffness in the joint that limits the ability to move or lift the leg. Joint replacement surgery aims to relieve this joint pain, while also helping restore your independence so you may return to work and other daily activities.

Total joint replacement patients recover quickly. Patients can expect to be able to walk the day of surgery. Generally, patients are able to return to driving in two to four weeks, dance in four to six weeks, and golf in six to twelve weeks.

Dr. Salyapongse and his team have developed a complete, planned course of treatment. We believe that you play a key role in making your recovery a success. Our goal is to involve you and your family in your treatment from start to finish. This patient notebook will give you guidance for a safe and successful outcome.

Your team includes physicians, physician assistants, patient care coordinators, nurses, nursing aides, and physical therapists trained in total joint care. Specific details, from pre-operative teaching to post-operative exercises, are considered and reviewed with you and your family, or coach. Our team of professionals will help to plan your treatment program and guide you through the entire process.

## **Purpose of the Notebook**

Training, education, continuity of care, and a pre-planned discharge plan are essential for optimal results in joint surgery. Communication is crucial for this process. This notebook serves as both a communication and educational tool for patients, families, physicians, physical therapists, occupational therapists, and nurses. It has been developed to educate you so that you know:

- What to expect every step of the way
- What you need to do to prepare for surgery
- What will happen the day of surgery
- How your post-op recovery at home will progress
- How to care for your new joint for the rest of your life

Remember, this is just a guide.

Your physician, physician assistant, nurse, or therapist may add to or change many of these suggestions. Always use their recommendations first. Don't hesitate to ask questions if you are unsure about any information. Keep your notebook as a handy guide for at least the first year after your surgery.

## **Using This Notebook**

Instructions for Patients:

- Read Sections 1 for general information
- Use Section 2 as a checklist. Mark each item as you complete each task.
- Read sections 3, 4 and 5 for surgical and post-op information.
- Bring your notebook with you to all physician visits (surgeon and your primary care doctor), on the day of surgery, and keep at home for reference.

## **Overview of the Program at The Outpatient Surgery Center**

Features of the program include:

- Nurses and therapists who specialize in the care of patients having hip and knee surgery
- Family and friends educated to participate as "coaches" in the recovery process.
- A complete patient guide for you to follow from six weeks pre-op until three months post-op and beyond.
- Coordinated after-care program.

This guide may seem overwhelming on first reading. Please take it and read it as suggested, one section at a time.

## **Role of the Surgical Scheduler**

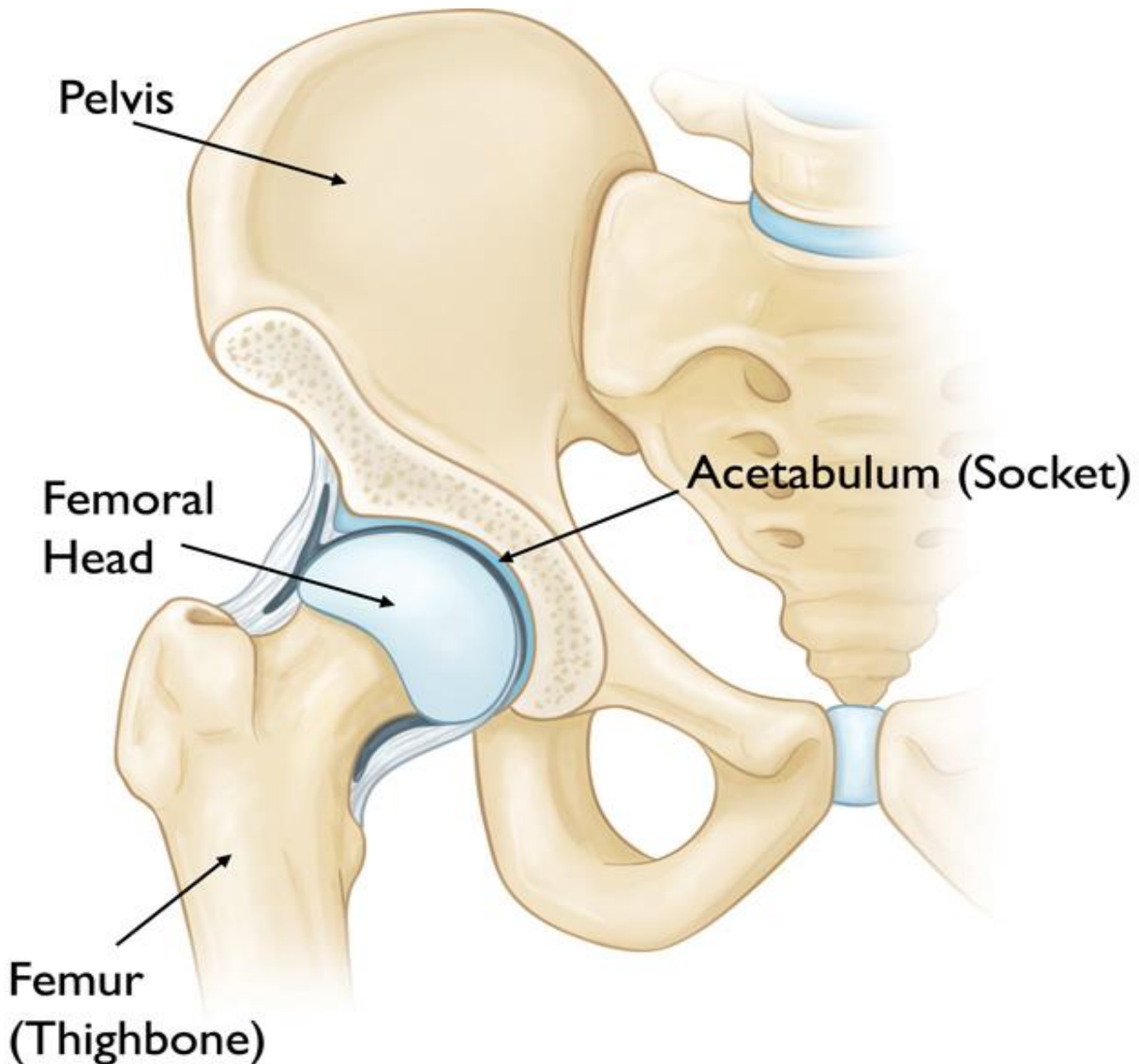
Shortly after you have made the decision to have surgery, your surgeon's office will work with you to:

- Set up pre-op appointments, surgical dates and times, and follow up visits
- Act as a link for management of your pre-operative care between the doctor's office, The Outpatient Surgery Center, your primary doctor, and the testing facilities, if needed
- Answer any questions and direct you to specific resources within the health care system as needed

You may contact the Surgical Scheduler or Physician Assistant (see contact list) at any time to ask questions about your surgery. A message may be left to call you back if they are not available.

