

TOTAL HIP REPLACEMENT



Total Hip Replacement

Dear Proliance Orthopedic Associates Joint Replacement Patient,

Congratulations on making the decision to improve your quality of life. Quality of life means different things to different people: hiking, riding a bike, lifting a grandchild, golf, tennis, or simply enjoying a walk. Being able to move without pain or limited function is an important part of getting back to your life.

The orthopedic surgeons at Proliance Orthopedic Associates (POA) work to restore mobility to those living with pain and loss of function of their arthritic joints. Arthritis affects about 40 million Americans. We have all witnessed the ways joint injury, arthritis, and other degenerative joint diseases rob people of their independence and, in some cases, their happiness.

The skilled orthopedic surgeons, physician assistants, nurse practitioners, and staff at POA have developed a joint replacement program focused on compassionate care, excellent outcomes, and outstanding customer service. It is important to us that you, as the patient, are an active participant in your care. This includes taking responsibility for your diet, sticking to an exercise plan, and participating in our preoperative and postoperative programs to optimize the outcome of your joint replacement surgery.

To maximize success after your surgery, it is important that you:

- Appreciate that each person has their own unique challenges. No two joint replacement experiences will be the same. This educational material serves as a guide for your upcoming joint replacement journey.
- Understand that you will be discharged home from our Ambulatory Surgery Center with your care partner who may be a spouse, family member, significant other, or friend. A care partner is essential for a successful journey through surgery and recovery.
- Realize this information outlines the various steps and processes to get you ready for your upcoming surgery. Please review this and make sure you follow the pathway we have outlined.
- Know that we all worry about the unknown, and understand we are here to guide you successfully through this process and to minimize any discomfort or apprehension.

We are committed to providing the expertise, resources, and service to ensure the best possible outcome following your joint replacement procedure.

Proliance Orthopedic Associates (POA)

Contact Information

Proliance Surgery Center at Valley 4009 Talbot Road South, Suite 200 Renton, WA 98055	Phone (425) 226-2041 Fax (425) 226-2405
POA Renton Talbot Professional Center 4011 Talbot Road South, Suite 300 Renton, WA 9805	Phone (425)-656-5060 Fax (425) 656-5047
POA Covington 27005 168th Pl SE, Suite 201 Covington, WA 98042	Phone (253) 630-3660 Fax (253) 631-1591
POA Maple Valley 24060 SE Kent Kangley Road Maple Valley, WA 98038	Phone (425) 358-7708
POA Auburn Lakeland Hills 1620 Lake Tapps Parkway E, Suite 115 Auburn, WA 98092	Phone (253) 246-2860 Fax (253) 246-2861
POA Bone and Joint Urgent Care 150 Andover Park W. Tukwila, WA 98188	Phone (425) 979-BONE (2663) Fax (425) 524-4447
For surgery scheduling questions: Ambulatory Surgery Center Scheduler	Phone (425) 656-5060 Ext 3062
For medical questions: Ambulatory Surgery Center Pre-op Nurse	Phone (425) 291-1465
For billing or insurance questions: Proliance Billing/Insurance	Phone (425) 291-1414
For anesthesia questions: Valley Anesthesia Associates	Phone (425) 251-5180
For anesthesia billing questions: Anesthesia Billing	Phone (425) 407-1500 Ext 1001 or 888-900-3788
For durable medical equipment questions (walker, cane, ice machine, etc.): Proliance Orthopedic Associates	Phone (425) 656-5060 *Ask for the cast room
To page the on-call doctor for urgent medical concerns after-hours: POA Answering Service	Phone (425) 251-1311

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Preparing For Total Hip Replacement

4-8 Weeks Prior to Surgery

Now is the time to start preparing for your upcoming joint replacement. This period of time is essential to get yourself set up for a successful outcome. In this section, we will discuss assembling your care team, optimizing your health to prepare for joint replacement surgery, and beginning “Pre-Hab” physical therapy.

Preparing your Care Team

Undergoing a total joint replacement is not something you do alone and will require you to assemble a care team to help you. You will depend on family members and/or friends to assist you in the preoperative phase as well as throughout the recovery process. In the preoperative phase, your care team can assist you with ensuring that your house is prepared for your postoperative recovery. This will include minimizing barriers and tripping hazards (cords and loose rugs), meal prepping, stocking up on ice, as well as making arrangements for child and pet care. In the recovery phase, your care team will need to get you to and from your post-op appointments, assist with meals, personal hygiene, and medication management after surgery.

Pre-Surgical Rehabilitation (Pre-Hab)

“Why am I doing physical therapy when I have done this in the past already?” This is a question we commonly are asked during this preoperative process. We recommend “Pre-Hab” because it has been shown to help accelerate your post-operative recovery. This form of therapy focuses primarily on optimizing your strength and range of motion for your upcoming total joint replacement. In addition, we recommend that you maintain your regular daily activities including walking/hiking, biking, and strength training, up until your surgery.

Medical Optimization

When you schedule your total joint replacement surgery, you will meet with our surgery scheduler who will arrange your preoperative visits and any other necessary medical clearance as determined by your orthopedic team in order to safely proceed with surgery. These additional clearances might include sign off from cardiology, pulmonology, neurology and/or your dentist.

Identified in many studies as a major risk factor, smoking can lead to serious postoperative complications including infections, delayed wound healing, and the need for further surgeries. Smoking cessation will help decrease the occurrence of these postoperative complications. If you are an active smoker you will need to quit all tobacco products, including nicotine replacement therapy, for a minimum of 6 weeks before surgery. If you are in need of assistance with smoking cessation, we recommend you partner with your primary care provider to discuss options. Urine, blood, and/or breathalyzer tests will be ordered to confirm you have quit.

If you are taking any opioid medications, you will need to decrease your daily consumption by 25% before surgery. This will aid in controlling your postoperative pain.

Patient Engagement App

You will be given the opportunity to enroll in an app-based electronic platform with educational information and reminders throughout your surgery process. An email address may be used if preferred.

Preparing For Total Hip Replacement

2-4 Weeks Prior to Surgery

Preoperative Visits

- Your upcoming joint replacement is right around the corner! Now is the time to ensure that you have completed all of the steps mentioned above. At this point in time, you will have two appointments set up with our office.
- One appointment will be your preoperative visit with the orthopedic physician assistant or nurse practitioner, which may be in the office or a telehealth visit. During this visit, we will discuss your upcoming total joint replacement in detail. We will go over what to expect leading up to surgery, the day of surgery, and the postoperative course.
- During the second appointment you will meet with our internal medicine physician assistant who will review your health history, medications, perform a physical exam, and review any other preoperative clearances from other specialists.
- After this visit, you will be sent to the lab for preoperative blood work as well as an EKG if necessary.
- You will also meet with or speak to our Orthopedic Care Coordinator, an advanced registered nurse practitioner who will follow you throughout the preoperative and postoperative process. Your Orthopedic Care Coordinator will be your main point of contact should you have any questions or concerns.
- If you or any member of your care team have any paperwork that needs to be completed by our office, such as a return to work notice or Family Medical Leave Act (FMLA) form, please bring it with you to your preoperative visits so that we may complete and fax it to the appropriate recipient.

When Do I Stop Taking My Medications?

At the conclusion of your visit with our internal medicine physician assistant, you will receive a printed handout of instructions detailing all of your home medications. In this set of instructions, you will find which medications you should continue to take up until the night before or morning of surgery, along with the medications you should discontinue before surgery.

- You will need to **discontinue all vitamins and supplements 2 weeks before surgery.**
- You will need to **discontinue the use of all NSAID medications 1 week prior to surgery.**
(i.e. Ibuprofen/Advil, naproxen/Aleve, meloxicam/Mobic)
- At the conclusion of your preoperative visit, if you are taking **any anticoagulation/blood thinning medication**, you will be given specific instructions for when to discontinue these before surgery.
- You are allowed to take **Tylenol/acetaminophen** up until the night before surgery for pain control.

What Devices do I Need?

- At your preoperative appointment you will be fitted for a walker and a cane. These will be used in the immediate postoperative phase. Patients typically use a walker for the first 1 to 2 weeks. Under the guidance of a physical therapist and/or based on your own comfort level, you can transition from the walker to the cane as you feel ready.
- You will also have the option to purchase an **ice machine**. These will be on display in our medical supplies room and can dramatically assist you in reducing your postoperative pain and swelling control. If you are interested, please read "Ice and Compression Machine" on pg. 34 and ask your team for more information.

