

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

TOTAL HIP REPLACEMENT

What is a Total Hip Replacement?

A hip joint consists of two bones - the femoral head (the ball) and the acetabulum (the socket). Usually the joint is well lubricated and the one bone can slide against the other bone with minimal friction. However, with diseased hips, the cartilage covering the surface of the bone is worn away and we now have a situation in which the bones are rubbing against each other, causing pain and limiting movement. Joints can be destroyed for a variety of reasons, but arthritis is the most common.

Total Hip Replacement is a surgical procedure, which involves the removal of the diseased bone and the reconstruction of the anatomy with an artificial joint called a total hip prosthesis. The components of the prosthesis are designed to act like the normal joint. There is a femoral stem - a metal component that is placed into the thigh bone, and an acetabular cup- a plastic and metal component that is placed where the socket was. There are two goals with Total Hip Replacement:

- Reduce or eliminate pain.
- To restore function by improving the movement of the joint.

What should you expect?

Blood Transfusion

You have the option to donate at least 2 or 3 units of your own blood within 30 days prior to your surgery date. This will involve scheduling an appointment with the blood bank of the hospital, or if necessary, a blood donation facility recommended by your insurance carrier or one closer to where you live (out-of -state patients). Only one unit of blood can be donated at a time, so you will need to come in for at least two visits. The blood is then stored until your operation.

If you are unable to donate blood, for whatever reason, donor blood will be used in your case, if necessary. People have expressed some concern about blood transfusion because of the risk of transmitting diseases. Donor blood is carefully screened for communicable diseases. With the new technology, the risk of hepatitis and HIV infection is extremely low. To our knowledge, disease transmission through use of donated blood has never occurred in any of our patients. However, there is no question that your own blood is the safest. Therefore, if you are able, we recommend that you donate blood for your surgery. If you're coming a long way, arrangements can be made to have you give blood locally and have it transported here for your surgery. Please be assured that blood that you give will be given back to you, if needed.

Pre-admission Testing

Within four weeks prior to your surgery, you will be asked to undergo several laboratory tests and possibly an electrocardiogram and chest x-ray. This is called pre-admission testing. This will help us to tell whether there are any conditions, which might increase the risk of surgery. A physical examination, performed by your own medical doctor or hospital staff here, is also a part of pre-admission testing.

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

Just Before Surgery

You will not be allowed to drink or eat anything after midnight and on the morning of the surgery. In some cases, you may be allowed to take a medication you normally take in the morning with a minimal amount of water. If instructed to do so, you will need to let the admitting nurse know that you have done this.

When you come into the hospital on the day of surgery, you may have some additional x-rays that might not have been taken previously and have a physical examination by your surgeon or resident. If you have not already done so, you will be asked to sign an operative consent form to state that you understand what is being proposed and that you are in agreement that we may proceed with the operation. Just prior to surgery, an intravenous line will be started and you will be taken into the operating suite.

Anesthesia

You will be seen by an anesthesiologist on the morning of surgery. Most of our surgeries are performed under regional anesthesia. This is a very safe form of anesthesia. It is safer than general anesthesia, which is one of the reasons why we recommend it. Spinal anesthesia disturbs the major body functions a lot less than general anesthesia. Unless there are some specific reasons why a spinal anesthetic should not be used in your case, this is our preferred method of anesthesia.

The anesthesiologist will give you some medication to make you sleepy so that you're not really aware of what's going on in the operating room. You will not be totally asleep either. However, the area that will be operated on will be totally numb throughout the operation and for several hours after the surgery.

Surgery

As stated before, the surgery involves the removal of all of the damaged bone and cartilage. This is done with saws and drills much like a carpenter uses. The next step is to prepare the bone for the prosthesis. This involves using specialized tools to make precise cuts and to shape the bone so that the prosthesis will fit properly. The artificial joint is then placed into the bone with or without bone cement. The surgery itself takes between two to three hours, depending on the complexity of your case.