## **Frequently Asked Questions Specific to Total Hip Replacement Surgery**

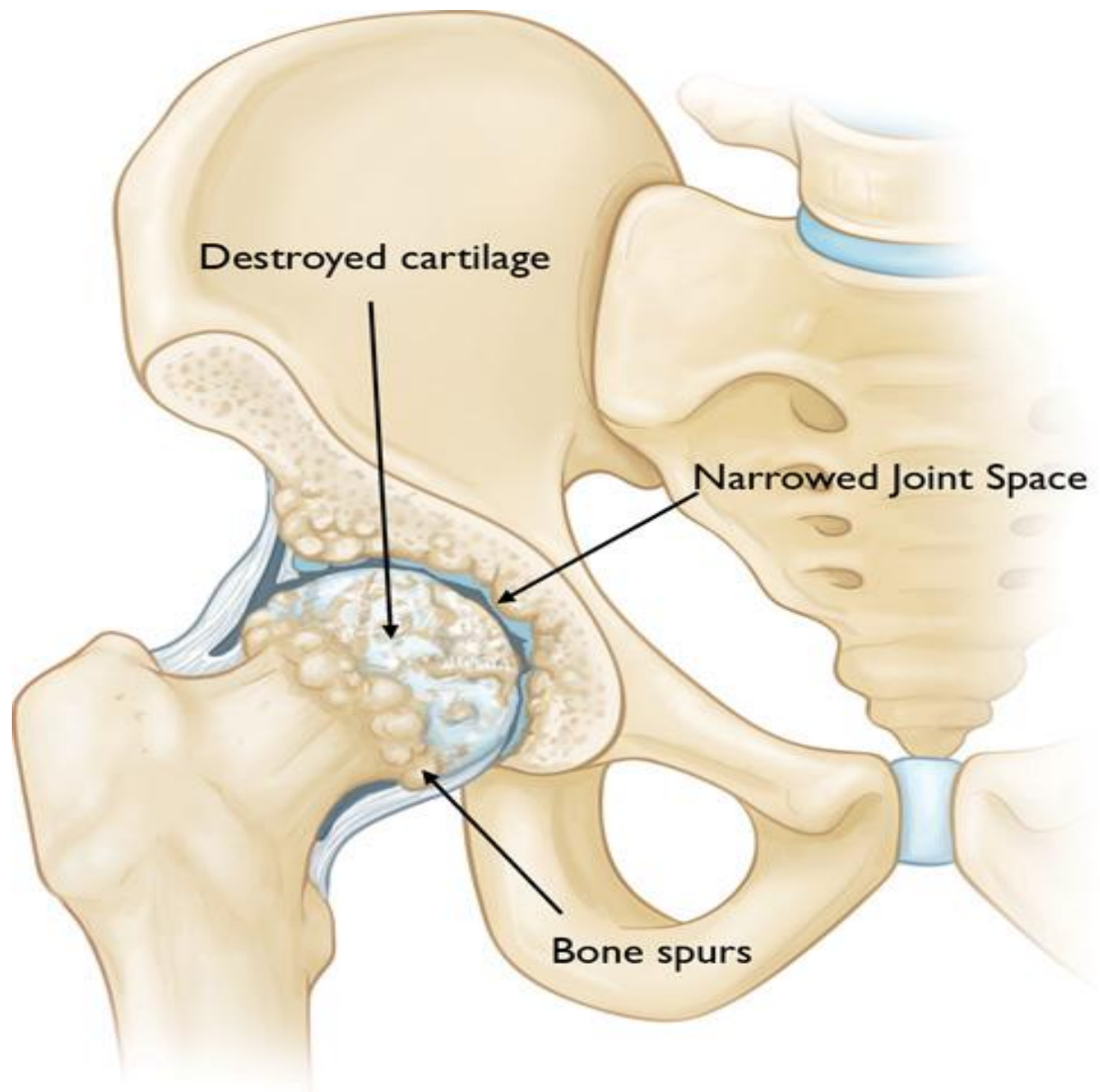
Many patients have asked questions in regards to their total hip replacements. Below is a list of the most commonly asked questions along with their answers. This notebook gives you additional information. If there are any other questions that you need answered, please contact our office. We want you to be fully informed about this procedure.





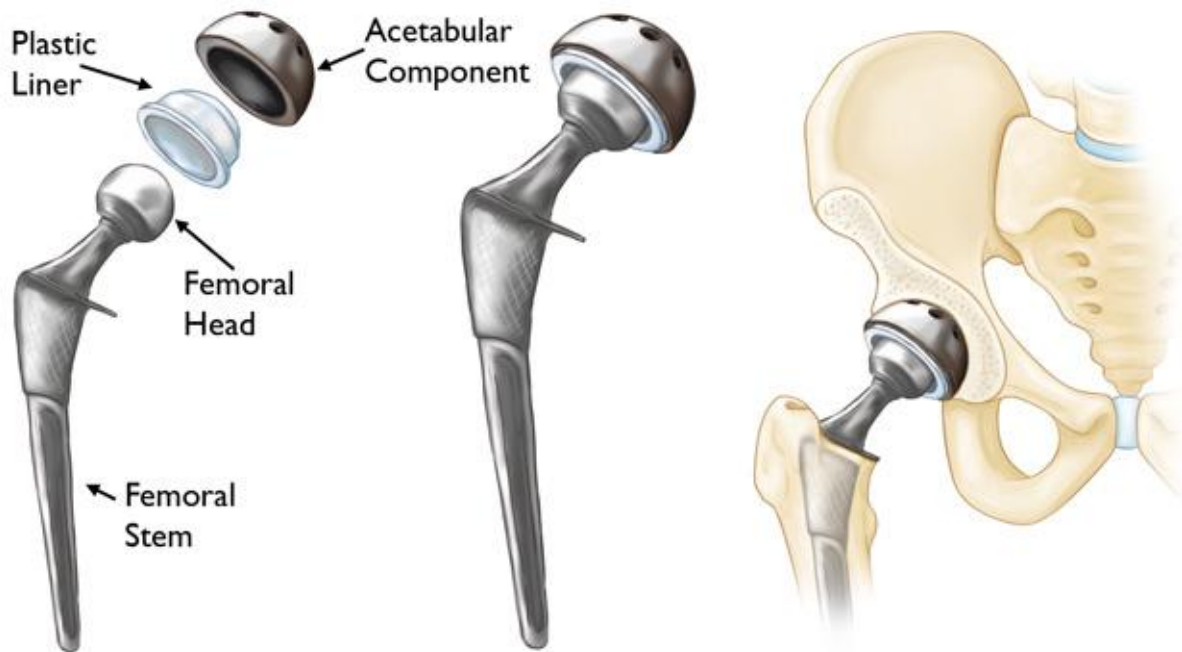
### **What is arthritis and why does my hip hurt?**

In the hip joint, there is a layer of smooth cartilage on the ball of the upper end of the thigh bone (femur). There is another layer within your hip socket, which serves as a cushion. This allows for smooth motion of the hip. Arthritis is a wearing away of this smooth cartilage. This cushion may wear down to bone. Your discomfort, swelling and/or stiffness are due to your thigh bone rubbing against your hip socket. Common symptoms of hip arthritis include: pains in the groin or front part of your hip, trouble bending to reach socks and shoes, leg length changes, trouble crossing legs, pains going up and down stairs.



### **What is a total hip replacement?**

A total hip replacement is an operation that removes the arthritic ball of the upper thigh bone (femur), as well as the damaged cartilage from the hip socket. The ball is then replaced with a metal (cobalt, chromium alloy) or ceramic ball. This ball is then fixed solidly inside the femur. The socket is replaced with a plastic liner, which is usually fixed inside a metal shell. This creates a smoothly functioning joint, reducing and sometimes eliminating pain. You can discuss these differences with your surgeon to determine which implant is best for you.



### **What are the results of a total hip replacement?**

Approximately 95% percent of patients have good to excellent results with relief of pain and discomfort. Patients significantly increase activity and mobility after their procedure.

### **When should I have this type of surgery?**

Your orthopedic surgeon will decide if you are a candidate for the surgery. This is based on your history, exam, x-rays, MRI's and response to conservative treatment. The decision will then be yours. It is very reasonable to consider surgery if your hip continues to hurt despite medications, physical therapy, injections, and activity modification.

### **Am I too old for this surgery?**

Age is not a problem if you are in good health and have the desire to continue living a productive, active life. You will be asked to see your primary care physician for his or her opinion about your general health and readiness for surgery.

### **How long will my new hip last, and can a second replacement be done?**

On average, the older hip replacements from the 80's and 90's had a lifespan of about 12-15 years. With recent advances in the components and technology, the potential for the hips to last for more than 17 years is good. A lot depends on your overall health, weight, and activity level after your surgery.

### **What approach will my surgeon use?**

Dr. Salyapongse utilizes the Anterior Approach for >97% of his patients. It's characterized by the location of the incision for your surgery. In this approach, the muscles are pulled apart (rather than cut) for exposure. After your surgical procedure is over, your muscles fall back into their natural position. This has been proven to provide a faster recovery than traditional approaches and often less pain. You will not have to worry about bending, twisting, or sleeping on your side after surgery. This will all be allowed with the Anterior Approach.

### **How long is recovery?**

The first 2-3 weeks is spent walking and trying to deal with the swelling that occurs immediately after surgery. Just like any other muscle pull, your thigh will feel sore and stiff. That's typical. From 3 weeks to 3 months, you'll be strengthening your muscles and trying to regain flexibility. Most people are walking without assistive devices within 2 weeks, driving in 2-3 weeks, and swimming in 6 weeks. Most people are fully independent in 3-4 weeks, but will still be working with therapy on muscle strengthening and flexibility.