Preparing For Total Hip Replacement

Four Days Prior to Surgery

You are so close! For the four days leading up to surgery and on the morning of surgery, you will need to take a daily shower and wash with an antiseptic solution to help prevent infection. See below for instructions and details. At this time, we also recommend discontinuing the use of any topical gels, ointments, or creams on the operative leg.

Approximately two business days before your surgery date, you will receive a phone call from our office to inform you of your check-in time for surgery. This check-in time will be roughly 1.5 to 2 hours before the surgery itself. During this time, we will be getting you ready for surgery in our preoperative holding area.

During this period of time, we also recommend you begin hydrating well with water or sports drinks like Gatorade. The night before surgery, it is important to make sure you drink at least one large glass of water or Gatorade.

Preoperative Showers With CHG Antiseptic Solution

Proper skin care plays an important role in preventing infections. Please contact your surgical team if you have any skin issues on or near your surgery site, or open wounds anywhere on your body so we can ensure it is safe to proceed with surgery.

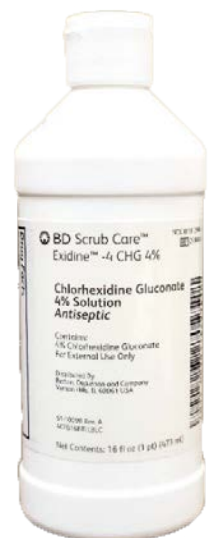
We will provide you with a 16 oz. bottle of BD Scrub Care™ Exidine™ Chlorhexidine Gluconate (CHG) 4% Solution at your preoperative visit. You will need to shower daily for FIVE DAYS with this CHG solution prior to surgery, including the morning of surgery.

REMINDERS:

- Removal of nail polish from fingers and toes preferred.
- After your last shower before surgery, **DO NOT** apply any lotions, make-up, hair products, or perfumes.
- For at least 72 hours prior to surgery, **DO NOT** shave or wax the surgical area. Facial shaving is okay.
- After your surgery, **DO NOT** use CHG solution, as it can cause excessive dryness or other skin issues.

While in the Shower

1. **Measure it out:** using a household measurement cup, measure out 1/3 cup (3 fl oz) of CHG solution prior to your shower to ensure you won't run out by the last shower. Have a clean washcloth ready.
2. **Take a normal shower:** wash your entire body as you normally would with your usual soap and shampoo. Rinse well, and turn off the water or step away from the shower stream.
3. **Apply the CHG solution:** apply it directly onto your skin or using a clean, wet washcloth. Gently wash from the neck down (avoiding the face and genitals). Be sure to wash the surgical site area, armpits, stomach, and front groin folds especially well. If you have abdominal folds, make sure to wash well under the folds.
4. **Wait 60 seconds:** allow the solution to sit on the skin for 60 seconds and then rinse thoroughly with water.
5. **Towel dry:** pat yourself dry with a clean towel and dress in clean, dry clothing. Ensure bed sheets are washed and clean as well.



Preparing For Total Hip Replacement

Day of Surgery

Scrubbing Up

Surgery day may start really early if you are the first case of the day. Please take your fifth shower with the CHG solution as directed.

Fluids

We encourage you to drink clear liquids up until 2 hours before your check-in time. You should drink 8 to 10 ounces of water or clears sports drinks. This helps you stay hydrated before surgery. No food or snacks for 8 hours prior to check-in time.

ADULTS		
Types of Liquids or Meals	Examples	When to Stop Before Surgery or Procedure
Clear Liquids	Only water or Gatorade allowed. (Gatorade Zero for diabetic patients) Drinking fluids before surgery has been shown to lead to better outcomes after surgery	Stop a minimum of 2 hours before check-in time.
Food	Solid foods and full liquids: this includes soups, broths, chewing gum, and cough drops.	Stop a minimum of 8 hours before check-in time.

Medications

Take your usual prescription medications as directed with water as discussed at your pre-op visit (exceptions to this discussed earlier, if you have any questions please call our Surgery Center and ask to speak with a pre-op nurse).

What Should I Wear?

- Loose-fitting clothes such as sweat pants, baggy shirt, slip-on shoes. Do not wear yoga pants or tightly fitting stretch pants (as these are hard to put on after surgery).
- Remove all jewelry, piercings and artificial nails.
- Do not shave your surgical site or write messages for your surgeon on your leg.

Preparing For Total Hip Replacement

Day of Surgery

What Should I Bring With Me To The Surgery Center?

- Your insurance info card
- Pharmacy card
- Photo ID card
- List of medications and dosages
- Walker
- Attachment pad for the ice machine (if purchased)
- Your smart phone
- Small amount of cash or credit card for pharmacy co-pays
- If you wear glasses/contact lenses or removable dentures, bring a case to put these in during surgery

Don't bring large amounts of cash, valuables, watches, etc.

Check-In For Surgery

Proceed to the main floor of the Proliance Surgery Center at Valley for the check-in desk.

After You Check-In

You and your care partner will be taken back to a private room to get ready for surgery. Your care partner(s) will be able to stay with you until you are taken back to the operating room. We ask that you not have small children or family members who are ill accompany you to the Surgery Center. Once in your private room, you will remove your clothes and wipe your entire body down with antiseptic wipes to reduce the bacteria on your skin. You will need assistance to reach your back. This material may make your skin feel a bit sticky. You will then put on a hospital gown and socks and your clothes will be placed in a bag. You can now relax in a recliner with a warm blanket.

Next...

A nurse will come in and review your medical history, medications, and allergies. Your blood pressure, pulse, and temperature will be recorded. An IV will be started in one of your arms. You will be given some oral medications to help with pain after surgery. You will be given iodine swabs to clean your nostrils which minimizes bacteria in your nose, and reduces your risk of developing an infection.

Your anesthesiologist will come in and discuss anesthetic options for your surgery. Most patients have a spinal anesthetic with sedation (see Anesthesia section on the next page for details).

Your surgeon will come in to see you and answer any questions, confirm the procedure you are about to have, and put their initials on your operative site. They will sign your surgical consent, and after you review it, you will be asked to sign as well.

Your operating room circulating nurse will then come to take you back to the operating room, and your care partner/family will wait for you in the waiting room area where they will have access to free Wi-Fi and a TV. Your surgeon will make a plan to let them know when the surgery is done.

Preparing For Total Hip Replacement

The Operating Room

This is a bright, chilly room with lots of equipment. In the room, there will be a surgical scrub technician who will assist with the surgery and hand instruments to your surgeon, the nurse who brought you into the room, and your anesthesiologist. Your nurse will give you a warm blanket and place monitors on your arm and finger to check your blood pressure, pulse, and oxygen level. You will be given antibiotics through your IV to minimize the risk of infection as well as medication to decrease blood loss during surgery. Your anesthesiologist will administer the anesthetic you discussed, after which the nurse and team will get you in the proper position for surgery, prep your hip with an antiseptic solution, and then place sterile drapes on the surgical site. You will have some sedation through your IV and may not remember this activity. All of this takes about 30-40 minutes and then surgery will begin.

Anesthesia

As previously discussed, your anesthesiologist will review your history and make recommendations for your anesthetic. Most patients have a spinal anesthetic with sedation through the IV. Studies have shown decreased complications after surgery with spinal vs. general anesthetics.

Spinal Anesthesia with IV Sedation

Spinal anesthesia with IV sedation is the preferred choice of both your orthopedic and anesthesia doctors. Spinal anesthesia (Fig. 1) is a one-time injection made at the level of your lumbar/low back vertebra. A spinal anesthetic provides excellent numbness from your waist down to your toes. This numbness will last throughout the procedure and will wear off 60 to 90 minutes after the surgery is complete. You will be asleep for the entirety of the procedure with medicine given to you through your IV. You will wake up safely in our recovery area having already received medications to help treat pain and nausea. The advantages of spinal anesthesia versus general anesthesia are significant and include needing little to no IV narcotics for pain control during your procedure, quicker emergence in our recovery room, and avoidance of inhaled anesthetic gases and breathing tubes. When comparing spinal anesthesia to general anesthesia, medical research has shown a lower incidence of nausea and vomiting after surgery, lower amounts of blood loss, lower need for postoperative pain medicine, and a quicker return to cognitive baseline.

The most commonly occurring risks of spinal anesthesia include:

- Less than 1% risk of bleeding and infection at the site of spinal injection.
- Less than 1% risk of headache.