Total hip prostheses can be attached to the bone using a material called methylmethacrylate or, more simply, bone cement. With proper technique, this gives an immediate fixation of the prosthesis to the bone. Another method is called biologic fixation. This method requires that the surface of the prosthesis next to the bone is porous. With time, bone grows into the pores and the prosthesis becomes an integrated part of the joint. There are advantages and disadvantages to each type of fixation. Furthermore, the type of fixation recommended to you will depend on your age, weight, and activity level.

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

Recovery Room

When your surgery is completed you will go to the recovery room where you will be closely monitored until the effects of the anesthesia and intra-operative medicines are decreased and you are relatively awake and comfortable.

Orthopaedic Unit

When you have completed your stay in the recovery room, you will be transferred to your hospital room in the orthopaedic nursing unit. You will be lying on your back in a comfortable position with a pillow between your legs. The pillow between your legs is designed so that you will not run the risk of dislocating the hip replacement in the initial postoperative period. If you have surgery early in the morning, you may sit up on the edge of the bed that evening. In general, all patients are out of bed within twenty-four hours and attending physical and occupational therapy. The therapists will instruct you in learning how to use crutches or a walker and being taught some of the precautions that are necessary in the immediate post-operative period. The physical therapist will answer any of your questions and will go over all of the details.

Risks

It is important that you understand that there are risks associated with any major surgical procedure and total hip replacement is no exception. These risks include the risk of death. That's true of any major surgical procedure requiring anesthesia and blood transfusion. The risk of death in our hospital for total hip replacement is in the order of 1 per 750 or 1,000 cases so that you can see that the risk is very small, but it's not 0. The specific risk for you will depend upon your general medical condition, your age, and the difficulty of the surgical procedure, but the risk of death itself is really very small.

There are, however, some other risks, which are a little bit larger. For example, there is about a 1% risk that your hip will dislocate in the immediate post-operative period. This may come from an inadvertent false movement in which the socket of the hip prosthesis becomes disengaged from the ball (femoral head). In the vast majority of these cases, this can be treated by manipulation and would not require another surgical procedure. It might require some relaxation; it might even require a short acting anesthetic. But again, this risk is relatively small, being about 1% of all the cases that are operated on.

A major potential risk is the risk of infection. Again, in this hospital, the risk of infection is in the order of 1 per 200 cases and we do many things to keep this risk very low. You will be receiving an antibiotic on the morning of surgery and this will be continued for 24-36 hours after surgery. There are other preventive measures that will also be undertaken to reduce the possibility of infection. In spite of the measures, a very small percentage of patients will develop an infection and that generally can be treated by antibiotics and cured. But occasionally, rarely, it might result in the hip prosthesis having to be removed.

There are a host of other possible complications. If you review series of several thousand you will see literally dozens of possible complications that could take place. However, these complications take place with exceeding rarity. Things such as muscle ruptures, pulling off of the tendon,

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

injuries to nerves and blood vessels, superficial infection and opening of the wound, and other things of this nature may occur. They don't occur very often, but they can occur.

One of the things that could occur is the loosening of the prosthesis. This loosening would not happen suddenly, but it would be a gradual process and it would be characterized by discomfort. In most instances, if a prosthesis becomes loose, it can be corrected but that usually means further surgery. Now what is the nature of this risk? That depends on several circumstances. We think in general, it's probably a cumulative risk of about 1% per year, so that if you have your prosthesis for 20 years, the possibility of loosening over those 20 years could be as high as 1 in 5. If you have your prosthesis for 10 years, it could be 10%.

Activity

To a certain extent, what the patient needs to realize is that an artificial hip can never be as good as a normal hip. There is always the potential that it may get infected at some date in the future. It will not tolerate the same kinds of physical stresses that the normal hip will tolerate. We strongly recommend against physical activity such as tennis, running, contact sports, things that can contribute to loosening of the hip through a physical process and the physical force applied to the hip that results in motion between the prosthesis and the bone and loosening and pain. But this is the reason that one has to be cautious about actually performing a total hip replacement and why it should only be applied to those patients who have severe symptoms.