### **Will I notice anything different about my hip?**

Patients with hip replacements think that the new joint feels completely natural. We recommend always avoiding extreme position or high impact physical activity (running, jumping, cutting sports, kick boxing, etc). In the first few weeks after surgery, your new hip may feel longer than it was before. This is due to the fact that most arthritic hips have shortened. After surgery your hip has been restored to its original length and this makes it feel longer than before. Most patients get used to this feeling in a short time.

### **Why do hip replacements fail?**

As long as you avoid running, jumping and high impact activity, there is potential for your hip to last 15-20 years (or more). Failure can occur after major injuries (car accidents, falls) where the force is enough to break your bones or break the hip replacement. These episodes are very rare, but we caution you nonetheless. Wearing out of the plastic cushion may also result in the need for a revision, although newer bearings may last for more than 25 years.

### **What are the major risks?**

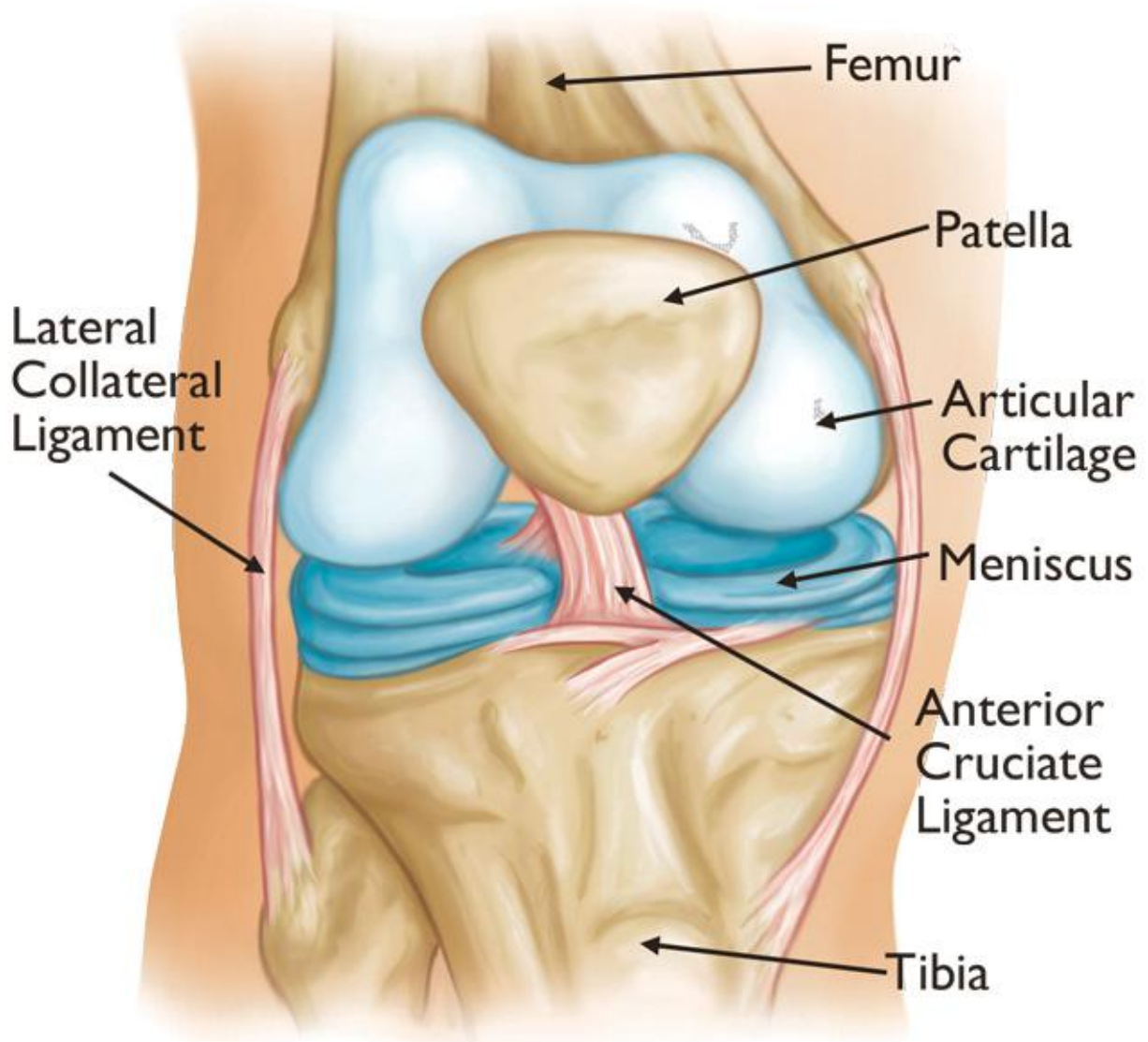
The main risks of surgery to consider are infection, dislocation, and blood clots. We take great care in preparation for your surgery, during your surgery, and for months after to prevent these complications. See our rates below compared to national average:

	Dr. Salyapongse	National Average
<b>Infection</b>	<b>0.05%</b>	<b>1%</b>
<b>Dislocation</b>	<b>0.2%</b>	<b>3-5%</b>
<b>Blood Clots</b>	<b>0.03%</b>	<b>1-2%</b>

## **Frequently Asked Questions Specific to Total Knee Replacement Surgery**

Patients have asked many questions about total knee replacements. Below is a list of the most commonly asked questions along with the answers. This notebook gives you additional information. If there are any other questions that you need answered, contact our office. We want you to be completely informed about this procedure.

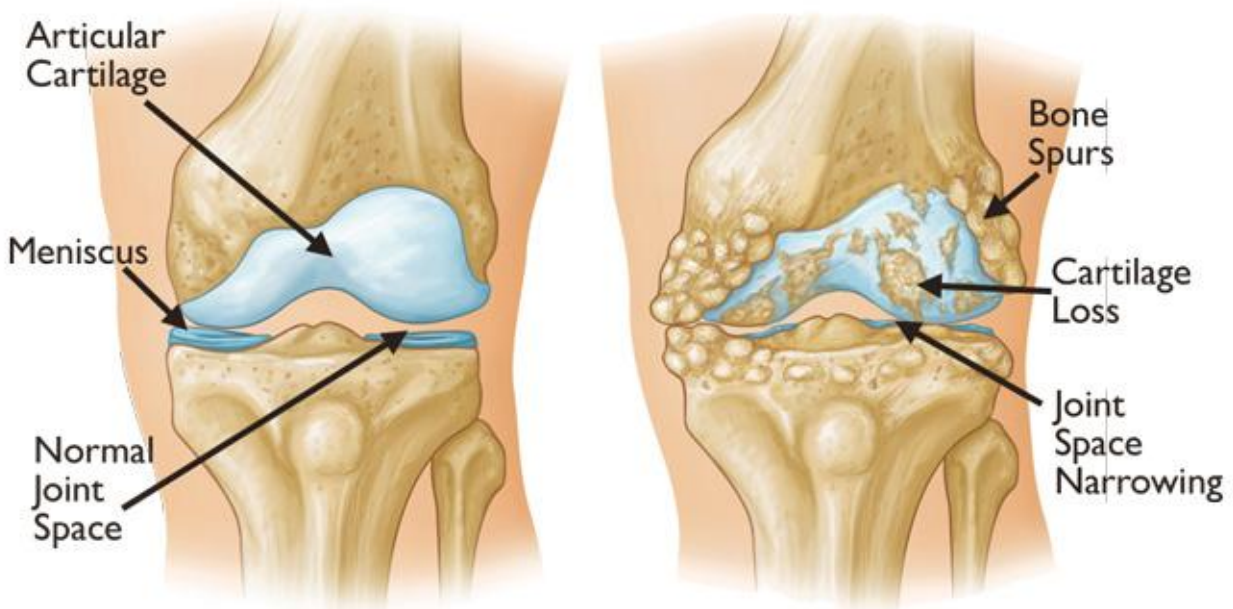
### **Knee Anatomy**



### What is arthritis and why does my knee hurt?

In the knee joint there are three layers of smooth cartilage. The layers are on the lower end of the thigh bone (femur), the upper end of the shin bone (tibia) and the undersurface of the kneecap (patella). This cartilage serves as a cushion. It allows for smooth motion of the knee. Arthritis is a wearing away of this smooth cartilage. This cushion can wear down to bone. Rubbing of bone against bone causes discomfort, swelling and stiffness.