Figure 1

This is the typical position for spinal placement

Preparing For Total Hip Replacement

Anesthesia (Continued)

General Anesthesia

General anesthesia is the delivery of anesthesia medicines, both intravenously and inhaled, in order to keep you safely asleep throughout your procedure. After you are put to sleep with medication given through your IV, your upper airway will be secured by the placement of a breathing tube. During your procedure, you will be given medication to help treat pain and nausea via your IV in order to ensure every measure has been taken to provide for a safe and comfortable awakening from anesthesia.

The most commonly occurring risks of general anesthesia include:

- One in four patients may experience a sore throat
- One in four patients may experience nausea/vomiting.

A Note From Valley Anesthesia Associates

We hope this brief summary of your anesthetic choices has helped prepare you for your upcoming surgery. Know that Valley Anesthesia Associates will make every effort to tailor a safe and effective anesthetic to each and every patient, with close attention paid to your specific medical needs. We will be available to answer any and all follow up questions or concerns the day of your surgery. Please also feel free to contact us prior to your surgery as an anesthesia provider will be available during normal surgery center business hours.

Please also note that anesthesia is billed separately.

For any anesthesia billing questions please call (425) 407-1500 Ext 1001 or 888-900-3788.

Preparing For Total Hip Replacement

Recovery Room

- Once your surgery is complete, you will be transferred to the recovery area. (Phase 1)
- Following surgery, your surgeon will talk to family members and your Care Partner.
- Once in the recovery room you will continue to be monitored closely by your recovery room nurse(s).
- It is common to feel groggy or lightheaded during Phase 1 recovery and you may have little or no recollection of this phase.
- If you have an Ice Machine, the sleeve will be placed on your hip after the dressing has been placed and it will be connected to an Ice Machine while you are in Phase 1. Otherwise ice packs will be applied to the hip.
- You will remain in Phase 1 until you are awake, alert, have regained sensation to your lower extremities, and any postoperative symptoms are well-controlled. Typically, you will remain in Phase 1 for a relatively short period of time before being transferred to Phase 2.
- Once in Phase 2, your family will be allowed at your bedside.
- You will be allowed to drink water and eat a small snack.
- You will be encouraged to walk with staff for the first time.
- The nursing staff will continue to monitor you, and if necessary, treat any remaining postoperative symptoms.

Discharge

You will be ready to go home when the following criteria are met:

- You are tolerating food and liquids.
- Pain is well controlled.
- You demonstrate the ability to safely walk and do stairs (if needed).
- You are cleared by your surgeon and nursing staff for a safe discharge.

Once these requirements, and any individual needs specific to your care are met, then you will be discharged.

Recovering from Total Hip Replacement

Getting Back to Life

Congratulations! Now that the stress and worry of surgery is behind you, we recommend that you spend a few minutes of mindfulness to simply enjoy being home relaxing with ice/cold therapy on your hip. Plan on getting started on the steps below first thing in the morning.

We will guide you through the details of your recovery starting with key topics of concern including what to expect in the days, weeks, and months to come. We will also point out key “to do’s” and pitfalls to avoid.

Getting Back to Life

First and foremost, remember your hip precautions – **No Bridging, Back-Bending, or Limbo**. Be cautious, but not paranoid. Otherwise, we have found when patients approach their recovery and rehabilitation like a “full-time job”, they seem to experience a better recovery process. So, what does that daily job schedule look like?

- Begin with your morning routine – eat your breakfast, do your exercises (avoiding bridging), walk at least 300 ft (which is a city block) progressing 100 ft per day, and then use cold therapy/ice over your incision for a minimum of 30 minutes (Fig. 4 on the next page).
- Around noon, eat your lunch, do your exercises, walk, and then once again ice for a minimum of 30 minutes.
- At dinner time, eat, do your exercises, walk, and then lay down and ice for a minimum of 30 minutes. You can relax and take the rest of the evening off.
- When it comes time to sleep, feel free to sleep in any position that is comfortable. Sleep and rest are necessary for healing.

Your first day or two at home you may notice increasing pain as the anesthesia has worn off. The normal response to increased swelling is an increase in pain. Remember to be diligent about icing your hip and taking Tylenol and Meloxicam for pain relief. If needed, you may use the opioid pain medication as prescribed, starting at a low dose and working your way up as needed for pain control. Keep in mind it is normal for your hip discomfort to be in the 1 to 3 range when you’re sitting absolutely still, and in the 4 to 6 range when you’re up moving around. Pain may be above a 6 when doing your therapy exercises for the first 5 days, as this seems to be the peak of the pain and swelling. After that, we would anticipate the need for pain medication to begin to lessen.

After your first week, you will find that the pain and swelling have decreased and the function of your leg is beginning to return fairly quickly. For those with jobs that allow you to sit and stand as needed, it is reasonable to return to work around 3 to 4 weeks after surgery. For those who work in jobs that require standing, walking, or climbing for the majority of the day, it is reasonable to return to work around 4 to 6 weeks.

Recovering from Total Hip Replacement

Key Topics of Concern

The body's normal reaction to any surgical procedure includes pain, swelling, weakness, bruising, and, on rare occasions, blistering around the incision site. Another key concern is dislocation of your hip replacement. It is important to know and understand how to manage each one of these known concerns.

Hip Dislocation. . . Is that Possible?

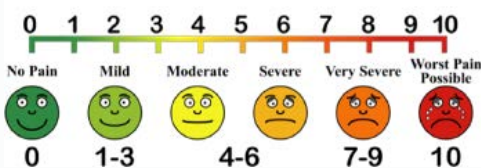
While rare, it is possible to dislocate your hip after an anterior hip replacement. For 6 weeks after surgery, avoid bridging, which is back or hip extension exercises such as lying on the bed or floor with your knees bent, pushing your pelvis or hips upward, and "bridging" ... i.e. doing the back-bend or limbo (Fig. 2). Do not drop your surgical leg over the edge of the bed while laying down or attempting to sit up (Fig. 3). During pre-hab, your therapist will go over this in great detail.



Figure 2: AVOID THIS POSITION

Pain

PAIN ASSESSMENT TOOL



Pain is one of the expected responses to a hip replacement. We will empower you with the tools you need to help control and minimize your discomfort. You will be frequently asked to rate your pain based on the pain assessment tool.

Over the first several days and weeks, we anticipate that your pain will be around a 4 or 5. While doing hip exercises, your pain may increase for a short period of time. Minimizing swelling and using ice/cold therapy can help control that pain. We will also provide you with specific medications that will be used to control your pain. All of these are mentioned in more detail on the next few pages.



Figure 3: AVOID THIS POSITION

Swelling

Swelling will occur around your surgery site and perhaps your thigh over the next 5 days. This is a normal and expected response to surgery. Swelling is best controlled by laying down and resting with cold therapy or ice on your incision for a minimum of 30 minutes every 2 hours during the day for the first 3 or 4 days following surgery. Gravity can also pull swelling into your lower leg. If this occurs, lay flat on your back and elevate your operative leg on a wedge of pillows or blankets well above your heart level. Gravity will pull swelling out of your leg and get the fluid to your heart (Fig. 4). The heart will get rid of the extra fluid. Lay this way for a minimum of 30 minutes every 2 hours during the day. Apply ice or use the Ice Machine on your hip during that time. This is particularly important during the first 3 or 4 days after surgery.

Avoid sitting with your operative leg dangling down for more than 30 minutes at a time. Sit in this position only when you are eating meals for the first 3 days. Sitting with your leg hanging down for too long allows gravity to work against you, pulling fluid back into your knee, calf, ankle and foot.



Figure 4

Proper elevation and icing of the hip and leg

Recovering from Total Hip Replacement

Key Topics of Concern

Swelling (Continued)

Generally speaking, swelling is better in the morning and gets worse as the day progresses. Elevating your leg will help decrease swelling. If you are elevating properly and are not seeing any notable change or relief, please reach out to our Orthopedic Care Coordinator, ARNP, at 425-656-5060.

Ice/Cold Therapy

Ice/cold therapy is your friend! Cold therapy such as the “Polar Care Wave” and “IceMan” machines (Fig. 5), gel packs, frozen bags of peas, or bags of ice will help control swelling and help relieve pain. You may use cold therapy as frequently as you would like. We recommend that you give your skin a break from icing some portion of every hour, particularly if you are using bags of ice. Also consider using a thin material between your cold therapy and your skin. We would like to emphasize the use of cold therapy as your first go-to method to decrease pain.

See “Ice and Compression Machine” on page 34 in the Appendix for more information about maximizing cold and compression therapy, which has been shown to decrease the need for opioid pain medication amongst other benefits.