Helpful Hints

Once your surgery has been scheduled, there will be a period of time prior to your admission to the hospital. This time can be used to organize and plan for both your hospital stay and your care after discharge. The suggestions given here are a guide in assisting you to make the best decisions concerning your surgical experience as well as your full recovery. With this goal in mind, please feel free to adapt any of the following to your individual situation.

MAKE LISTS - Making lists can help organize your thoughts and plans during this time. Included here are several ideas for lists you may find helpful to you.

QUESTIONS - No doubt you and your family members will have questions regarding your pre-admission, surgical, and post-discharge care. Making a list of these questions will help in assuring that any and all information needed is obtained. Keep the lists with you (perhaps in a notebook) before, during, and after your surgery, so that the appropriate people involved with your care will answer all of your questions.

MEDICINES - Throughout your preoperative as well as your postoperative care, many people may ask what medicines you take. Be prepared by making a list of all the medicines you take (both prescription and over the counter). Include medicines that you are taking for medical as well as orthopaedic reasons. Add to the list any vitamins or nutritional supplements you also may be taking. Be sure to also list any allergies you have to medicines or other substances. Keep this list handy and definitely bring it with you at the time of your pre-admission work-up as well as the day of admission to the hospital

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

APPOINTMENTS - Depending on where your pre-admission testing is performed, you may have several appointments before your actual admission to the hospital. Pre-admission appointments may include scheduling doctor's appointments, lab tests, blood donations, x-ray appointments, and preoperative class appointments. Keep yourself organized by listing the date and time of any appointments necessary and checking them off as they are completed.

PLANNING - Take the time to plan for your care after surgery. Planning and preparing ahead of time will make your experience much more pleasant and productive. By making a list of who and what will be needed to assist you throughout this time, you can be assured that nothing important will be missed. Ideas for planning might include a list of who will be available to assist you to travel to appointments and stay with you after discharge if necessary. The list might also include your plans for home care assistance, meals, and rehabilitation after discharge from the orthopaedic unit.

EVALUATE YOUR HOME - One of the most important goals of surgery is for you to return home and function as independently as possible. By evaluating your home for safety and ease in functioning before your surgery, you can avoid what may later seem like large obstacles to your recovery.

MULTI-LEVEL VS. ONE LEVEL HOMES - If you live in a multi-level home, consider where you will stay after coming home, keeping in mind that you should be able to climb stairs after discharge. For many patients in a 2 level home, they get up in the morning, bathe and dress upstairs, then come down to the first level and remain there the rest of the day. If there is no access to a bathroom on the 1st level, it may be necessary to obtain a portable toilet. While there is no set limitation to the number of stairs you can climb, certainly in the first several weeks after discharge, stair climbing may tire the patient. As stability, confidence, and strength continue to improve, stair climbing becomes more frequent.

A one level home presents minimal problems since all rooms are available to the patient.

- **STAIRS- INSIDE/OUTSIDE** As mentioned, all patients are taught stair climbing while in the hospital. Evaluate any steps at your home prior to your surgery. Make sure that the handrails are sturdy. If you desire, install rails on both sides of the steps for maximum convenience going up and down. If outside steps do not have a handrail, perhaps now is the time to install one if possible. Evaluate the entrances to your home. Select the one that has the easiest access for you while using crutches or a walker. You'll find if you work on these ideas now, your recovery time won't be hampered by trying to make these decisions.
- **BATHROOMS** - Safety is the keyword when you look at your bathroom. Make sure you can maneuver. Remember, you will be using a walker or crutches for 6 weeks. Some ideas to consider are:
 - shower/tub rail
 - rail on wall by toilet (many times a sink to the side of the toilet can be used for support)
 - raised toilet seat
 - shower/tub bench
 - non-slip mat inside tub/shower