### Healthy Vs Arthritic Knee



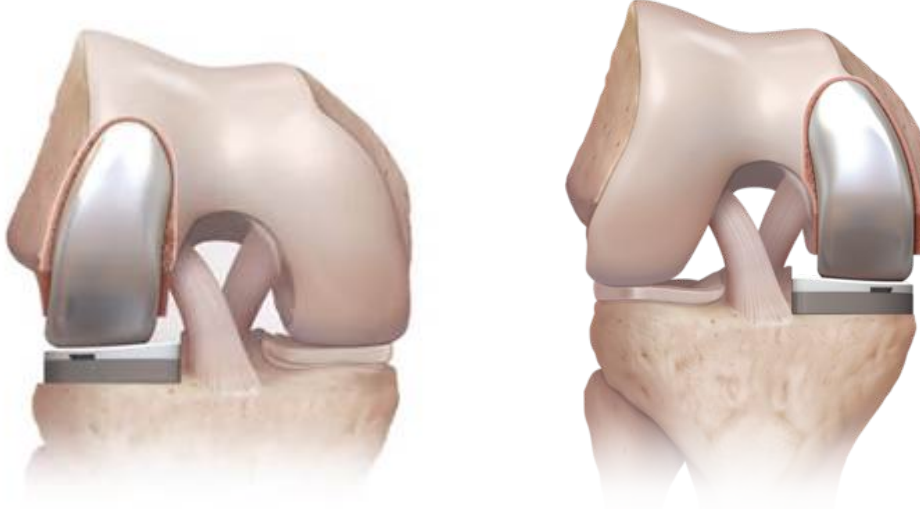
### What is a total knee replacement?

A total knee replacement is a cartilage replacement with an artificial surface. The knee itself is not replaced. However, an artificial substitute for the cartilage is inserted on the end of the bones. This is done with a metal alloy on the end of the femur and tibia with a plastic spacer between the two metal components and on the back of the kneecap (patella). This creates a new smooth cushion and a functioning joint that can significantly reduce pains and swelling.

### What is a partial knee replacement?

The knee is comprised of 3 different compartments: inside (medial), outside (lateral) and front (patellofemoral). Sometimes arthritis only affects one of these areas. Patients with arthritis in only one compartment may be a candidate for a partial knee replacement. Only the affected area in the knee is replaced, leaving the other two compartments untouched. Usually, this results in a more natural feel after surgery.

## Medial and Lateral Replacements



Patellofemoral Replacement

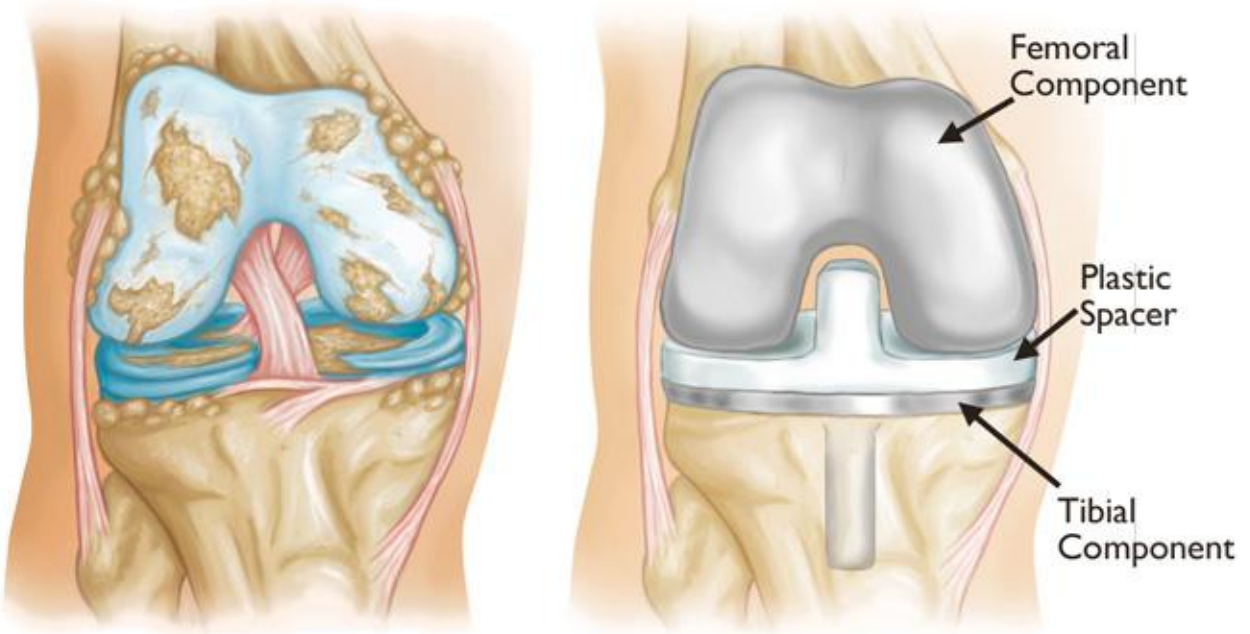
### **What are the results of a total knee replacement?**

90-95 percent of patients have good to excellent results with relief of discomfort. Patients significantly increase activity and mobility.

### **What are the major risks?**

Most surgeries go well, without any complications. Infection and blood clots are two different, but serious, complications. To avoid these complications, we use antibiotics and medications to thin the blood (blood thinners). There are also special precautions taken in the operating room to reduce the risk of infection. The chances of this happening in your lifetime are one percent or less. Your doctor will discuss ways to reduce this risk.

## Arthritic Knee Vs Replaced Knee



## **General Questions After Total Joint Replacement Surgery**

### **Should I exercise before the surgery?**

Yes, you should either consult an outpatient physical therapist, or follow the exercises listed in your notebook. Exercises should begin as soon as possible.

### **How long will I be incapacitated?**

You should be able to walk and bear weight using a walker or crutches within hours after surgery. However, swelling and joint soreness can persist for weeks to months. Your return to normal activities can take 3-6 months.

### **How long will I be at the surgery center?**

Most total joint replacement patients will be discharged from the surgery center within 4-6 hours after their procedure. Some patients may stay up to 23 hours if needed.

### **What if I live alone?**

The best option is to arrange to have a family member or friend stay with you for the first 2-3 days after your surgery. We can then arrange for a home physical therapist and/or a nurse to come to your home 3-4 times per week to assist with your recovery.

### **How do I arrange for surgery?**

To schedule surgery, contact Dr. Salyapongse's Surgery Scheduler. They will pencil in a date for you and assist you in completing all preoperative preparations prior to your surgery. This will include education, a visit with your primary doctor (and any other specialists you may see regularly), and a pre-op visit with Robin Mercer PA-C and Dr. Salyapongse.

### **How long does the surgery take?**

We block approximately two to two and a half hours for surgery. Some of this time is used by the operating room staff to prepare you for the surgery. The actual surgical time ranges from 45 – 90 minutes.

### **Will I require general anesthesia for my surgery?**

You may have a general anesthetic, which many people call "being put to sleep." Some patients prefer to have a spinal or epidural anesthetic, which numbs your legs and may allow for you to stay awake. This choice is between you and your anesthesiologist. For more information, read "Anesthesia and You" in your notebook appendix.

### **What will my pain be like after my surgery?**

Immediately after surgery it's normal to feel aching and burning around your incision site. Aching in your joint is also very common. Please alert your nurse how severe your pains are (on a scale of 1 – 10). For the first 2 days after surgery a mild ache is common. **Usually 3 days after surgery, swelling starts, and peaks around 7 days.** Elevation of your joint and icing will help, but this will be the most difficult part of your recovery. After the first 2 weeks, pain and swelling should start to subside.