Figure 5

Weight Bearing and Use of an Assistive Device

You may place as much weight onto the operative leg as your pain, comfort, common sense, and balance will allow. You will not damage your hip replacement by placing weight on the leg, but we would like you to use a walker for the first week to ensure that you do not fall. As you progressively put more weight on the leg, you may wean off of the walker as tolerated. For example, when you no longer feel that the walker is necessary and you feel safe, confident, comfortable, and balanced, you may progress to a cane. If you are carrying your walker more than using it for balance and safety, you are probably ready to transition to a cane. It is usually best to use the cane in the hand opposite of the operative leg (Fig. 6). When you no longer feel a cane is necessary and you feel safe, confident, comfortable, and balanced, you may discard the cane. The length of time it takes to walk without support aids is not important and will not determine the success or failure of your hip replacement. However, you have our permission to walk without support whenever you feel you are safe. Some people do this within 2 weeks of surgery, others take 6 weeks or so.



Figure 6

For a **LEFT** hip replacement, use the cane in the **RIGHT** hand. For a **RIGHT** hip replacement, use the cane in the **LEFT** hand. The tip of the cane and the operative leg should strike the ground at the same time, followed by swinging your good leg forward.

Recovering From Total Hip Replacement

Key Topics of Concern

Medications for Pain

You will be given a prescription for specific medications that will help control your pain. Most people go home with the following medications (unless medical issues limit their use):

- **Tylenol** 500 mg tablets, 2 pills taken by mouth every eight hours. This will be your primary medication for pain control.
- **Meloxicam** 7.5 mg tablets, 1 pill taken by mouth twice daily with a meal (breakfast and dinner). This medication will help control swelling and decrease your pain.
- **Oxycodone** 5 mg tablets, ½ of a pill up to 2 pills every 4 hours taken by mouth as needed for pain.

Some patients may not tolerate one or more of the above medications. Please indicate this to your care team so that alternative medications can be provided.

Mild Pain	Moderate Pain	Severe Pain
Ice and Elevation	Ice and Elevation	Ice and Elevation
<u>ANALGESIC</u> Tylenol/acetaminophen 1000 mg every 8 hours (maximum daily dose 3000 mg in 24 hours)	<u>ANALGESIC</u> Tylenol/acetaminophen 1000 mg every 8 hours (maximum daily dose 3000 mg in 24 hours) DO NOT TAKE IF ALSO TAKING NORCO	<u>ANALGESIC</u> Tylenol/acetaminophen 1000 mg every 8 hours (maximum daily dose 3000 mg in 24 hours) DO NOT TAKE IF ALSO TAKING NORCO
<u>ANTI INFLAMMATORY</u> If prescribed Mobic/meloxicam take 7.5 mg twice daily.	<u>ANTI INFLAMMATORY</u> If prescribed Mobic/meloxicam take 7.5 mg twice daily.	<u>ANTI INFLAMMATORY</u> If prescribed Mobic/meloxicam take 7.5 mg twice daily.
	<u>OPIOID</u> If prescribed Tramadol : Take 1 tab (50 mg) every 6-8 hours as needed (maximum daily dose 300 mg in 24 hrs). If prescribed Norco (hydrocodone/acetaminophen) : take ½-2 tabs every 6-8 hours as needed. If prescribed Oxycodone : take ½-2 tabs every 6-8 hours as needed.	<u>OPIOID</u> If prescribed Tramadol : Take 1 tab (50 mg) every 4 hours as needed (maximum daily dose 300 mg in 24 hrs). If prescribed Norco (hydrocodone/acetaminophen) : take ½-2 tabs every 4 hours as needed. If prescribed Oxycodone : take ½-2 tabs every 4 hours as needed.

Weaning Off of Opioid Pain Medication

Your goal is to take as little opioid pain medication as needed to reasonably control your pain. The aim is to continue to decrease the use of this medication as your symptoms improve. Once you establish the amount and frequency of pain medication necessary for pain control right after surgery, plan on using that amount routinely for just a few days until your pain begins to improve. We anticipate that you will need some level of opioid medication to a varying degree for up to 4 weeks. Start weaning off of opioid pain medication by taking fewer pills at a time or taking pills less frequently.

- Example 1: Take 1 tab every 4 hours instead of 2 tabs
- Example 2: Take 1 tab every 6 hours instead of every 4 hours

Recovering From Total Hip Replacement

Key Topics of Concern

Weaning Off of Opioid Pain Medication (Continued)

Stopping opioids abruptly can lead to symptoms of withdrawal, and many of these symptoms overlap with side effects from taking opioids. Withdrawal symptoms can include restlessness or anxiety, increased pain, insomnia, nausea, vomiting, diarrhea, sweating or fevers, drowsiness, tremors, rapid heart rate, blood pressure changes, confusion, hallucinations, and/or seizures.

You can avoid these symptoms by taking as little opioid pain medication as necessary and making a change every 1 to 2 days to your medication regimen as noted above, with the goal of stopping use as soon as possible.

Other Medications

Most people go home with the following medications in addition to the pain medications mentioned above (unless medical issues limit their use):

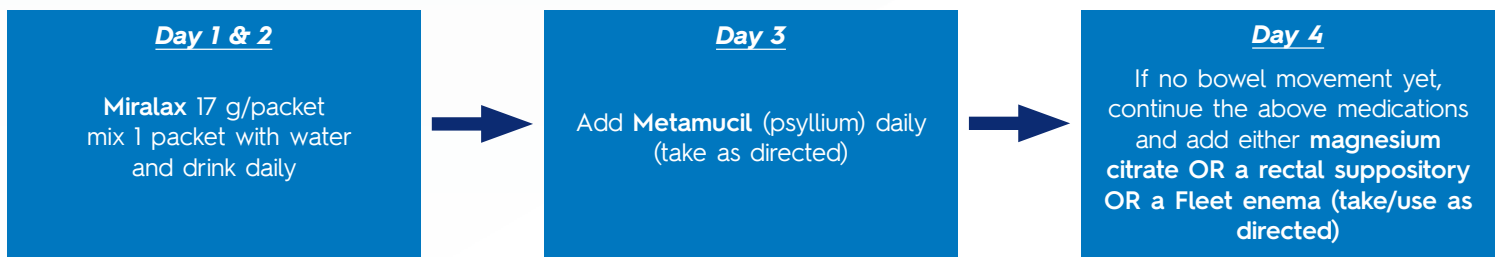
- **Aspirin** 81 mg tablets - take 1 tab by mouth twice a day (one with breakfast and one with dinner). This is for blood clot prevention. You will need to take aspirin for a total of four weeks.
- **Omeprazole** 40 mg capsules - take 1 cap by mouth daily. This is to protect your stomach while you're taking aspirin and Meloxicam together.
- **Miralax** 17 g/packet - mix 1 packet with water and drink daily for constipation if needed.

Some patients may not tolerate one or more of the above medications. Please indicate this to your care team so that alternative medications can be provided.

Constipation

Constipation is a very common problem following hip replacement surgery. Contributing factors are the use of opioid pain medications, decreased activity, poor diet, and poor hydration. Decreasing the use of opioids, eating a healthy diet high in fiber, staying well hydrated, and increasing activities will help prevent constipation from occurring. We will prescribe Miralax to help reduce the risk of developing constipation.

Until you have regular bowel movements, we encourage you to follow the regimen below (all of these medications can be obtained over-the-counter at any pharmacy):



If you develop sudden onset abdominal pain, severe bloating, nausea or vomiting, please contact our office. This may be a sign of a more serious complication.

If you have a history of constipation, or concerns about this being a potential postoperative occurrence, you can start taking Miralax one day prior to surgery.

Recovering From Total Hip Replacement

Key Topics of Concern

Blood Clot Prevention – It's Important

Hip replacement surgery increases the risk of developing blood clots in the veins of your legs – this is called deep vein thrombosis (DVT). We use several methods to decrease this risk including the use of blood thinners. If you are **low risk**, meaning no prior history of blood clots (DVT) and no unusual risk factors, then **Aspirin 81 mg tablets 1 tab twice a day (one with breakfast and one with dinner) for 4 weeks** will be used to thin your blood.

If you are at **high risk** of a blood clot, then an alternative **oral blood thinner will be used for approximately 6 weeks**. We have used this strategy for many years to safely and effectively minimize the risk of blood clots.