Many patients who have been living with joint problems already have some equipment in their bathrooms. While not all of the equipment listed is required, the most important one patients need is the raised toilet seat. If you are not currently using one, you may want to wait until you attend

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

the preoperative joint class or until your admission to the hospital. By doing so, you and the occupational therapist can decide which type is best suited for your bathroom. The second most popular piece of equipment used by patients is the tub bench. This allows the patient to be seated while in the shower since standing without support is not allowed the first six weeks after surgery. If you intend to use a tub bench after surgery, please be aware that it will be necessary to remove any tub doors in order for the bench to fit inside the tub. Our recommendation is to purchase a tension rod and shower curtain, and store the tub doors until they can be used again.

The other important aspect to consider in the bathroom is to have any supplies within easy reach. If possible, place shampoos, shaving equipment, toilet tissue...within easy reach (waist to chest level) where there is minimal or no bending over or reaching too far for supplies. You'll find that this is the most efficient way to maneuver, meets any position restrictions recommended in the postoperative phase, and by far is the least likely to cause discomfort or injury after surgery. An added plus is that you'll be able to quickly identify when supplies are running low.

- **KITCHENS** - Again, planning ahead can mean the difference between a recovery period that runs smoothly or one that you feel is constantly frustrating. Using safety and efficiency as the primary guides, take a look at your kitchen. Think about meals and the equipment used for them. Put pots, pans, canned goods and cleaning supplies at waist to eye level for ease of access. When using crutches or a walker you're not going to want to be bending too low or reaching too high for safety's sake.

Use your upper cabinets or counter space to store your most frequently used equipment.

If you plan on preparing meals and freezing them before having your surgery, try to place them in containers that will go from the freezer to the oven, stove, or microwave to make life easier. (Don't make any containers too heavy if you are the one who will need to get them out.)

Remember the refrigerator too. The same rules apply - try to keep the items you'll use most frequently on the upper shelves to maximize energy conservation and maintain any position restrictions you may have.

- **GENERAL HOUSEHOLD** - In general, most households need just a few adjustments made in order for you to function more effectively after surgery. As with all the suggestions given here, remember to adapt what may be suited to your individual needs.

Floors - Be sure that your pathways are cleared. If you have small items sitting on floors or stairs, you may want to put these away for now. If you have small children at home, educate them now to put away toys, books, etc. so that everything is up from the floor.

Household Pets - If you have indoor pets such as cats or dogs, please be sure that someone will be available to help care for them. You will need assistance with their care while using a walker or crutches. In addition, consider the safety factor of functioning in your home with an indoor pet. Remember, you will always want a clear pathway and every effort made to avoid injury.

Carpets - Scatter rugs should be placed away for later use. They can cause you to lose your footing and perhaps fall. Even those with rubberized backs can be an obstacle to crutches or walkers so our advice is to get them off the floors while recuperating.

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

Furniture - In general, patients are most comfortable sitting on higher furniture with arms. Sofas or chairs that are too low can cause problems bending too much to get into, and straining too much to get out of. Pick a comfortable, moderate height chair or sofa for sitting so that your knees are on a level with or slightly lower than your hips when you are seated. Foam cushions on chairs or sofas that are too low may help to keep you on the right level and are available through the physical occupational therapy department while you are in the hospital.

Recliners, if the correct height for comfort and any position restrictions, are a popular type of chair patients use at home.

- **GET COMFORTABLE!** - Make sure that the things you need - like the telephone, TV remote control, newspaper... are within your reach. You may want to place a small table near the chair or sofa where you will be sitting after surgery in order to keep these things handy.
- **PACKING FOR THE HOSPITAL** - Our advice for this is to pack lightly! The hospital supplies patients with gowns, robes, non-skid footies, and a small personal hygiene pack, which has a toothbrush, tissue, soap, and a comb. Most patients use hospital gowns at least for the first day or two after surgery. If you prefer bringing your own clothes, be sure that they are comfortable and loose fitting. They also should allow for easy access to the operative site since this area is checked frequently to be sure no problems develop. Shorts are a popular item for Physical Therapy sessions. Avoid gowns or other clothing made of nylon - they tend to make people perspire and become uncomfortable when in bed for any length of time.
- **FOOTWEAR** - Any closed back, flat shoe or slipper with a non-skid sole is appropriate for the post-op period. Tennis shoes are ideal and inexpensive.
- **TOILETRIES** - Items such as deodorant, combs, toothbrushes, etc. should be brought with you as desired.
- **EQUIPMENT** - Any crutches or walkers you will use post-operatively should be brought on the day of admission so that they are readily available when you start therapy.

