

Hip Surgery for Arthritis

Osteoarthritis is a common condition of the hip and is characterized by cartilage deterioration and wearing. This will lead to narrowing of the cartilage space between the bones. On x-ray, one can often see the ball of the femur touching the socket once the arthritis is severe. The primary thing that can be done for this problem is to lose weight and strengthen the hip and core. Medicines (Tylenol or ibuprofen-like pills), shots (cortisone), therapy, or surgery are other choices. Arthroscopic surgery should generally only be done if the space between the bones is normal (which indicates less wearing) and is done to re-shape the ball and smooth the labrum.

The decision to do surgery is based primarily on overall health, degree of arthritis, and failure of common treatments. Most importantly, surgery is best done when quality of life is beginning to deteriorate. Research shows that results are best when replacement is done before health and fitness worsen and before arthritis pain starts to affect outlook and mood.

Hip arthritis is characterized by pain in the groin, buttock and thigh. Pain can radiate to the knee. Rolling over in bed, dressing, and getting in and out of a car can be painful. Pain in the buttock, numbness, or pain below the knee are usually related to the lumbar spine nerves and are unrelated to hip joint arthritis. These symptoms likely would remain after successful hip replacement.

Hip Replacement Surgery

Total hip arthroplasty (THA) is one the most successful surgeries in history. It involves removing the arthritic surfaces of the hip and replacing the surfaces with a titanium socket, polymer liner, ceramic ball and metal alloy stem that extends into the hollow part of the femur bone.

Resurfacing, metal-on-metal, ceramic-on-ceramic, two-incision THA, and most computer navigation surgery have been abandoned due to complications and the fact that most outcomes have been worse. Dr. Lewis performs well over 300 knee and hip replacement surgeries per year. Hip replacement is generally a predictable and reliable surgery that takes about 1-1.5 hours to perform. A high body weight, a large leg/buttock, diabetes, history of blood clots or previous surgery are factors that make the surgery take longer and have a higher complication risk.

Modern instruments and techniques have allowed surgeons to use a minimally invasive or less invasive approach. This can be done posterior or anterior. Dr. Lewis believes that the minimally invasive posterior approach is best because it does not require cutting across the gluteus muscle but splitting the muscle only. It has a lower complication and reoperation rate (8.5% vs 5.8%) compared to the anterior approach. We use state-of-the-art materials usually including a ceramic ball and cross-linked polyethylene which often lasts a lifetime. The implant is designed for highly active people and will tolerate a wide variety of activities and sports.

<u>Back Pain</u>

Patients who have arthritic hips often have coexisting back pain. A stiff hip may worsen pain from an arthritic back but would not cause back pain directly. Back pain can radiate to the buttock and down the leg and is often confused with "hip" pain. If you have buttock pain or pain radiating below the knee before surgery, you can expect that THA will not help this type of pain. Back ache itself, however, is sometimes improved by a painless, mobile hip. If you have had a spine fusion, please alert Dr Lewis's staff as this generally requires a different design of the THA.

<u>Bursitis</u>

Trochanteric bursitis is another cause of pain around the hip. This is pain on the side of the hip instead of the groin. There is typically a painful pressure point on the outside of the hip, which hurts when lying directly on the side. A bursa shot can both diagnose and treat bursitis. Bursitis is separate from hip joint arthritis and would not be improved by hip replacement.

Location for surgery and length of stay

With Medicare rule changes and better rehab/pain management, the new standard of care is a single overnight stay or discharge home on the day of surgery. It is important that you take responsibility to have a friend, family or spouse be available for the first few days to be with you and support you. "Rehab" stays cannot be arranged ahead of time and cannot be set up for family convenience. If you do not have a coach who can stay with you then it may not work for you to have surgery at this time.

The surgery can be done at Minnesota Valley Surgery Center (MVSC), through the Excel program at the TCO/Vikings Eagan facility, or at the Orthopedic Institute in Chaska. Location is based on availability, insurance coverage, and your health. Same day surgery has been proven to be as safe and effective as an overnight stay in certain patients.

For patients with medical problems, elevated BMI (high weight) or insurance restrictions, hospital-based surgery (Orthopedic Institute of Fairview) is needed. Surgery is done Monday morning with discharge to home on Tuesday morning. Again, to stay more than one night requires a specific necessity and is determined by the hospital, not Dr Lewis's team. If you are a Medicare patient, you must be aware that the government has now classified hip replacement as an outpatient procedure. This means that it is EXPECTED that you leave the hospital the next day. Unfortunately, the government and the hospital have determined that pain, stairs, wanting to go to rehab, and not having help at home are NOT adequate reasons. If you have these issues, you may need to POSTPONE surgery until you are able to make proper arrangements.