Some patients are on other types of blood thinning medications for other medical reasons. Your care team will give you specific directions on when to resume those particular medications and what dose to take. Almost always, you will be placed on a lower dose than you usually take for five days from the time of your surgery. At the end of this time, you will then resume your normal preoperative dosing of your blood thinning medications.

If you have any questions, please contact the Orthopedic Care Coordinator at 425.656.5060.

Signs And Symptoms Of A Blood Clot (DVT)

Swelling in your calf or thigh that does not improve within an hour of elevation over heart level.

Constant pain, increased warmth, and/or tenderness in your calf, or with motion of your ankle.

Signs And Symptoms Of A Pulmonary Embolism

Sudden onset of shortness of breath, difficulty breathing or chest pain.

This is a true medical emergency. It occurs when a blood clot travels to your lungs. Call 911 immediately.

DO NOT DRIVE.

Call 911 immediately if you develop any of these symptoms:

- Sudden chest pain
- Difficulty breathing
- Feeling of shortness of breath
- Pain with deep breathing
- Coughing blood

Recovering From Total Hip Replacement

Incision Care

How Do I Take Care of My Wound?

Do not use ointments, creams or lotions around your wound, particularly when the mesh is still in place. After the mesh has been removed, please wait one more additional week before you apply any ointments, creams or lotions to your incisional area.

Let's Talk About Drainage

It is not uncommon to have slight drainage from your incision site. If it occurs, it is generally very minimal and lasts just a few days after surgery. If at any time you are concerned about wound drainage, please call our office at 425.656.5060 and ask to speak with our Orthopedic Care Coordinator, ARNP.

You Can Shower!

Over your incision, you will see a dressing that is silver in color with clear edges (Fig. 7). This dressing is waterproof. Because of this, you can shower! We would like you to **leave this dressing in place for FIVE DAYS from your surgical date**. On rare occasions, some people have a reaction to the adhesive. If you begin to have itching or redness surrounding the dressing, please remove immediately.

Remove Your Silver Dressing When You Have Been Home 5 Days

Once it has been five days from your joint replacement, you should remove your Mepilex/silver dressing. Begin by grabbing the top edge of the clear portion of the dressing (Fig. 8 and 9). Pull gently in a downward fashion until completely removed. Underneath this dressing, you will see a clear mesh on your incision. This is called **DermaBond Prineo** and is part of your wound closure. This should remain over your incision for up to **THREE WEEKS**. You may find that the edges of the mesh start to curl up. In this case you may trim off the curled up edges (Fig. 10 and 11). You may continue to shower as the mesh continues to keep your incisional area waterproof.

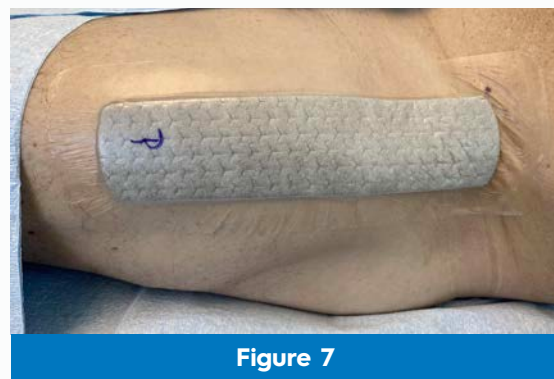


Figure 7



Figure 8



Figure 9



Figure 10



Figure 11

Recovering From Total Hip Replacement

Incision Care

Time to Remove The Dermabond Prineo

It is time to remove the Dermabond Prineo now that you are three weeks from your joint replacement. Apply a generous amount of any type of petroleum product such as Vaseline. Work it into the mesh. Allow that to sit on the mesh for three to five minutes. After five minutes, start with the top edge of the mesh and gently pull in a downward fashion (see Fig. 12, 13 and 14). The mesh should peel off fairly easily. If it is still difficult, apply more petroleum product and/or give it more time to soak into the mesh. To forcibly remove the mesh may cause injury to your skin. You may continue to shower as your incision is now well healed. We would like you to hold off for one more week before you soak in a tub or a pool.



Figure 12



Figure 13



Figure 14

Bruising

It is not unusual to develop bruising following a hip replacement (Fig. 15 and 16). Bleeding normally occurs around the hip and gravity will cause this blood to track along the tissue planes of your leg resulting in bruising of the thigh, calf, foot, and ankle. This is normal and you should not be alarmed. Bruising will develop over time and ultimately end up in your toes before it's over. As the body absorbs the blood, the bruising will gradually go away on its own.



Figure 15



Figure 16

Recovering From Total Hip Replacement

Incision Care

Blisters

Some patients may develop blisters around the hip and/or the incision (Fig 17). Although blisters can be alarming in appearance, they pose no significant risk to your hip replacement. They may leak clear fluid for a period of time. If needed, you may cover the blistered area with a non-stick dressing and paper tape until a “scab” forms. These supplies can be obtained at any pharmacy. Otherwise, they should be left open to air and can generally be ignored as they will resolve on their own.

Numbness

Most patients develop an area of decreased sensation (numbness or tingling) on the outer part of the hip (Fig. 18). This numbness is expected and normal after hip replacement. It is not a sign of any problem. The area of numbness typically decreases in size over the next 6 to 12 months.



Figure 17



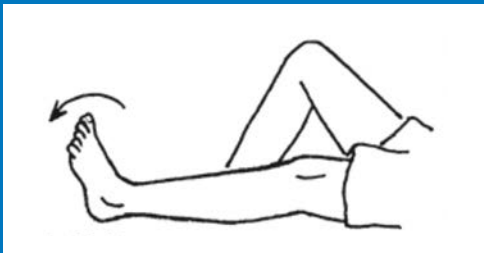
Figure 18

Recovering From Total Hip Replacement

Home Exercises For Your New Hip

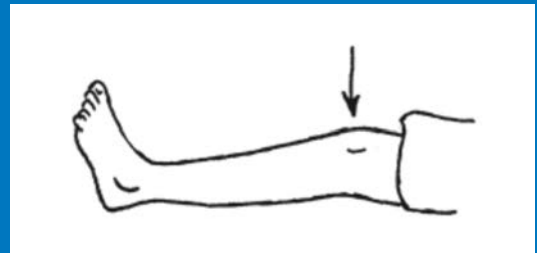
You will be able to walk before you are discharged from the Surgery Center. We do not recommend formal physical therapy following a hip replacement. During your pre-hab, the physical therapist will outline a home-exercise program. Walking and doing the exercises you were taught during pre-hab as well as the exercises demonstrated below are all that most people require. Some may need formal therapy and that will be determined by your surgeon. Begin these exercises the morning after your surgery, with 1 set of 10 repetitions of each exercise. Starting the next day, increase this to 3 sets of 10 repetitions for each exercise, and do this for 3 concentrated efforts per day. Ice your hip for a minimum of 30 minutes after each exercise session.

Ankle Pump



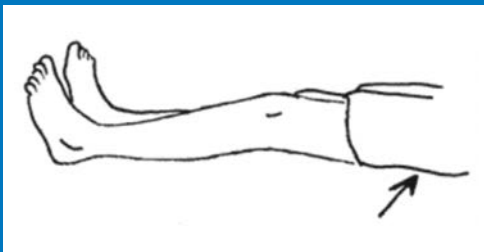
Move your foot back and forth as if pressing on a gas pedal.

Quad Set



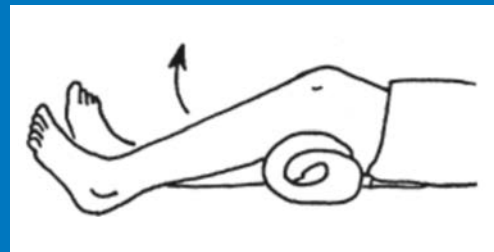
Tighten muscles on top of the thigh by pushing the knee down. Hold for 5 seconds.

Gluteal Set



Squeeze your bottom together. Do not hold your breath. Hold for 5 seconds.

Short Arc Quad

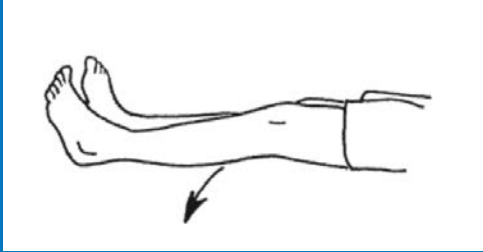


With the knee over a bolster, straighten the knee by tightening muscles on top of the thigh.