**Who will be performing the surgery?**

Dr. Salyapongse will perform all critical parts of your surgery. It is quite common for Robin Mercer PA-C to perform the surgical closure of your skin. Most patients have absorbable stitches that will not need to be removed.

**Will I need a walker or crutches?**

As a rule, we recommend that you use a walker or crutches. Your therapist and surgeon will help you decide if you need an assistive device. Equipment will be provided at discharge, if indicated.

**Will I need someone with me ALL the time when I go home?**

No. The first few days it will be VERY helpful to have someone assist you with some daily activities, such as preparing meals, etc. The Total Joint Team will arrange for a home health nurse and physical therapist to come to your house, if needed. Please try to arrange family or friends to be available to help.

Prepare ahead. Before your surgery, you should consider having the following activities completed to reduce the need for extra help:

- Finish your laundry
- Clean your house
- Remove rugs (throw rugs) and any cords that may interfere with walker or crutch use
- Make your bed with clean linens
- Cook single portion frozen meals

(Refer to page 31 for more information)

**Will I need physical therapy when I go home?**

As a rule, you will have home physical therapy for the first week or so. Therapy after total joint replacement usually consists of walking with general stretching and muscle strengthening. Many patients can achieve this at home without the assistance of a physical therapist. If you need home physical therapy, this will be set up prior to discharge.

**When will I be able to return to work?**

Returning to work is based on each individual's health and demand of their job. If your job involves more office type work, you can return to work with a cane or crutches earlier than someone with a more strenuous job (sometimes as early as 2-3 weeks). More physically demanding jobs may require 2-3 months of rehab before returning. A physical therapist can make suggestions for joint protection and energy management while at work.

**How often will I need to see my doctor following the surgery?**

One to two weeks after discharge, you will be seen for your first post-operative office visit. The schedule of follow-up visits will depend on your progress. Many patients are seen at six weeks and twelve weeks. Your surgeon will let you know what is recommended, as it can differ with each patient.

**Will I have restrictions following my surgery?**

Yes. High-impact activities, such as running, singles tennis, and basketball are not suggested. Injury-prone sports such as equestrian and downhill mogul skiing are also dangerous for the new joint. Please check with your doctor for possible restrictions.

**What physical/recreational activities may I participate in after my recovery?**

You are encouraged to participate in low impact activities such as walking, dancing, golf, hiking, swimming, bowling, doubles tennis, and gardening.

**When can I resume sexual activity?**

There are no true medical restrictions for resuming sexual activity. You can have intercourse when your joint feels comfortable enough.

**Will I need post-operative equipment?**

For walking, most patients are most stable with a walker after surgery. You may purchase a seat riser or 3:1 commode if you feel it may be more comfortable. These items can be purchased at a medical supply store or online. Most insurance companies do not cover the cost for these types of equipment. If you have further questions, call your insurance provider. If you have not purchased an ice-cooling unit (for knee surgery), then try to buy 4-6 flexible ice packs to use for swelling and inflammation.

**Will I be eligible for a temporary disabled placard?**

Yes, you will be eligible for a temporary disabled placard for about 8-12 weeks postoperatively.

**How long until I can drive after surgery?**

Driving yourself is dependent on which leg needed surgery. The right leg may require a longer delay in ability to drive. If you have an automatic, you can drive within 2-4 weeks. If you drive a stick shift and had surgery on your left leg this may delay driving time. You should NOT drive while on narcotic pain medication. "Getting back to normal" will depend on your progress. You can discuss a more specific time frame with your surgeon.

**Will I need a special card for flying?**

You might receive a card from your doctor that states you have had a joint replacement. Unfortunately, it is not uncommon to set off metal detectors when going through security. The card does not serve as a "free pass"; they will likely wand you for metal. You should mention to security that you have had a total joint replacement and ask to go through the full body scanner to avoid further delays.

# **PRE-OPERATIVE CHECKLIST**

### **□ Obtain Medical and Anesthesia Clearance**

When you were scheduled for surgery, a medical clearance letter will be sent directly to your primary care physician's office. The letter informs your primary doctor that you will be undergoing surgery for joint replacement soon. Based on your medical status, history, and current lab work/EKG, your primary doctor will sign the letter and "clear" you for surgery.

### **□ Obtain Laboratory Tests**

At your appointment with your primary care doctor, you will receive instructions on obtaining lab work in preparation for surgery. Follow the instructions in this order.

### **□ Start Pre-Operative Exercises**

It is important that you begin an exercise program before surgery. See exercises on page 28. Many patients with arthritis favor their joints and become weaker. This slows their recovery.

You may also be scheduled for physical therapy sessions before your surgery. This will be discussed between you and your surgeon.

### **□ 4 Weeks Before Surgery**

Dr. Salyapongse likes for you take a multi-vitamin and iron pills 3-4 weeks leading up to surgery. These supplements may cause your stool to turn black. Please stop the use of other OTC supplements (fish oil, ginkgo, vitamin E, "natural herbs", etc.) at this time. Fish oil in particular can cause increased bleeding. Certain herbals and other supplements may interact with medications you will receive after surgery.

**STOP SMOKING.** If you use tobacco, Dr. Salyapongse will likely CANCEL YOUR SURGERY. Nicotine can slow your body's natural healing process and may result in catastrophic infections.

### **Read "Anesthesia and You" (Appendix)**

Total Joint Surgery requires the use of either general anesthesia or regional anesthesia. Please read "Anesthesia and You" (see appendix). If you have questions, please contact our office.

### **1 Week Before Surgery**

#### **□ Pre-operative Visit to the Surgeon**

You should have an appointment in your surgeon's office seven to ten days prior to your surgery. This will serve as a final checkup. Please do not hesitate to ask any questions you might have.

### ☐ **Stop Medications that Increase Bleeding**

Stop all anti-inflammatory medications 7-10 days before surgery. Examples are aspirin, Motrin, Naproxen, Vitamin E, etc. These medications may cause increased bleeding. If you are on Coumadin, Xarelto, or Plavix, you will need special instructions before stopping the medication. Our team can help answer any questions you have regarding these instructions. Your Primary Care Physician, Dr. Salyapongse, Robin Mercer PA-C will help you with this issue.

At our pre-operative visit, we will notify you of medications that need to be stopped prior to surgery and those that should be continued up until the day of surgery. Please bring a current list of all prescription and over-the-counter medications you are currently taking to your pre-op visit. You will review this list as part of your pre-operative visit.

### ☐ **Day Before Surgery**

#### **Find Out Your Arrival Time at the Surgery Center**

You will be asked to come to the center two hours before the surgery time. This gives the nursing staff time to prep you and answer questions.

#### **Phone Interviews**

You will receive a call from a nurse at the Outpatient Surgery Center. The nurse will review any special instructions required for the day of surgery. Please have a list of all current medications available during the call. In addition, you will receive a call from the Anesthesiologist assigned to your case. They will review your health history and discuss anesthesia options.

### **Please do not shave your operative site for at least 24 hours prior to surgery.**

#### **The Night Before Surgery**

It is very important that you do not eat or drink after midnight, NOT EVEN WATER, unless otherwise instructed to do so. This includes chewing gum and hard candies. Surgery will be cancelled if these instructions are not followed.

### **Day of Surgery**

#### **Arrival Time**

It is important that you arrive on time to the surgery center. It is possible that your surgery may be moved to an earlier time. If you are late, it may create a problem with starting your surgery on time. Being late could result in moving your surgery to a much later time, possibly a later date.

#### **What to wear to The Outpatient Surgery Center**

You should have comfortable loose-fitting clothing, such as: shorts, t-shirts, sweats, well-fitted slippers, flat non-skid shoes or tennis shoes.