<u>Anesthesia</u>

Data has shown clearly that a spinal anesthetic is safer with fewer risks and complications, as well as a quicker recovery. It is safer for your heart and lungs and brain. Although many patients are worried that they will "be awake and hear the surgery", the anesthetist will give you medication to make you unaware and asleep but be breathing on your own. You will also be given local anesthetic (like Novacaine) that will help with pain for about 8 hours.

<u>Results</u>

The satisfaction rates are generally over 90%. This is excellent for a medical procedure but it is clearly not always a perfect solution. More than half of patients "forget" about their hip - <u>most</u> still describe occasional aching or stiffness about the hip; often this is related to the spine, tendons or bursa. Of the 5-10% who are unhappy, many do not have a clear reason and the causes as to why the body does not take well to an artificial joint are often unknown.

Long Term Results and Expectations

With modern materials, most hip replacements will last for a lifetime. Over 95% of replacements are still in place at 20 years. Fracture, infection, loosening of the parts, and dislocation are the most common reasons to have the hip re-done. Most patients who do well initially, will continue to do very well for many years after a successful hip replacement.

<u>Higher Risk Surgery</u>

Multiple research studies have shown that being younger than 50, male, heavier set, work on your feet and pre-surgical use of pain pills make it more likely that you will be unhappy with your hip replacement.

Depression, being inactive and being in poor condition can also be major risks for slow and incomplete recovery. If you fit these criteria, your surgeon will warn you of this risk. If this applies to you, it's often helpful to do therapy BEFORE surgery.

Obesity (BMI over 40), diabetes, back pain and previous surgery also increase the risk of infection and poorer result. The infection rate may be up to 10 times higher than the usual ½ percent.

Pain medication use before surgery can be a major problem in several ways. Research has shown that using narcotic pain pills before surgery

(vicodin, oxycodone, hydrocodone, Percocet, Tramadol) slows recovery and increases the risk of poor outcomes and lower satisfaction. Chronic use of these medicines before surgery alters the body's set point, which then requires much higher doses of these medicines after surgery. Inform Dr. Lewis if you are on these medications. It may be necessary to stop them for 2-3 weeks before surgery to re-set your system.

Anxiety, depression and a high level of worrying

In our modern society, many people suffer from depression, anxiety and just worrying a lot about how things will work out. If you have these issues, please call Angela (952 808-3011) and notify our team. We will definitely still treat and care for you, but we want to make sure you have the best experience possible. It is well known that patients with these conditions have a harder time with recovery.

POSTOP INFORMATION

<u>Stairs</u>

Stairs are a concern for most patients due to the layout of their home. The good news is that the replacement is sturdy enough to use stairs immediately. You may need to use a railing, crutch, or spouse for help. Many patients take stairs one at a time initially until the leg strength returns.

Postop Medications

Narcotics (oxycodone, hydromorphone):

These meds are necessary but have high risks such as addiction, confusion and constipation. They are used early but we make all efforts to get patients off them as soon as possible, even if that requires "putting up" with pain up to 3 or 4/10. Most patients use these regularly for the first 1-2 weeks. Beyond that time, only for sleep and before therapy. It is generally recommended to stop these medicines and continue with ibuprofen and Tylenol by 2-3 weeks from the surgery. It is unusual to use these medicines at all after 4 weeks.

Anti-inflammatories (Ibuprofen, motrin, aleve, naproxen): These are medicines for inflammation and are very helpful controlling pain after surgery. They are generally safer than narcotics and can be taken along with narcotics. The main side effect is upset stomach, although kidney and other problems can occur with longer use. Tell your doctor's team if you have kidney issues.

Celebrex (celecoxib) – this is an anti-inflammation drug that causes much fewer stomach issues. It is safer to use around the time of surgery but is expensive for use outside the hospital and not covered by many insurance companies.

Non-narcotic pain medicine:

Tylenol (acetaminophen) – this blocks pain and has few side effects; although less potent, it can be used with the other medications. Tramadol (ultram) – more potent than Tylenol, this is a "narcotic-like" medicine that can be used in patients with allergies to narcotics.

Blood clot prevention:

Aspirin (ASA) – nationally this has become the primary medicine for blood clot prevention, using 1 regular strength once or twice per day. If you have had a deep clot or strong family history of clotting, tell the team and then you may need a more potent medication.

Antibiotics:

Antibiotics are given before surgery and for 24 hours after. More antibiotics after this do not improve risks of infection. Most redness of the wound after surgery is normal.