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

Sexual Concerns Following Total Hip Replacement

Will I be able to resume sexual relations?

The vast majority of patients are able to resume safe and enjoyable intercourse after hip replacement. In fact, patients who, in the past, have had impaired sexual function caused by preoperative hip pain and stiffness usually find that, after surgery, their hips are pain-free and have better motion. However, after gaining new hip(s), it may take several weeks to become completely comfortable during intercourse.

When can I resume sexual intercourse?

In general, it is safe to resume intercourse approximately four to six weeks after surgery. This allows time for the incision and muscles around your hip to heal.

What positions are safe for me during intercourse?

Total hip replacement precautions need to be observed during all your activities of daily living, including sexual intercourse. You should avoid excessive hip flexion, adduction and internal rotation. Think about how the precautions relate to your traditional position(s) for intercourse; and then, whether you may need to vary your position(s).

What should I tell my partner?

Good communication between you and your partner is essential, because you may have to adopt new position(s) for intercourse. We suggest that you share this information with your partner. In addition, you can discuss the precautions related to hip movement, which have been taught to you by the staff.

Conclusion

We hope that, by reading this information, some of your concerns and questions dealing with sexual activity after hip replacement surgery will be answered. If you still have questions, please feel free to ask your surgeon, physical therapist, or nurse.

Department of Orthopaedics

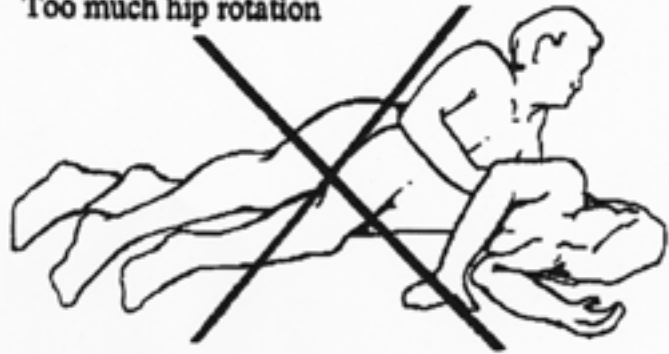
Division of Joint Replacement & Reconstructive Surgery