### **Important Items to Bring and Leave at Home Day of Surgery:**

- **BRING:**
  - A copy of your Advance Directives
  - Your insurance card, driver's license or photo I.D.
  - Front Wheel Walker (FWW) or crutches
- **LEAVE:**
  - Cash and other valuables at home
  - All jewelry
  - Make-up
    - All make-up must be removed before your procedure
    - You may continue to wear nail polish

# **DAY OF SURGERY EXPECTATIONS**

## **What Happens the Day of Surgery**

Arrive at The Outpatient Surgery Center TWO hours before your surgery time. Go to the main entrance. A staff member will accompany you to the pre-operative area, where you will be prepped for your procedure. There the nurses will start an IV and scrub your operative site. We will ask up to two family members to rejoin you when this is complete. Dr. Salyapongse will speak with you and your family. He will confirm which SIDE is being operated on and sign his name on your skin. Your operating room nurse and your anesthesiologist will then talk with you and escort you to the operating room. Antibiotics and a type of sedative such as Versed may be given through your IV before entering the operating room.

## **Operating Room**

In the operating room you will have cardiac, oxygen and blood pressure monitors applied, and you will be given some oxygen to help you breath. Once anesthesia takes effect you will be positioned on the operating room bed and your skin will be cleaned with a disinfectant solution. Sterile drapes will be applied so that only the area being operated on will be exposed. The OR staff will perform a “time out,” which is to verify the correct operative side and site; once confirmed, the surgeon will begin the procedure. Once the surgery is complete you will be transferred to a gurney and taken to the recovery room.

## **Recovery Room Care**

You will be taken to a recovery area after surgery. During this time, pain control will be managed. Your vital signs (blood pressure, heart rate and oxygen saturation) will be monitored. You will be very groggy for the first 2-3 hours after surgery; please make sure all movements are slow and deliberate to avoid falling/tripping.

You will be receiving pain medication. It is important that you tell the nurses if you are NOT getting good relief from the medication. Our goal is to make you as comfortable as possible, while keeping you safe. It is very important that you begin ankle pump exercises on this first day (located on page 28). This will help prevent blood clots from forming in your legs. You should also begin using your incentive spirometer. A nurse will instruct you on how to use this. Most of the discomfort takes place the first 2 weeks after surgery.

The physical therapist may come to visit with you shortly after arriving to the recovery area. Otherwise, you will walk with the nurse prior to your discharge. The nurses will manage pain, possible post-operative nausea, and any other symptoms you may experience. Most patients will be discharged about 6 hours after surgery. Readiness for discharge is based on pain control, ability to urinate, and to eat/drink small amounts of food/liquids. You will also receive an incentive spirometer (encourages you to take deep breaths) in the recovery room and should continue to use this during your 1st week at home.



### **If You Are Going Directly Home**

A responsible adult will need to drive you home. You will receive written discharge instructions about medications, physical therapy, activity, etc. We will arrange for any equipment as well as home health services, if needed.

### **23 Hour Stay: Over Night Stay**

Some patients may need to stay overnight depending on response to anesthesia. If you stay overnight, you will be transitioned to a “23 hour stay” status. A nurse will be with you throughout the night to monitor your recovery, maintain pain control, and assist with walking. You will then be discharged the following morning.

# POSTOPERATIVE CARE



Incentive Spirometer  
(Reduces the risk of pneumonia)



Front Wheeled Walker



SCD (sequential compression device)  
Reduces the risk of blood clots

## **Caring for Yourself at Home**

There are many things you need to know for your safety, a speedy recovery and your comfort.

- It is recommended to elevate your operative leg for short periods during the day. It is best to lie down and raise the leg above your heart.
- Call your doctor if you notice increased pain or swelling in either leg that is not going away with elevation. **Swelling tends to peak day 5 after surgery.**

## **Temperature**

Take your temperature if you feel warm or sick. If your temperature is above 101.5° F and persists after taking Tylenol, call your surgeon's office for assistance. It is quite normal to have fevers over 101.5 the first 48 hours after surgery. It's usually due to shallow breathing during your surgery. Taking a few slow deep breaths every 10-15 minutes should help.

A fever less than 101° is normal during the first few days after Total Joint Replacement surgery. If the temperature persists for more than 3 days, be sure to notify your surgeon and your primary care physician.

## **Controlling Your Discomfort**

- Take your pain medication at least 30 minutes before physical therapy.
- Slowly reduce the amount of prescription pain medication and transition to Tylenol. You may take two; extra-strength Tylenol instead of your prescription medication up to four times daily. **Please note** that some pain medication has Tylenol in it already. The maximum amount of Tylenol allowed in 24 hours is 4,000mg. Read the labels carefully so you do not exceed this amount.
- Change your position frequently. This will reduce stiffness.
- Use ice for pain control. Applying ice to your affected joint will decrease discomfort. Anytime you are not ambulating or doing exercises you should have ice applied around your surgical site. It is important to have a barrier between the ice and your skin i.e. e. washcloth, towel, or pillowcase. It is recommended to use ice before and after your exercise program. If you do not have an ice pack, a bag of frozen peas wrapped in a kitchen towel makes an ideal ice pack. Always have a layer of protection between the ice and your skin to prevent a burn.

## **CRYO-THERAPY- ELECTRIC ICE MACHINES**

- If you have an electric ice therapy machine it is recommended to use it ALL the time when you are not walking or doing exercises for the first several weeks after surgery. Again, you must ALWAYS have barrier between your skin and the wrap. As long as you have a barrier between the ice and your skin, the ice wrap can be on at all times. This will help reduce pain and inflammation.
  - Quick TIP: Freeze 10-8oz water bottles, you can use these as your ice cubes for the electric machine. Please remove all labels off the bottles prior to use.

## **Body Changes**

- Your appetite may decrease after surgery. However, nutrition is very important during your recovery. Your body needs more calories, protein, and certain vitamins and minerals to help you heal and prevent infection.
- Try eating more frequent, small meals and snacks (beef, chicken, fish, soy products, peanut butter, nuts, eggs, milk, cheese, yogurt, cottage cheese)
- Make sure you eat foods high in iron (lean red meats, fish, chicken, legumes, whole grains, iron fortified breads and cereals)
- Focus on foods high in vitamin A (fortified dairy products, tropical fruits, carrots, winter squash, sweet potatoes, green leafy vegetables)
- Focus on foods high in vitamin C (citrus fruits and juices, kiwi fruit, strawberries, broccoli, bell peppers)
- Consider taking a multivitamin with mineral supplement. Check with your doctor about taking an iron supplement, although this may not be needed.
- Drink plenty of fluids to keep from getting dehydrated.
- Your desire for solid food will return.
- You may have difficulty sleeping, which is normal. Do not sleep or nap too much during the day. You may feel that your energy is low but still have trouble sleeping at night. This is quite normal and may last for one month. Try taking a Benadryl (25mg tab) at night for sleep aid.
- It is common for your energy level to be decreased for the first month.
- Prescribed pain medications may cause constipation. Use stool softeners or laxatives, such as Senokot-S, Miralax, or Colace, on a daily basis. You may also take Milk of Magnesia if needed. These can all be purchased over the counter at a local pharmacy or grocery store.

## **Blood Thinners**

Dr. Salyapongse will prescribe a blood thinner. Based on your health and medical history, you will be utilizing one from the list below. If you have questions about the type prescribed, please contact Dr. Salyapongse's office.

### **Enoxaparin (Lovenox®)**

Lovenox or enoxaparin is an anticoagulant (blood thinner) that is used to help prevent the formation of blood clots. It is especially used for patients that have just had total joint replacement surgery, such as the knee or hip.

It must be used as a subcutaneous (under the skin) injection. Your nurse will give you instructions on the use of this medication. You may view a demonstration video at the following link: [www.lovenox.com](http://www.lovenox.com)

Lovenox should be continued for about 10-15 days after your surgery.

Follow all instructions given to you by your pharmacist. If questions arise after you are at home, please feel free to call the Clinical Coordinator for Orthopedics.

## **XARELTO®**

XARELTO® is a prescription medicine used to reduce the risk of forming a blood clot in the legs and lungs, especially in those who have just had hip or knee replacement surgery. If you had a hip replacement surgery you will take xarelto 10 mg once a day for 35 days following surgery. If you have knee replacement surgery you will usually take the same dose for 12 days. Your surgeon will decide how long you should take this medication. Do not stop or change your dose of xarelto without talking to your prescribing doctor.

## **ASPIRIN®**

Aspirin is an over the counter medication sometimes prescribed as a blood thinner after surgery. Aspirin should be taken twice daily for 4-6 weeks depending on your surgeon's preference. Enteric Coated Aspirin 325mg is the standard dose.