Recovering From Total Hip Replacement

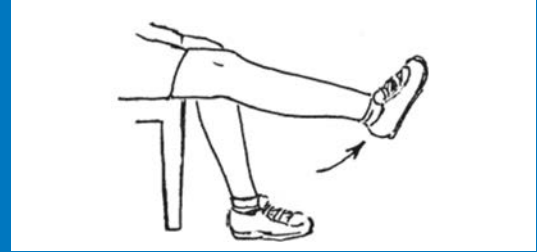
Home Exercises for Your New Hip

Hip Abduction Slide (sideways)



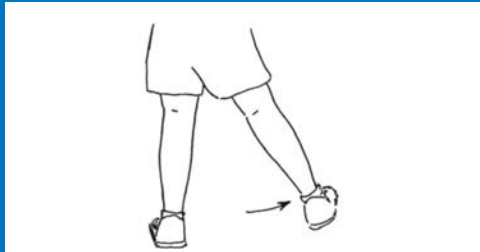
Keeping your toes pointed at the ceiling, slide your operated leg out to the side as far as possible. Return to starting position.

Long Arc Quad



While sitting, straighten your knee and hold for 5 seconds. Return knee to bent position.

Standing Hip Abduction (sideways)



Stand holding onto a kitchen counter or dresser. Slowly raise the leg out to the side, keeping toes pointing straight ahead.

Help, I Can't Raise My Leg!

For the first week or two after a total hip replacement, many people cannot independently lift their leg and require assistance. This is normal. After 1 to 2 weeks, you will regain the ability to raise your leg and will no longer require much, if any, assistance to lift it. When you can raise your leg on your own, it is generally much easier for you to get in and out of bed independently. If you cannot raise your leg on your own, it does not mean you are behind, not working hard enough, or that something has gone wrong. It just takes time. **We do NOT recommend working on active hip flexion exercises and strengthening (such as straight leg raises) until after six weeks from surgery.**

Frequently Asked Questions

I have a low-grade temperature, is that normal?

Yes, it is normal to have a low-grade temperature for the first few days after surgery, and is your body's response to the stress of surgery. A temperature of 101.5°F or greater should be reported to your surgeon.

Is it normal to have some aches and pains in my groin and/or hip?

Yes, we do the work on the ball and socket which are located in the groin region. This is a normal part of the healing process and will subside over the next couple of months.

Why am I bruised?

It is normal to develop bruising on the operative leg, including the thigh and lower leg down to the foot. Your body will absorb the blood and the bruising will gradually go away.

When can I stop taking the medication you sent home with me?

Aspirin: remain on Aspirin 81 mg taking one tab in the morning with breakfast and one tab in the evening with dinner for a total of 4 weeks after surgery. This medication will help prevent blood clots.

Opioid pain medication (Oxycodone, Dilaudid, Norco, Tramadol): The majority of patients are able to wean themselves from opioids within 2 to 3 weeks of surgery.

Acetaminophen/Tylenol: Tylenol should be the last pain reliever that you stop taking. It is most effective when you take it on the schedule of 1000 mg every 8 hours around-the-clock.

Stool softener/Stimulant: continue with this until you have weaned yourself off of narcotics or have had the return of normal bowel movements.

Meloxicam/Mobic: this is an anti-inflammatory medication and may be taken up to 4 weeks.

Omeprazole: continue to take this as long as you are taking both Aspirin and Meloxicam.

How long do I need to use my walker/crutches/cane?

A walker or crutches are used to help you ease back into a normal walking pattern. Whenever you feel safe, comfortable, and confident to transition from your walker to a cane, you may do so. If you have an increased limp or increase in your pain, go back to using your walker or crutches for a few days and then try again. The same goes for transitioning off of a cane to walk without any assistive device.

Do I need Physical Therapy?

Most patients will not require formal physical therapy. There are a few who would benefit from therapy and in those cases, we recommend beginning 2 to 3 weeks from your date of surgery.

Why Can't I Sleep?

We get that sleeping for several weeks or months after a hip replacement will be a challenge. For most patients, time will solve the insomnia. This is a difficult problem to treat and nothing completely eliminates the problem other than time. Working hard, being active during the day and avoiding daytime naps are helpful to induce sleep at bedtime. Unless you are accustomed to sleeping pills prior to your surgery, we do not recommend them as they often do not help and can cause other significant side effects. Use of opioid pain medications are also known to **negatively** impact sleep patterns. You may try over-the-counter antihistamine medications such as Benadryl, or supplements such as Melatonin at bedtime (see labels for instructions). 'Tylenol PM' includes the active ingredient in Benadryl and is an option as well, just be sure not to exceed 3000 mg of Acetaminophen (Tylenol) in 24 hours from all sources.

What is the normal follow-up after surgery?

You will have a telehealth or clinic visit 10-14 days after surgery with a Physician Assistant or Nurse Practitioner, a clinic visit 6-8 weeks after surgery with your surgeon, and a clinic visit around the one-year anniversary of your hip replacement.

Frequently Asked Questions

My incision is lumpy. Is this normal?

Yes, most patients do not have a thick fat layer over the anterior incision area and the buried sutures can be felt. These will be absorbed by your body. Occasionally, these may poke through the skin. Please contact us if this occurs.

What are my restrictions?

You can begin to resume normal activity. If this includes exercise (which it should), you can get back to your routine starting with low-impact cardio activity such as riding a stationary bike or using a stairmaster after 2-3 weeks, and swimming sports after 4-6 weeks.

What is the best way to manage my pain moving forward?

We would like you to wean off of opioid pain medication by 3 to 6 weeks after surgery at the very latest. You may want to use acetaminophen (Tylenol) and/or over-the-counter NSAIDs such as ibuprofen (Advil, Motrin) or naproxen (Aleve). Take as directed on the bottle. These should help with any residual pain after you are off of the opioid pain medication.

Why Does Nothing Look or Taste Good?

Loss of appetite is normal and is not cause for alarm. Many patients lose their appetite for several weeks, and sometimes for up to two months. Your appetite will return to normal with time. Many find it helpful to eat several small meals or snacks rather than large meals until one's appetite returns to normal.

When Can I Drive?

Safety first! Generally speaking, it takes 3 to 4 weeks to regain full control over your right leg to operate your car safely. A good indication you are ready to drive is when you are comfortably walking with the use of your cane or have transitioned from no longer using any assistive device. If the joint replacement was done on the left leg, ensure that you are able to get in and out of the car safely. Most importantly please use your common sense. Consider a couple of practice drives in a low traffic area or an empty parking lot. If you do not feel that you are safe to drive a car, wait until you feel ready. **Do not drive if you are still taking opioid pain medications.**

When Can I Safely Travel?

Ideally, we would like for you to stay in the area for at least 4 to 6 weeks following surgery to mitigate any risk of negatively impacting your recovery. If you are planning on traveling within this time frame, please discuss this with your surgeon so that necessary precautions can be addressed.

What About Airport Security?

Your hip replacement is made of metal and will set off metal detectors. It is most efficient to use the body scanner, but if that option is not available, tell the TSA agent you have a hip replacement to facilitate additional screening. Cards indicating you have a total joint replacement are no longer accepted by TSA. Here is a link to a video from the American Hip and Knee Surgeons if you would like further information: <https://youtu.be/7hagY2S9l3k>.

What About Sexual Activity?

You may resume sexual activity as comfort and common sense allows. If you have specific questions, please discuss them with your surgery care team.

Is it normal to have swelling around my incision and thigh?

Swelling of the surgery site and thigh is normal because this is where all the work took place.

Recovering From Total Hip Replacement

Follow-Up Appointments

Both your first and second postoperative visits are scheduled at the time you scheduled surgery. If you are not sure when, what time, or which office, please call us. We will be happy to direct you. Every postoperative course is different so please feel free to reach out to ask questions, discuss your surgery and/or recovery, or review any other concerns you may have.

First Postoperative Visit: 10 – 14 Days After Surgery

Your first visit will be 10 to 14 days after surgery via telehealth. You will be invited to join that appointment using your computer or smartphone. The appointment will be with a physician assistant or advanced registered nurse practitioner who is familiar with you and your surgery. In general, the following will happen at this appointment:

- Your incision will be assessed and incision care will be reviewed.
- Medications will be reviewed and refilled if needed.
- Any additional questions you have will be answered.

Who needs to be seen in the office for this appointment?

- Those who do not have access to a computer or a smartphone.
- Those who have staples or sutures that will need removal.
- You need to arrange for a ride to this appointment as you will not be ready to drive.