Positions for Intercourse To Be Avoided Following Total Hip Replacement

**Too much hip abduction,
flexion and rotation**



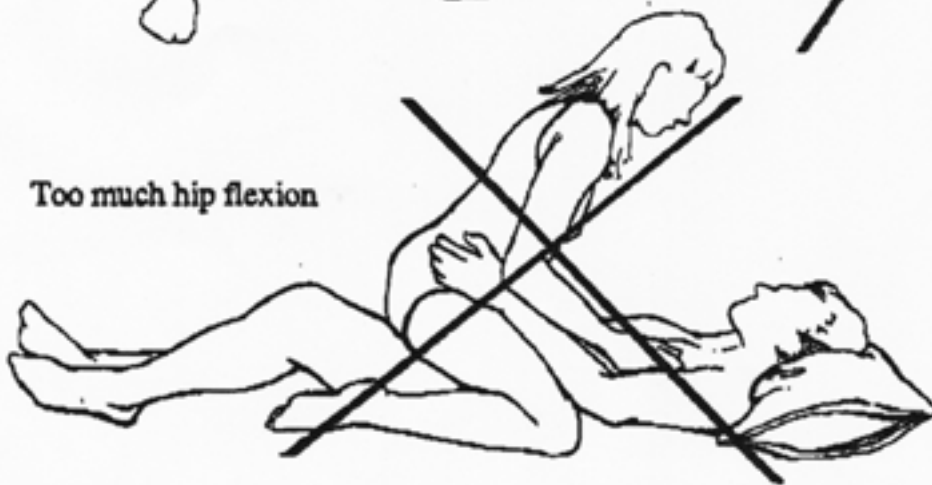
Too much hip rotation



Too much hip flexion



Too much hip flexion



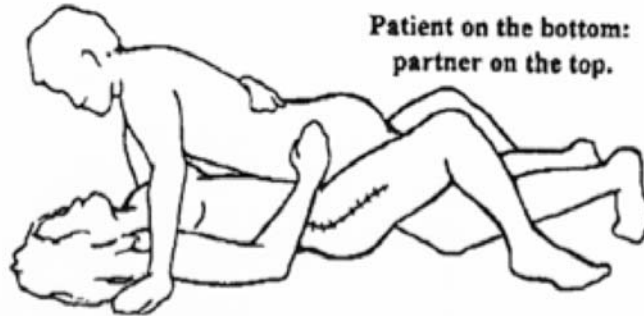
Obviously, there are other safe and unsafe positions and methods of obtaining sexual satisfaction. Please think them through. If necessary, please be ready to try something new to help protect your new hip(s).

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

Positions for Intercourse, which Do Conform to Precautions of Total Hip Replacement

Pillows can be used under the knees, back, and/or side for comfort and support.



**Patient on the bottom:
partner on the top.**

**Patient on the top:
partner on the bottom.**



**Standing position for both
the patient and partner.**



**Patient lying on side with
operated leg on top.**



Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

Possible Complications

Thrombosis

The occurrence of a blood clot or thrombosis after total joint replacement is another potential risk. Because patients are mobile very early in the postoperative period, this is a complication that is seen much less frequently now than in the past. In addition to early mobility, patients are treated with pulsatile stockings, (to prevent the stasis of blood in the lower extremities) and low doses of aspirin or other anticoagulation medications to reduce the risk of forming a thrombosis. If a patient is diagnosed with a blood clot, treatment with intravenous heparin and oral coumadin is initiated. As a result, patients may need to be hospitalized slightly longer, but recuperation remains normal overall.

While these complications may occur after any total joint surgery, both hip and knee joint replacement have unique problems which may occur.

Medical

Medical risks after total joint surgery are of course varied, and range from minor to more serious complications. These may include complications involving the cardiovascular respiratory, gastrointestinal, or genitourinary systems or any system in the body. Each occurrence of a medical complication is addressed as it occurs and will vary for the individual patient.

While total joint surgery or any type of orthopaedic surgery does involve certain risks, it is safe to say that most of these risks are encountered in any major surgical procedure. Careful pre-surgical screening, superior surgical technique, and conscientious post-operative management are the cornerstones to minimizing not only the occurrence of any complications, but certainly the outcome of these risks as well. It is our policy to adhere to these criteria whenever a patient undergoes any operative procedure, and in doing so, keeping these risks to a minimum.

It is important to understand that there are risks associated with any major surgical procedure and total joint replacement is no exception. Although the occurrence of these complications is low in number, each patient needs to be informed of these possible risks prior to surgery. In all cases discussion between the patient and the treating physician is imperative to put possible complications into proper perspective for a specific patient.

Death

The risk of death is present in any major procedure requiring anesthesia and blood transfusion. The risk of death in a patient undergoing a total joint replacement is 1 in 750 - 1,000 cases. The specific risk for each individual is dependent on their general medical condition, their age, and the difficulty of the surgical procedure performed. There are other risks involved with total joint replacement, which are somewhat larger than the risk of death.

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

Before and After Surgery

What kinds of tests will I need before surgery?