## **Caring for Your Incision**

- Keep your incision dry (you MAY shower with the waterproof bandage on)
- Your post-operative bandage will stay in place until seen at your follow up visit, usually within 7-14 days after surgery.
- You may shower when you are discharged, and every day thereafter, unless instructed otherwise. Most patients will have a water resistant bandage.
- Notify your surgeon if there is increased drainage, redness, pain, odor or heat around the incision.

## **Recognizing and Preventing Potential Complications**

### **Infections**

Signs and symptoms of an Infection

- Spreading redness or warmth at incision site
- Increasing drainage from incision site over the first 3-4 days after surgery
- Persistent fever greater than 101.5°

### **Prevention of Infection**

- Take care of your incision as explained
- Take preventative antibiotics when having dental work. Antibiotics should be taken prior to dental procedures for the first year after your surgery.
- Notify your dentist that you have a total joint replacement; they can prescribe antibiotics before each visit.

### **Blood Clots in Legs**

Surgery may cause the blood to slow and thicken in the veins of your legs, creating a blood clot. This is why you are prescribed blood thinners after surgery. If a clot occurs, you may need to be admitted to the hospital for IV blood thinners. Early treatment usually prevents the more serious complication of pulmonary (lung) embolus.

### Signs of Blood Clots in Legs

- New swelling in thigh, calf or ankle that does not go down with elevation.
  - Swelling after surgery is normal. If you have an unexpected INCREASE in calf/leg swelling and/or pain (that is not related to increased activity) please contact our office.
- Redness and warmth in a localized spot
- Sharp and continuous pain or tenderness in calf.
- NOTE: blood clots can form in either leg.

### Prevention of Blood Clots

- Perform foot and ankle pump exercises whenever you are sitting or lying around.
- Walking several times a day
- Taking your blood thinners as directed such as Aspirin, Lovenox, Xarelto.

### Pulmonary Embolus

An unrecognized blood clot could break away from the vein and travel to the lungs. This is an emergency and you should CALL 911 if you experience any of the signs listed below.

Signs of a Pulmonary Embolus:

- Sudden chest pain
- Difficulty and/or rapid breathing
- Shortness of breath
- Confusion

### Prevention of Pulmonary Embolus

- Prevent blood clots in legs (see above)
- Recognize a blood clot and call physician quickly

## **Postoperative Exercises, Goals and Activity Guidelines**

### **Activity Guidelines**

Exercising is important to obtain the best results from total joint surgery. Several short walks throughout the day are recommended. You may receive exercises from your home health therapist or from an outpatient therapist. It is important to continue the exercises on the days you do not have physical therapy appointments. Exercises and activity will be customized to fit each patient.

Each patient will progress at his or her own rate. Try not to compare yourself with other patients.

### **PREOPERATIVE AND POST-OPERATIVE EXERCISE PROGRAM**

#### **Ankle Pumps**



Ankle pumps should be done any time you are sitting in a chair or lying in bed. Straighten your leg and slowly push your foot forward and backward. This should be done multiple times throughout the day.

#### **Straight Leg Raises**



While lying on your back in bed, tighten your thigh muscles and lift the affected leg up several inches off the bed. Keep your knee straight and toes pointed up. Hold the leg up for 5–10 seconds and then lower it back onto the bed. Repeat 10 times with each leg, 2-3 times per day. Do not continue if this hurts your low back.

#### **Ham Sets - (Post-Operative Knee Arthroplasty)**



While lying on your back in bed, keep your affected leg bent and the other leg straight. Tighten the muscle on the back of your affected leg. Push the heel down into the bed with the affected leg. Hold for 5 seconds. Repeat 10 times with both legs, 2-3 times per day.

### **Heel Slides - (Post-Operative Knee Arthroplasty)**



While lying on your back in bed, bend your knee and slide your heel to your buttock. Slide it back out straight. You may place a plastic bag under your foot if it is easier that way. Repeat 10 times with the affected leg, 2-3 times per day.

### **Sitting Knee Extension with Stool - (Post-Operative Knee Arthroplasty)**



While sitting in a chair, place the foot of your affected leg on top of another chair seat or stool. Press your knee down and hold for 30 seconds. Repeat 10 times, 2-3 times per day.

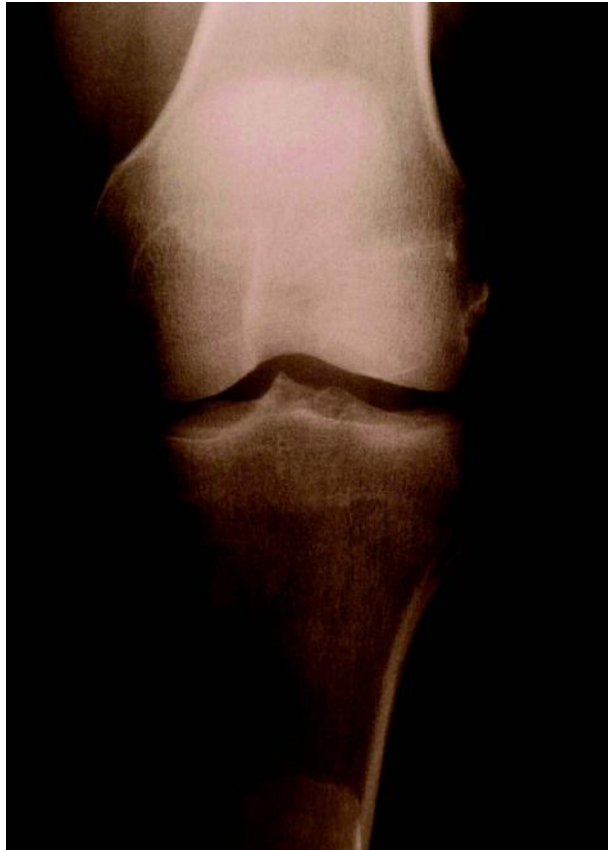
### **Sitting Knee Flexion - (Post-Operative Knee Arthroplasty)**



While sitting in a chair, scoot a little forward. Place a belt or towel under your foot while holding the edges in your hands. Bend your knee as far as you can with the belt/towel. Scoot forward a little more to feel more of a stretch at your knee. Hold for 30 seconds. Repeat 3-5 times with the affected leg, 2-3 times per day.



# ACTIVITIES OF DAILY LIVING



## **Precautions and Home Safety Tips**

### **How to Conserve Your Energy**

- **KITCHEN**
  - DO NOT get down on your knees to scrub floors. Instead, try using a mop and long handled brushes.
  - Pre-plan meals, or gather cooking supplies when you want to prepare a meal. It may be easier to sit while prepping food.
  - Avoid repetitive bending and stretching by placing frequently used cooking supplies and utensils where they can be reached easily.
  - To provide a better working height, use a high stool or put cushions on your chair when preparing meals.
- **BATHROOM**
  - Use a mop to clean bathroom floors and the tub. DO NOT get down on your knees to clean.
- **SAFETY AND AVOIDING FALLS**
  - Remove throw rugs from the floor and ensure any loose carpeting is tacked down. Cover slippery surfaces with carpets that are firmly anchored to the floor or that have non-skid backs.
  - Be aware of your surroundings: pets, objects on the floor, or uneven surfaces in your home. Keep in mind you will be much wider when walking while using a walker. You will have to account for this space throughout your home.
  - Use of night-lights in the bathrooms, bedrooms and hallways are helpful.
  - Extension cords and telephone cords should be removed from pathways. DO NOT run wires under rugs, as this is a fire hazard.
  - DO NOT wear open-toed slippers or shoes without backs. They do not provide adequate support and can lead to slips and falls.
  - Use chairs with arms, it is much easier to get up and down.
  - Change positions slowly, such as; going from lying to sitting to standing, to reduce feeling light headed.
  - DO NOT lift heavy objects for the first three months, or until your doctor says its is safe.
  - Always use good judgment.
- **STAIRS AND GETTING IN AND OUT OF BED**
  - You will be instructed how to use a walker or crutches to go up and down stairs if indicated. There are NO contraindications after joint replacement. A physical therapist can work with you on this as well. The physical therapist will also show you tips on getting in and out of bed to put the least amount of stress on your operative leg.