Second Postoperative Visit: 6 – 8 Weeks From Surgery

Your second scheduled follow-up visit will be with your surgeon, typically 6 to 8 weeks after surgery. Most patients are able to drive themselves at this point and have stopped taking opioid pain medication. In general, the following will happen at this appointment:

- X-rays will be taken at this visit and reviewed with you.
- Your surgeon will review your mobility and return to activity.
- Discuss your concerns and make additional recommendations.
- Follow-up visits: As long as everything is going well, your next follow up will be your one-year anniversary for an x-ray check.

Recovering From Total Hip Replacement

What Is So Important about Antibiotics and Dental Work?

Bacteria that are not present anywhere else in the body are present in your mouth. When you have dental work including routine teeth cleaning, these bacteria are scattered into the bloodstream. They can collect around your hip replacement, causing it to become infected and antibiotics kill the bacteria that cause this type of infection. It is imperative you notify your dentist that you have had joint replacement surgery.

The American Association of Orthopedic Surgeons (AAOS) believes it is worthwhile for all patients to take preventive oral antibiotics prior to dental work for one year after surgery (lifelong if you are at higher risk for infections). These underlying conditions may include, but are not limited to, autoimmune disease, diabetes, recent or active cancer treatment, etc. We will prescribe antibiotics for you if your dentist does not.

Patients not allergic to Penicillin:

Amoxicillin Take 2 grams orally, 1 hour prior to dental procedure to include routine dental cleaning.

Patients allergic to Penicillin:

Clindamycin Take 600mg orally, 1 hour prior to the dental procedure to include routine dental cleaning.

After one year, your dentist is ultimately responsible for making the decision for or against taking antibiotics based on his/her knowledge of the dental work to be done. If you have any questions regarding antibiotics and dental work, have your dentist contact your orthopedic surgeon.

Ongoing Recovery And Care For Your Total Hip Replacement

Protecting Your New Hip

Your new hip is the result of many years of research. However, like any device, its life span depends on how well you care for it. You should exercise proper care of your new hip for the rest of your life.

Making It Last

Let's compare the surgical-grade plastic bearing surface of your hip replacement to car tires. A race car driver requires 4 or 5 sets of tires in a 200-mile race, while tires for the average driver can go 30,000 miles. You are the one that will determine how quickly you will burn through your tires.

Sports And Other Activities

Remember, your new joint is designed for the activities of daily living and low to medium-impact sports, not high-impact sports. Once you receive your surgeon's approval to participate in more activity, walking, hiking, swimming, tennis, and cycling are recommended. Aggressive sports, such as running or jumping off of high platforms (i.e. Crossfit), may impair or compromise the function and long-term success of your joint and should be avoided.

Patient Education

The Hip Joint And Osteoarthritis

The hip joint is a ball and socket joint for which the “ball” is the head of the femur and “socket” is the part of the pelvis, the acetabulum. These surfaces are covered with a thin layer of cartilage that cushions the hip joint and allows for normal hip motion. Bands of tissue called ligaments (the hip capsule) connect the ball to the socket and, in conjunction with muscles, provide stability to the joint (Figure 19).

Osteoarthritis is the wearing away or loss of the cartilage layer, similar to the way the tread on a car tire wears away. When cartilage in the hip joint wears away, the joint becomes “bone-on-bone”. These rough bone on bone surfaces cause friction, resulting in swelling, pain, loss of motion and function. Osteoarthritis is the most common type but other less common causes of arthritis do exist including rheumatoid arthritis, post-traumatic arthritis, and avascular necrosis. Regardless of the type of arthritis, they all lead to loss of articular cartilage and resulting pain (Figure 20 & 21).



Figure 19
Normal Hip Joint



Figure 20
Femoral Head with no Cartilage

Treatment Options

Conservative treatment options can help patients with early arthritis maintain their quality of life and minimize pain. These include the use of anti-inflammatories (i.e. Ibuprofen, Aleve, Advil, Motrin, etc.), Tylenol, activity modification, injections, and physical therapy.

Once conservative measures are no longer effective, hip replacement can be considered. A total hip replacement is where the femoral head is removed and replaced with an artificial head. This is connected to a stem that is inserted into the thigh (femur) bone. The acetabulum (socket) is replaced with an artificial socket as well. A liner is placed into the acetabulum and accepts the new artificial femoral head.



Figure 21
X-ray progression of hip arthritis from normal (left) to severe (right).

Patient Education

Total Hip Replacement: The Basics

We use state-of-the-art hip replacement components supported by decades of clinical data substantiating their safety and effectiveness (Figure 22). We commonly use either a ceramic or metal ball and a surgical-grade plastic liner for the acetabulum (bearing surfaces). Most implants rely on the bone to grow into and onto the metal surface (Figure 23). Occasionally, the femoral stem can be cemented if needed. The procedure takes between 60 and 90 minutes and is completed through an anterior (from the front) approach.

There are numerous surgical approaches to the hip joint. We use an anterior approach for the majority of our hip replacement surgeries. This approach has been shown to promote a faster postoperative recovery, a lower dislocation rate, and less postoperative pain as no muscles are cut. Your recovery from a total hip replacement will continue for more than one year, but a large proportion of your recovery happens in the first three months. More than 90% of people who have total hip replacement surgery experience a dramatic reduction of hip pain and a significant improvement in quality of life.

The components of the replaced hip joint are artificial and can wear out with time and use. Excessive activity or increased body weight can speed up this normal wear process and may cause the hip replacement to become painful. Therefore, activities to avoid are running and jumping from a height greater than 3 feet.

As with all major surgeries, there are risks. Your surgical team will do everything in their power to decrease these risks and get you the best possible outcome. Sometimes surgery is postponed while known risk factors are optimized before surgery. Body weight must be under control as measured by body mass index (BMI). Diabetes must be well-controlled, as measured by HbA1c. If you use tobacco or nicotine products, you will need to quit before surgery. All these measures are put in place to decrease your risk and improve your outcome.



Figure 22

Implants commonly used for total hip replacement surgery.



Figure 23

Most commonly used bearing surfaces with ceramic head, treated plastic liner and press-fit acetabular component

Patient Education

Total Hip Replacement: The Surgery

After the anesthesiologist has administered your anesthetic, your feet are placed into boots (similar to ski boots) and you are positioned on a specialized table for your hip replacement (Fig. 24). Prior to surgery your team reviewed your X-rays and developed a surgical plan. Surgery begins with a time out where everyone pauses to confirm the patient, procedure, correct leg, and that the appropriate antibiotics and other preop medicines have been given. A yellow iodine-based adhesive drape is placed on the skin, and a straight incision is made over the front of your upper thigh (Fig. 25). The length varies depending on your height and weight. Muscles are moved out of the way but are not cut as the hip joint is exposed and replaced. Surgical tools called retractors help your surgical team see the hip joint (Fig. 26) and the specialized table facilitates placement of the leg into different positions for each part of the operation (Fig. 24). Technology, such as intraoperative X-ray and computer measuring programs, are used to help your surgical team get the hip replacement components in position for your specific anatomy. Proper component placement is critical for a long lasting, well-functioning total hip replacement. Once the bone cuts are made and the final components are inserted, the soft tissues around the hip joint are injected with numbing medicine and anti-inflammation medicine to help with post-operative pain control. Typically, the surgery takes 60 to 90 minutes. Your skin will be closed with buried sutures, a waterproof mesh and skin glue. A silver-impregnated waterproof large band-aid will be placed over the incision. After the dressings are on your hip,



Figure 24

Example patient positioned for total hip replacement surgery.

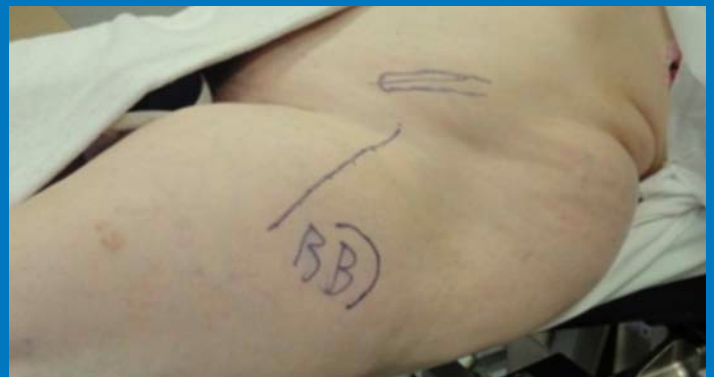


Figure 25

Surgical marker demonstrates the position of a planned skin incision for total hip replacement. The surgeon (Dr. Barrett in this case) places their initials on the skin in the preoperative area to ensure correct site of surgery.