All patients are required to have routine blood work and urinalysis performed. These tests cannot be performed prior to 30 days before the scheduled surgery in order to be acceptable. In addition all patients are required to have a physical examination, which can be performed at any time within 30 days of the surgical date. Patients over the age of 50 are required to have an EKG and chest x-ray performed within 30 days of the surgical date. Patients below the age of 50 with any cardiac or respiratory history may also be required to have these tests performed.

Most pre-admission testing and physical evaluations can be performed either by the patient's personal physician or at the hospital where the procedure will be performed.

PLEASE BE ADVISED that if an abnormal exam or test result is reported, you may need a further evaluation or repeat testing performed. This does not necessarily mean surgery is canceled, but for your own safety, further investigation of any abnormalities is the standard procedure. Some insurance restrictions may apply.

Will I need to donate blood before surgery?

Some surgeries do require the patient to receive blood transfusion and you can elect to donate your own blood preoperatively. If your physician requests blood donation, this can be done any time within 30 days of the surgical date. The number of units that can be donated prior to surgery will be discussed with the patient by their physician. When units of blood are donated, the patient's blood levels are monitored prior to each donation in order to assure the patient's safety.

If the patient cannot donate his or her own blood, a designated donor, usually a family member or relative, may donate blood for the patient. This is done through the Red Cross Blood Donor Centers and the units then transported to the hospital for the patient's use.

If a patient is unable to donate blood and there is no designated donor, the patient will receive blood from the hospital Blood Bank if necessary. The hospital follows universal guidelines in screening blood and blood products to ensure the patient's safety as much as possible in this situation.

Are there any medicines I need to take before surgery?

It is recommended that patients take an iron supplement prior to surgery particularly if you will be donating your own blood. These supplements may be purchased at any drugstore or recommended by your family physician.

Are there medications I need to stop taking before surgery?

Most medications may be taken up to the day of surgery. If you are currently taking an anti-inflammatory medication containing aspirin, this should be discontinued two weeks prior to

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

surgery unless you are instructed otherwise by your physician. These medications tend to act as blood thinners and this is the reason for recommending discontinuing them.

Blood thinning medications such as Coumadin or aspirin are also discontinued prior to surgery. However, the exact times of discontinuing these medications are made on an individualized basis and should be checked with your personal physician for the correct method regarding this.

How long will I be in the hospital?

For joint replacement surgery, most patients are hospitalized 4 days, including the day of surgery. This may vary if the patient is either going to a rehabilitation center, a sub-acute facility, or not cleared medically or surgically for discharge home.

PLEASE BE ADVISED Most insurance covers 3-4 days of acute care in the hospital for total knee replacement surgery. Some insurances do provide for further care in several other types of facilities. It is advisable for each patient to contact their health insurance provider for specific programs covered and to obtain these provisions in writing.

What should I bring to the hospital?

All patients should bring with them personal toiletries and shaving gear, loose fitting COMFORTABLE clothing; non-skid shoes or slippers (slip-on type with closed back preferred), a list of their current medications (including dosages), and any paperwork the hospital may have requested.

PLEASE BE ADVISED The hospital provides pajamas, gowns, robes, slipper socks, and a small toiletries supply. Most patients, however, do supplement these with the articles outlined above, at least in terms of toiletries.

In addition, if you have an assistive device that you plan to use after discharge (i.e. walker, cane, crutches) but are not currently using, you should have someone bring this in prior to discharge so the physical therapist can check to assure that it is the adequate size for you.

DO NOT BRING radios, TV's, or large amounts of cash.

When should I arrive at the hospital for my surgery?

Patients are requested to arrive at the hospital 2 HOURS prior to the scheduled surgery time. This allows time for you to go through the admission process, change into hospital clothing, meet the anesthesiologist and nursing personnel who will be with you during your surgery, and get any questions pertaining to this process answered.

PLEASE BE ADVISED You should have nothing by mouth from midnight on the day of your surgery. In some cases you may be allowed to take a medication the morning of surgery. If this is the case, you should take the medication with the least amount of water necessary. Report to the admitting nurse any medications (and dosage) you may have taken.

