TOTAL HIP REPLACEMENT

Surgical Treatment for Advanced Pain due to Arthritis

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What is Arthritis? How do you treat Arthritis?

Arthritis is an inflammation of the joint due to loss of cartilage. Although there are a number of rheumatologic diseases that cause arthritis most hip arthritis is due to osteoarthritis. Sometimes hip arthritis may be post-traumatic or the result of an injury such as a fractured hip. There currently is no way to stop, slow down or reverse arthritis.

The diagnosis is made by taking a history of your symptoms and performing a physical examination. Plain weight bearing x-rays will be ordered (MRI's are not necessary to diagnose arthritis). Common features of arthritis on x-rays are bone spurs, narrowing of the joint space and cysts. Treatments for the symptoms of arthritis include:

- 1. Strengthening and exercise
- 2. Weight loss if indicated
- 3. Oral medications such as acetaminophen (Tylenol), ibuprofen (Motrin, Advil) or naproxen (Aleve)
- 4. Injections such as cortisone may be an option
- 5. Assisted devices such as a cane, crutch or walker

When these treatments fail to relieve symptoms you may be a candidate for total hip replacement.

What is a Hip Replacement?

A hip replacement replaces your arthritic hip socket with a new ball and socket. The bad ball (femoral head) is removed. After this the cup (acetabulum or socket) is smoothed out and all of bone spurs are removed. A metal shell is inserted into the socket; the bone will grow into the back of the shell over time. Occasionally screws are used to supplement the fixation of the cup. Then a plastic insert is placed inside the metal shell. This plastic functions as your new bearing surface.

On the thigh bone side, the bone is prepared to accept a stem which will be placed inside the bone. Sometimes bone cement is used if the quality of the bone is poor, such as in patients with osteoporosis. Next, a ball (usually made of ceramic), is attached to the top of the stem. Last, the hip is reduced and the ball is put back in the socket.

What is a partial hip replacement or hip resurfacing and am I a candidate?

Partial hip replacements only replace the ball side and not the socket. This surgery is usually reserved for older, sicker patients who present to the hospital with a hip fracture.

Hip resurfacing attempts to preserve some bone on the thigh bone side. It is only available in metal on metal bearings. Due to the metal on metal hip failures and shorter longevity of these implants I do not recommend them to my patients.

Are there any limitations after total hip replacement?

It is recommended to avoid high impact activities such as running and jogging or sports that require jumping as these place excessive load on your hip replacement and may cause pain and premature failure of the device. Many patients return to walking, hiking, golf, doubles tennis, bike riding. Some patients find they are able to return to activities such as snow skiing and surfing but these may place extra wear on the implant.

What complications could occur?

Any surgical procedure has risk, which is why it is important to try conservative treatment first, and consider surgery once you have failed conservative care. There are a number of complications that can occur but the percentage of patients that have a complication is quite small.

Complications that may occur after total hip replacement include infections, blood clots (in the leg or in the lung), bleeding, the need for a transfusion of blood, fractures of the bones, injuries to the blood vessels, nerves, ligaments or tendons, wound healing complications, unequal leg lengths, dislocation, and loosening of the implants. Other potential complications could include heart attack, stroke, kidney failure, bladder infection or death.

Prior to surgery we evaluate each patient to assess your individual risk. Other risks may be addressed at the time of your visit based on your medical history. Those patients that have medical conditions that may increase any of these risks may be required to see their primary care doctor, have special tests or get certain medical conditions optimized prior to having a total hip replacement.

Will I need a reoperation or revision?

Total hip replacements can wear out or fail. Most total hip replacements should last for about 20 years. Around 20 years after the total hip is implanted 90% of total hips are still functioning well. Each year after 20 years approximately 2% may start to wear out per year. Routine follow-up will be scheduled to monitor your implant with x-rays to see if your hip is starting to wear out.

One of the more common hip revisions is when the plastic bearing is exchanged for a new bearing. This is done when the bearing has worn out. When the plastic bearing wears out the hip may be sore, painful or swollen and may start to feel unstable.

Other things that may occur that would require a revision would be an infection, a fracture, instability or loosening of the implant.

What approach do you use?

There are many approaches to the hip that may be used when performing a hip replacement. Surgeons may use the posterior, lateral, two-incision, anterolateral or anterior. In my hands, I have had excellent success with the mini-posterior approach with an anatomic capsular repair. I have not seen the benefits of the other approaches in my patients. My results with this approach have kept my complication rate low and my length of hospital stay short. Most of my patients only spend one night in the hospital and then go home. Many patients only need to use a walker for a day or two and should be off their cane within two to three weeks. I encourage patients that are interested in a particular approach to get a second opinion and then choose the path that they feel is best for them.

Prior to surgery

It may be necessary to see your primary care physician to obtain a "medical clearance" to proceed with surgery. If you have heart disease you may need to see your cardiologist. They will help determine if any special tests are required to make sure you are safe to have surgery.

You should have good oral hygiene. The mouth is a source of bacteria and could potentially lead to an infection in your replaced knee. It is important to brush and floss regularly. If you have cavities, severe gum disease, or other problems, these will need to be addressed and we will need a clearance from your dentist.

If you are overweight this can increase your risk of multiple complications after surgery such as infection, bleeding, wound complications, blood clots and implant failure. It may be necessary to reach a goal weight prior to your operation to minimize these risks.

If you are a smoker you will need to quit prior to having your hip replaced. Smoking can increase the risk of clots, infection and wound healing complications in addition to the other known health complications.