Figure 26

Intraoperative placement of acetabular component with retractors in place to optimize visualization.



Figure 27

Intraoperative placement of femoral stem within the bone of the femur.

Appendix

Incision Instructions

Dermabond™ Prineo™ (DBP) Skin Closure System

Your incision was closed with a water-tight, sterile, and strong wound closure system called **DERMABOND™ PRINEO™ (DBP)**. There are multiple layers of dissolvable sutures under the top layer of your skin. There are no sutures or staples to be removed, however, the mesh will eventually fall off or be removed. See instructions and answers to common questions about this wound closure system below.

1. **Five days after surgery, you should remove ONLY the top bandage that is silver with clear edges (Mepilex)** as seen in Figures 28 and 29. You will see a mesh-like material covering your incision underneath. This is the DBP. It is normal to appear wrinkly, to have some dried blood spots on the mesh, and purple pen marks (Fig. 30 DBP). **The DBP is to be left in place for up to 3 weeks.**
2. The corners may peel up as seen in Fig. 30. Trim the peeled up edge(s) with clean scissors (Fig. 31 trimming DBP).
3. **You may shower with the DBP.** Do not scrub it or submerge it in water. Pat dry with a clean towel.
4. **After 3 weeks, if the DBP is still in place, please remove it.** Apply a generous amount of any type of petroleum product such as Vaseline. Then wait 3 to 5 minutes. Then, start by peeling up the top edge of the mesh, and gently pull in a downward fashion and in-line with the incision. The mesh should come off easily. If it is difficult, apply more petroleum product or allow more time for it to soak into the mesh (Fig. 32, 33, and 34 taking the mesh off). Forcibly removing the mesh may cause damage to your skin. Once removed, you may continue to shower.
5. **Refrain from soaking in a hot tub, swimming, or applying any lotions, creams, or ointments on the incision for a minimum of 4 weeks from surgery.**

Frequently Asked Questions

There is blood on the DERMABOND™ PRINEO™, is that normal?

Yes, the incision does bleed a little while it is being closed during surgery. We do not anticipate a large volume of blood draining or pooling under the DBP. If this occurs, please call the clinic and ask for our Orthopedic Care Coordinator, ARNP at 425-656-5060.

Why can't I just remove the dressing after surgery?

The DBP is a part of your wound closure system and is a substitute for staples. It helps the skin heal and helps prevent infection. It should remain on your incision for two to three weeks.

How do I remove the mesh after three weeks?

See #4 above and Fig. 30-34 on the next page.

Appendix

Incision Instructions



Figure 28
Mepilex



Figure 29
Removing Mepilex on day 5



Figure 30
Dermabond Prineo: leave
in place up to 3 weeks



Figure 31
Trimming DBP



Figure 32
Vaseline (3 weeks after surgery)



Figure 33
Wait 3-5 minutes



Figure 34
Removing DBP

ICE & COMPRESSION MACHINE

- Reduced pain
- Faster return to activities and work
- Less physical therapy required during recovery
- Improved sleep
- Reduced swelling
- Decreased use of opioid pain medication post-op

*Optimize Your Recovery
& Minimize Pain
and Swelling*



We carry **two options**, both designed for use on the Shoulder, Knee and Hip

Cold Therapy & Compression

Polar Care Wave by Breg: \$250

Varied Levels of Cold and Compression settings.

10 seconds to reach maximum compression and 10 seconds to release compression.

Cold Therapy

Iceman Clear 3 by DonJoy: \$145

Easy-to-use! Just plug it in to start!

Semi-closed loop circulation system which maintains consistent and accurate temperature.

Ice and Compression machines are cash pay and not covered by insurance.

Prescription Opioids for Surgical Pain

October 2019 | DOH Pub 631-079



2018 Opioid Prescribing Requirements

Between the years 1999 to 2016, over 200,000 people in the United States died from a prescription opioid related overdose (CDC, 2017). A Washington State law passed in 2017 requiring opioid prescribing rules be written in response to the statewide opioid crisis.



739 deaths (2017)



1,615 overdose hospitalizations (2017)



14,389 opioid use disorder admissions (2015)



324,000 individuals 12+ years who misused opioids in the last year (2016)

Washington State Opioid Related Statistics

Opioid medications can be addictive and anyone is at risk for developing an opioid use disorder. Keep yourself and others safe by limiting usage, disposing of all unused medications, and knowing how to recognize the signs of opioid use disorder.

What do you need to know as a patient

Prior to prescribing opioids, your health care provider may:

- Ask you to complete a risk assessment.
- Ask more questions for your patient record.
- Check the Prescription Monitoring Program to identify other medications or drugs of concern.

Individual health care providers, practices, systems, pharmacies, and insurance companies may have more strict policies regarding opioids.

Ask your health care provider questions about alternative treatment options for pain.

Know your prescription, always follow Instructions, and never take more than Prescribed.

You can refuse an opioid medication at any time. Your provider must honor this request unless you revoke it.

Common types of opioids are oxycodone, hydrocodone, codeine, tramadol, fentanyl, morphine, and methadone. Opioid medications may be prescribed by health care providers to treat moderate to severe pain, but can have side effects and serious health risks, such as tolerance, physical dependence, opioid use disorder, and overdose.

It is important to follow medication instructions when taking opioids and always be honest with your health care provider regarding other medications you may be taking. You should avoid consuming alcohol or operating heavy machinery when taking opioid medications.

Be informed. Be aware. Never share.



What are the risks?

- Opioid use disorder
- Physical dependence
- Falls and accidents
- Increased sensitivity to pain
- Overdose

Risks may be greater with:

- Pregnancy
- History of substance use
- Over the age of 65
- Mental health conditions
- Combining with other medications (example: sleep or anxiety)



Possible side effects

- Nausea, vomiting, and dry mouth
- Constipation
- Sleepiness and dizziness
- Confusion
- Withdrawal



Proper disposal

You are not required to use all of your opioid medication. To find your nearest take-back location for proper disposal of unused medications, please visit:

- med-project.org
- doh.wa.gov/safemedreturn



Safe storage

- Never share or sell your prescription opioids
- Keep opioid medications locked or in a safe location
- Keep out of reach of children and out of sight from others
- Leave in the original bottle with the label attached



Naloxone

Naloxone is a prescription medicine that briefly helps a person wake up and start breathing again after an opioid overdose. Your healthcare provider may choose to give you a prescription for this drug. For more information see stopoverdose.org



Thank you for choosing Proliance Orthopedic Associates as your care team, we are pleased to partner with you throughout your orthopedic surgery experience. Our care team also includes providers at our very own **Proliance Bone and Joint Urgent Care**, available for any post-operative care needs such as medication management, wound care including dressing changes, cast and splint care, x-rays, and more.

Proliance Bone and Joint Urgent Care proudly offers these benefits to our patients:

- Open seven days a week with extended hours
- Walk-in or scheduled appointments available
- A shorter and more cost-effective visit than the ER
- Billed as a routine office visit
- Direct access to orthopedic specialists

SPECIALIZING IN WHAT MOVES YOU

425.979.BONE
(2663)

**150 Andover Park W
Tukwila, Washington 98188**

WALK-IN OR SCHEDULE AN APPOINTMENT

Tuesday - Friday: 12pm - 7pm
Saturday - Monday: 10am - 7pm



Type of Injury/Condition	Bone & Joint Urgent Care	POA Office Visit	ER
Acute/Sudden Back Pain	X	X	
Acute Sports Injuries	X	X	
Concussion Management	X	X	
Chronic/Reoccurring/Long-term Bone, Joint, or Muscle Injury		X	
Cold, Flu, Respiratory or Stomach Issues			X
Superficial/Small Lacerations	X		X
Deep Lacerations - Cuts and Bleeding			X
Fractures and Dislocations	X	X	
Hip Dislocations			X
Knee and Hip Injuries	X	X	
Motor Vehicle Accident with Strain or Sprain of Muscles, Joints, or Bones	X	X	
Post-Operative Care - Surgical site evaluation, dressing change, cast/splint care, x-ray, and more.	X	X	
Shoulder Dislocations	X	X	
Shoulder, Elbow, Hand Injuries	X	X	
Simple Fracture of the Hand/Foot with Bone Visible	X	X	
Sports Physicals	X	X	
Sprains and Strains	X	X	
Visible Fractures of Any Bone (Except Hand/Foot)			X

Notes

[illegible]