### **How to Prevent Infections Post Recovery**

A prosthetic joint could possibly attract bacteria from an infection located in another part of your body. Taking antibiotics one hour before having dental work will help prevent any complications with your joint. It is recommended to take antibiotics prior to dental work for 1 year following your surgery. Post-op infections are very rare, but if you should develop a fever of more than 101.5° F, call your doctor.

The closer the injury is to your prosthesis, the bigger the concern is. Occasionally, antibiotics may be needed. Surface scratches may be treated with topical antibiotic ointment. Notify your doctor if the area is painful or reddened.

### **What to Do for Exercise Post-Recovery**

- Choose a Low Impact Activity
  - Recommended exercise classes
  - Home program as outlined in notebook
  - Regular one to three mile walks
  - Home treadmill
  - Stationary bike
  - Regular exercise at a fitness center
  - Low impact sports — golf, bowling, walking, gardening, dancing, etc.
- What Not to Do
  - Do not run or engage in high impact activities
  - Do not participate in high-risk activities such as downhill skiing, etc. unless you have discussed the risks with your doctor.
  - Avoid ladders and step stools.

# **APPENDICES**

## **Exercise Your Right (Living Will)**

### **Put Your Health Care Decisions in Writing**

Although it is extremely rare to experience a serious medical condition, we highly suggest all patients undergoing any medical treatment should have an advance medical directive in place. It is the policy at The Outpatient Surgery Center to place patient's wishes and individual considerations at the forefront of their care. We respect and uphold those wishes.

### **What are Advanced Medical Directives?**

Advanced Directives are a means of communicating to all caregivers the patient's wishes regarding health care. If a patient has a Living Will or has appointed a health care agent, and is no longer able to express his or her wishes, The Outpatient Surgery Center is committed to honoring the wishes of the patient as they are documented at the time the patient was able to make that decision.

### **The Different Types of Advanced Directives**

#### *Living Wills*

These are written instructions that explain your wishes for health care if you have a terminal condition or irreversible coma. A Will is used when the patient is unable to communicate.

#### *Appointment of a Healthcare Agent*

This may be referred to as a Medical Power of Attorney. This is a document that lets you name a person (your agent) to make medical decisions for you, if you become unable to do so.

#### *Health Care Instructions*

These are your specific choices regarding use of life sustaining equipment, hydration and nutrition and use of pain medications.

On admission to the surgery center, you will be asked if you have an Advanced Directive. Please bring copies of the documents to the surgery center with you. The Directive can become a part of your Medical Record. Advanced Directives are not a requirement for admission.

## **Anesthesia and You**

### **Who are the anesthesiologists?**

Board Certified and Board Eligible physician anesthesiologists staff The Outpatient Surgery Center. Each member of the anesthesia team has privileges to practice at The Outpatient Surgery Center.

### **What types of anesthesia are available?**

Decisions regarding your anesthesia are made to meet your personal needs. The types available for you are:

- GENERAL ANESTHESIA, or “going to sleep”, provides loss of consciousness. Your anesthesiologist will be monitoring all of your vitals and breathing closely.
- REGIONAL ANESTHESIA, (e.g. nerve blocks), involves the injection of a local anesthetic. This provides numbness, loss of pain or loss of sensation to a large region of the body. Regional anesthetic methods include spinal blocks, epidural blocks, and arm and leg blocks. Medications can be given to make you drowsy. They will also blur your memory.

You and your doctors may decide to use a combination of both types of anesthetic techniques. All anesthesia provided in our center is administered by MD anesthesiologists.

### **Will I have any side effects?**

Your anesthesiologist will discuss the risks and benefits of the different anesthetic options. They will discuss any complications or side effects that can occur with each type of anesthetic. Nausea or vomiting may occur with anesthesia. With improved anesthetic agents and methods, there is less of a problem today. These side effects can continue to occur for some patients. Medications to treat nausea and vomiting will be given if needed. The amount of discomfort you experience will depend on several things. Each patient can react differently. Your doctors and nurses can help relieve pain with medications. Your discomfort should be tolerable, but do not expect to be totally pain-free. The staff will teach you the pain scale (0-10) to assess your pain level. It is important not to compare yourself with others, each individual experiences pain differently. Please notify your anesthesiologist if you have had any problems with anesthesia in the past.

Please alert your anesthesiologist if you, or a first-degree relative, have experienced Malignant Hyperthermia. This will affect which types of anesthesia are safe and proper for you.

### **What will happen before my surgery?**

You will meet your anesthesiologist right before your surgery. Your anesthesiologist will review all information needed to evaluate your general health. This will include your medical history, laboratory test results, allergies, and current medications.

As a team, you will determine the type of anesthesia best suited for you. He or she will also answer any other questions you may have.

You will also meet your surgical nurse. Intravenous (IV) fluids will be started and pre-operative medications may be given. Monitoring devices will be attached in the operating room. These include a blood pressure cuff, EKG, and other devices for your safety. At this point, you will be ready for anesthesia.

**During surgery, what does my Anesthesiologist do?**

Your anesthesiologist is responsible for your comfort and well being before, during and immediately after your surgery. In the operating room, he or she will manage vital functions, including heart rate and rhythm, blood pressure, body temperature and breathing.

**What can I expect after the operation?**

After surgery, you will be taken to the Post Anesthesia Care Unit (PACU). Specially trained nurses will watch you closely. During this period, you may be given extra oxygen and intravenous fluids. You will likely be dehydrated from not eating or drinking prior to your surgery. Your breathing and heart functions will be watched closely. An anesthesiologist is available to provide care as needed for your safe recovery. Many people feel light headed after anesthesia. Move slowly when you first get up; dizziness is common.

**May I choose an Anesthesiologist?**

No.

# **Techniques and Methods of Relaxation after Surgery**

## **Relaxation Techniques**

Relaxation is the lessening of tension. Relaxation can help you control anxiety. It helps you use your energy better. Tense people sometimes feel short of breath. Anxiety about feeling short of breath actually increases shortness of breath! Relaxation activities can reduce tension and anxiety. It leaves more oxygen for daily activities. Relaxation is a learned response. It takes practice. In the beginning you need to set aside times during the day to practice. Eventually, you will learn to notice the signs that you are tense. That is your trigger to begin using relaxation activities. This will save your energy for chosen activities.

## **Methods of Relaxation**

### *Deep Breathing:*

While lying on your back, bend your knees. Move your feet about 8 inches apart. Keep your toes turned out slightly.

- Check your body for tension.
- Place one hand on your stomach. Place the other hand on your chest.
- Breathe in slowly and deeply through your nose into your stomach. Push up your hand as much as it feels comfortable. Your chest should move only a little and only with your stomach.
- When you feel at ease with that step, smile slightly and breathe in through your nose. Breathe out through your mouth. Make a quiet, relaxing whooshing sound like the wind as you gently blow out.
- Continue deep breathing for about five to ten minutes at a time. Do this once or twice a day. Continue for a couple of weeks. Then you can increase the period to twenty minutes.
- At the end of the session, take time to check your body for tension. Compare the tension you feel at the end of the exercise with that which you felt when you began.
- Use this exercise anytime you feel tension or anxiety.

### *Body Awareness*

This exercise allows you to concentrate on different body parts. It will bring on general relaxation. Position yourself comfortably. Close your eyes. Think of your face muscles. Let them totally relax. Next, concentrate on your neck and shoulder muscles. Relax all your muscles. Move from head to toe. Let all your body parts become loose and warm.

### *Imagery*

Allow pleasant thoughts and images to bring you a relaxed state. Close your eyes. Picture a pleasant scene or a favorite place. Now think about the sights, sounds, and smells of the pleasant scene as you relax.



### *Additional Relaxation Tips*

- Use these tips anytime you feel tense during the day. They may be very helpful to use before you begin a task or during activities that cause tiredness.
- Play soothing music.
- Think pleasant thoughts.
- Take rest breaks as needed.
- Your location can help relaxation. Turn down the lights. Close the door and be in a quiet place. Wear loose comfortable clothing. Try to keep interruptions and noise to a minimum.

Notes

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