You do not need to go to physical therapy prior to surgery. No study has shown that PT before hip replacement (commonly called pre-hab) has made any major difference in the outcome. It would be beneficial to continue any low impact exercise that you have been doing such as walking, pool exercises or bicycle riding.

The Day of the surgery

When you arrive at the hospital you will meet one of our pre-operative nurses. They will assist you in getting into a hospital gown. They will get an IV started and check your vital signs. If needed, your hip will be shaved and prepped. You will also be given some pills (a pain pill, an anti-inflammatory pill and an anti-nausea pill). Taking the pills prior to surgery ensures that they will be in effect by the time you wake up.

I will see you in the holding area before surgery. We will have a chance to talk and I will be able to answer any additional questions that you may have. I will also mark your hip with you while you are awake in the holding area.

You will also meet the Anesthesiologist. They will go over your medical history and anesthesia history with you and answer any questions that you have.

You will be taken to the operating room where you will meet the rest of the team. Once you are asleep you will be positioned for the surgery, your leg is then sterilized with a cleaning solution. Next, I perform the operation. During the operation I take an x-ray to check the implants and leg length.

At the end of the operation I inject the area with a long-acting local anesthetic. The skin is closed with absorbable sutures and Prineo/dermabond closure system, a dressing is placed over the wound and a pillow is placed between your legs to keep you from crossing your legs when you are waking up. You be awakened from anesthesia and taken to the recovery room.

After Surgery

You will be in the recovery room for approximately one hour while you recover from the anesthesia. An additional x-ray will be taken of your new hip. The nurses in the recovery room will ice your hip and give any medications that are necessary. You may start having ice chips and crackers.

After that you will be taken to your room. You will meet the staff on the floor that will be taking care of you. You will have a light lunch that may consist of jello or broth. That afternoon therapy will come to see you.

Therapy on the day of surgery will consist of bed exercises. Following that you will sit up and stand with the assistance of the therapist and a walker. If you are comfortable you can walk that afternoon with the therapist.

The following Day (Post-Op Day #1)

I will see you on rounds in the morning. The dressing on your hip will be removed and I will inspect the incision.

You will have physical therapy twice that day. Therapy will consist of more exercises and walking. We have a stair model and the therapist will teach you how to go up and down the stairs safely.

If you meet all of your criteria you will be able to go home after therapy. You should be able to get in and out of bed by yourself, walk down the hallway with the walker, and use the toilet. The majority of patients are able to go home the day after the operation.

Going Home

When you are cleared to be discharged you will meet with the case manager. Prior to leaving you will get instructions and any additional prescriptions that are

needed. You may also receive or have arrangements made for special equipment such as a walker.

A very small percentage of patient have to go to a nursing home, sometime called a SNF (skilled nursing facility). Usually, the need to go to a nursing home is because of underlying medical conditions that require special care or treatment.

Icing

Icing is important after surgery. Applying ice to the hip and wound area will help decrease pain and swelling. A plastic bag with ice cubes works well. Some patients find the reusable ice packs that you can buy are convenient.

Follow-up Office Visits

At your one month follow-up appointment your office visit will include x-rays of your new hip. Most patients have discontinued the cane, but may still have a slight limp. Patients have completed their home therapy and usually there is no need for outpatient therapy.

At 3 months you will have another follow-up visit, x-rays and an evaluation. Patients at three months are back to doing most things but may have some occasional achiness or soreness, especially after activity. It is okay at this point to go back to activities such as golf, tennis, hiking, etc. You will also get a prescription for antibiotics to use prior to dental appointments. I recommend this protection for life to decrease the risk of an infection in your total hip.

Pain Control

Pain control is a big concern for many patients. Hip replacement for many patients is not very painful. Many patients find the pain after the surgery is better or different than the pain they had before surgery. Most patients find the most

painful or uncomfortable thing after surgery is the act of getting in or out of the bed, but once they are up and walking the pain is mild.

If you have been using chronic narcotics before surgery it is important to cut back or stop using them before surgery. People will build up a tolerance to those drugs and it will make them less effective after surgery. Many studies have shown that patients that use chronic narcotics have worse outcomes after joint replacement surgery.

We use a multi-modal pain management pathway. This is using different medications to block different types of pain. The other goal is to limit the amount of narcotics, as most of the medication side effects are due to the narcotics. The side effects of the narcotic pain pills may include constipation, itching, rashes, confusion and addiction.

Prior to surgery you will get a cocktail of a pain pill, anti-inflammatory pill, narcotic pain pill and an anti-nausea medication. During the operation I inject a local anesthetic, or numbing medicine, into your hip area and around the incision.

In the hospital you will receive a few medications around the clock. These will be scheduled medications to keep your pain level at a manageable level. You will get extra-strength acetaminophen (Tylenol) three times a day. You will also receive an anti-inflammatory (unless contra-indicated). Another medicine will be given to desensitize your nerves. For breakthrough pain there will be additional narcotics ordered.

When you go home you will be taking acetaminophen (Tylenol) around the clock and you will be given a prescription for a narcotic. Your instructions at the time of discharge from the hospital will detail when, how much and for how long to take the medication.

Pick a coach!

Find someone you trust and get along with. This person may be a spouse, family member or friend. This person should come to all pre-op and post-op visits with

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| I have read this document and understand its contents and accept the risks and conditions associated with surgery. | | | | |
| This is only a brief overview of the process. You will have time to discuss the surgery, risks, benefits and complications prior to your operation. Some things may be added, changed or modified based on your medical history. | | | | |
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