<u>Physical Therapy</u>

PT (physical therapy) is started immediately. Your hip is immediately solid and cannot be internally damaged by walking, bending or pressure. It is even solid for a vast majority of falls. You will be expected to stand and walk the day of surgery, in the late afternoon or evening. Don't be afraid of your hip: it is normal to feel pain, stiffness, bruising and swelling. The hip will feel weak until the muscle fully awakens – that is all normal. It is very important to remember that you cannot harm the hip and that your own hard work will be the biggest factor in recovery. Walking as much as possible is important.

PT is not usually needed after you go home. Walking is the primary exercise after surgery. This will prevent blood clots and improve strength and balance. The therapist will also review simple isometric muscle contraction exercises and simple stretching. It is safe to bring your knee up in flexion as long as your knees are apart. The therapist and surgeon's team will review this.

Early Setbacks and Thigh Pain

Hip replacements are unique in that many patients feel excellent pain relief early. Consequently, some patients are too active with yard work, health club workouts, and long walks within the first 3-4 weeks. The hip is designed to be impacted into the bone and this can create microscopic "stress injuries" to the bone at the time of surgery. In some cases, this can cause WORSENING thigh pain in the first month. If your pain is worsening in the first 2-4 weeks, please contact us and return for an xray. The x-ray usually is normal as the cracks are microscopic and heal with 4 weeks of crutch use. Rarely, an actual visible fracture is seen which can require a surgery to place a cable around the femur bone.

<u>Leg Lengths</u>

Most patients with arthritis have gradual loss of cartilage and bone which causes the worn side to shorten by 3-15 millimeters (up to $\frac{1}{2}$ "). This is a slow process over many years and patients rarely notice this gradual shortening. During routine THA surgery, the leg length is restored to the normal length. Most patients do not notice a change, but some patients feel that their leg is longer, when, in fact, it is simply returned to its normal length. Sometimes the leg must be lengthened slightly more than this to improve stability of the artificial hip (prevent dislocation). All research shows that, even in cases of lengthening, most patients accommodate to this with time and therapy and do not even notice any difference at 3-6 months. Rarely is a small wedge put inside the shoe of the opposite leg if the issue remains at 6 months. Using a lift immediately will prevent your body from adapting and this is discouraged.

<u>Your Wound</u>

You will have several layers of sutures and a top layer of staples which will need to be removed at 7-10 days from surgery. You will have a special silver impregnated bandage that repels infection. This will remain on your hip until you return to see Libby after surgery. You may shower with the bandage in place and you may also shower after the staples have been removed. In both cases, keep a direct flow of water off the wound and pat the wound dry with a towel. Do not immerse the wound in a bathtub or hot tub until 3 weeks from surgery. Redness, warmth and swelling are normal.

<u>Lower Leg Swelling</u>

Because of the surgery, the circulation will be affected at the hip causing blood and lymph fluid from the lower leg to pool at the thigh, knee, foot and ankle. To some degree this is normal, especially for patients who

tended to retain fluid before surgery. Rarely does this mean a serious blood clot. Bruising is normal – it is blood pulled from the hip toward the foot from gravity. This is NOT a blood clot that would go to your lungs and be dangerous. The white compression hose (TEDS) are often used to minimize swelling in the lower leg. They may be at your discretion to control swelling.

<u>Stiffness</u>

Stiffness initially after THA is an expectation. This is due to multiple reasons: swelling from surgery, restoring the leg to normal length, and long-term muscle tightness from a contracted, tight hip joint. Once the ball and socket are replaced, there no longer are spurs and bone impingement that limits motion and you will be able to gradually stretch the hip with the guidance of your surgeon's team and the therapist. Remember that some of the muscles have not been stretched for many years due to your worn-out hip. Those muscles will gradually stretch out over 6-12 months. Home exercises are all that is typically needed and therapy is ordered only for patients who are struggling at 6-8 weeks. It is safe to work on crossing your legs and bringing you knee to your chest as long as you always remember to KEEP YOUR KNEES APART.

Daily life and Return to Work after THA

You may stretch, walk and do stairs based on pain. For a right hip, you may legally drive after 3-4 weeks and when you feel safe getting to the brake, while a left THA you may drive when off narcotic pain medicine. For patients who go to a YMCA or health club, it is often helpful to return ASAP to enjoy the friendships and people that you know there. You may do any upper body exercise and may bike as soon as you wish.

Return to work depends on the type of work you do and how quickly you personally recover. Phone and computer work can be done from home when your mind is clear, generally 5-7 days postop. People who sit at work usually return at 3-6 weeks depending on the ability of their work to allow for elevation, position change, and an occasional "early day" home if there is discomfort. Walking, driving, or standing jobs (sales, nursing, or cashier) can return between 6-10 weeks. Heavier jobs (cleaner, laborer, factory) often require 3-4 months. It is usually best to speak with your supervisor and HR person and give them a "best guess". All forms for FMLA and Disability can be faxed to Angela Gelhar at (952) 808-3001 or dropped off at the office. Please allow adequate time for completion. Angela or Libby can also provide a temporary handicap parking form for 4 months.

<u>The Dentist</u>

Newer data from the American Dental and Orthopedic Associations suggests that 1 year of dental prophylaxis is adequate. Call our office for antibiotics. Wait 3 months until you see your dentist for cleaning.

<u>The Airport</u>

Due to airport security changes, "airport cards" are no longer accepted and you must tell the TSA agent that you have a new hip and you will be screened with a wand device. You should delay flying for at least 6 weeks and move frequently when you do travel.

<u>Travel after Surgery</u>

Travel issues relate to two points: blood clot risk and mobility. Generally short, sitting trips in a car can be done at 2-3 weeks although stretching and frequent walking (every half hour) is encouraged. Flying can be challenging as it may be difficult to get through the airport and deal with your bags so you may need someone to help you if you try to fly at 6 weeks.

<u>Allowed Activity</u>

All activities are allowed. Running, impact sports, and heavy squats are not recommended due to worry that the parts will wear out or loosen early.

2025

Follow-up

We generally will see you at 1 week, 8 weeks, and 4 months after surgery. If you are going doing well, we may try to save your time and the insurance company's money by making the 4 month visit only "if needed". Returning every year if there are no problems or pain is unnecessary.

Issues at 8-week appointment

Stiffness is very common still at this point. People make different amounts of scar tissue and motion may still be a problem. Flexibility will improve slowly for up to one year.

Some patients will have localized swelling or a collection of fluid. This is from the breakdown of blood around the hip. Draining this is difficult as the fluid is often clotted and thick. Draining is also unnecessary as the body will absorb this fluid in most cases by 3-6 months.

Warmth is a sign of leftover inflammation and is normal even out to 3-6 months from surgery.

Numbness is normal due to the nerves that cross the incision. The area of numbness will gradually shrink and is rarely a long term problem.

Issues at 1-year appointment

Occasional aching is common with an artificial hip. It is a mechanical hip and rarely is entirely painless. You may still feel slight discomfort with changes in barometric pressure/weather or with excessive activity. Other issues are some of the same seen at 8 weeks.

<u>The "Other Hip"</u>

Arthritis is caused by multiple factors: aging, injury, weight, and genetics. Many patients have moderate wear of the opposite hip. Hopefully, by replacing the "bad hip", the other hip will be off loaded and be treated with cortisone or medication. If not, replacement could be done as early as 6-8 weeks from the first.

Unsatisfied patients

Unfortunately, there is nothing in life or in medicine that works perfectly every time. Hip replacement is one of the best surgeries in human history, but still roughly 10% of patients are only somewhat happy or wish they had not done the operation.

Of the patients who are unhappy, some have an obvious problem such as leg length difference, increased back pain, bursitis or tendonitis, a "parts problem" on x-ray, infection, or a nerve problem. These are difficult problems with imperfect solutions.

5% of THA patients have pain for no clear reason. There are risk factors such as preop back and nerve pain, having only mild arthritis before surgery, and being on narcotic pain meds before surgery. High anxiousness and depression are large factors as well.

Your doctor should make sure you do not have an explainable reason to hurt. If there is not an identifiable problem, you will likely have to live with your current situation, although we would encourage multiple, unbiased second opinions outside of TCO for peace of mind. Drs Eggers, Bloom and Hartigan within TCO are rehab specialists that can treat patients with persistent pain, although results are unpredictable. 2025

Preoperative Checklist

Complete and give to Angela or Libby before you schedule your surgery

<u>Medical history</u>: Diabetes?

Low Hemoglobin or anemia?

Anticoagulation or blood thinners beyond aspirin?

Narcotic use (vicodin, oxycodone, fentanyl, morphine, tramadol)?

Urinary issues for men such as enlarged prostate, cancers or surgery?

Medications for autoimmune disease such as Methotrexate or prednisone pills?

Can you take a full or baby aspirin?

Have you ever been allergic to cephalosporins? Have you ever had a severe reaction to penicillins (more than rash)?

<u>Personal situation</u>: What is your BMI (the team can get this for you)?

Who will you stay with after surgery?

Who will be your personal coach and helper?

GAD Survey (0-None, 1-Several days, 2-More than half of days, 3-Nearly every day)

A- Over the past 2 weeks, how often have you been bothered by feeling nervous, anxious or on edge?B- Over the past 2 weeks, how often have you NOT been able to control or stop your worrying?