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

Can my family stay with me during this time?

Families may stay with patients until the patient is taken to the operating room.

Will anyone contact me before surgery to discuss any concerns I may have?

The orthopaedic surgery patients are followed throughout their experience by a Shelby Lash, RN. Shelby is familiar with our routines and procedures. It is her role to assist the patient in planning for discharge, answer any questions the patient may have in terms of their case, and provide a supportive link throughout the patient's surgical experience. You will be contacted by Shelby prior to your surgery and assisted in planning for your individualized case management. Shelby also will schedule you to attend a pre-operative class in which you and your family members will receive instruction for each phase of your surgical experience. The classes are held on a weekly schedule for total hip and total knee patients and are highly recommended. By attending class, both you and your case manager are better able to plan for your upcoming surgical experience.

Day of Surgery

What type of anesthesia will I have?

Most of our cases are performed under spinal anesthesia. We feel this is the safest anesthesia for you and unless there is a recommendation from the anesthesiologist, this is the method preferred. You will be meeting with the anesthesiologist on the day of surgery and at that time any questions or concerns regarding this will be addressed.

How long will the surgery take?

Depending upon the difficulty of your case, the surgery may take several hours. In general, you should expect 2-3 hours in surgery and 2-3 hours in the recovery room.

Will the surgeon see my family immediately after surgery is completed?

Whenever possible, the surgeon or one of his assisting surgeons will meet with family members immediately after surgery. If for any reason the family misses seeing the surgeon, they should contact his office the next day and all efforts will be made to arrange a time for the surgeon and family to discuss the patient's surgery.

After Surgery

What will my hospital stay be like?

The first night of your stay, you will more than likely be somewhat "groggy" from the medications you receive in surgery. You will be taken to your hospital room directly from the recovery room in your hospital bed to avoid transferring you from stretcher to bed. Once you are fully awake, you

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

will be able to eat and drink as tolerated. Your vital signs, urinary output, and any drainage will be monitored closely by the nurses on the orthopaedic surgery floor. Pain medicine for the first 24 hours may be administered by intravenous method (the PCA pump-) and you will be shown how to use this device to assist in controlling your pain level.

Starting on day one post-operatively, you will be getting out of bed and attending physical and occupational therapy sessions. These sessions are vital to your progress and are arranged for 2-3 sessions each day, each session lasting 45 minutes to 1 hour. The physical therapists attending you will teach you the exercises needed for your optimal recuperation and instruct you on your weight bearing technique using a walker or crutches. The occupational therapist is trained to assist you in adapting your activities of daily living to your post-operative limitations. Activities such as bathing, dressing, using the bathroom, transfers from bed to chair, ambulation, and stair climbing will all be addressed during these sessions. Instructions for traveling by car or in some cases car and plane will also be discussed

Will I see my doctor regularly while in the hospital?

The attending doctors make rounds daily on their patients whenever possible. In addition, the orthopaedic resident doctors make rounds twice daily to monitor your progress and make any changes required for your care. The case manager will also meet with you (and family members if necessary) in order to assure the proper discharge plan for your particular case. Arrangements for transfer to a rehabilitation floor or sub-acute floor either at the hospital or elsewhere will be evaluated by you and the case manager if this becomes an option.

When will I be ready for discharge?

Depending on whether you go home or to another facility to recuperate will play a role in when discharge occurs. In general, a patient can be transferred to the rehabilitation floor on the 3rd post-operative day. If you are being transferred to another facility, transfers usually occur on the 2nd or 3rd post-operative day as well. Discharges to home occur on the 3rd to 4th post-operative day in general.

How will I know whether to go home or to another facility for further rehab?

In general, if you live with someone who will be assisting you, discharge home is the usual procedure. Arrangements for further home or outpatient P.T. will be made by the case manager. Most patients can go directly home if they are deemed safe by the physician and therapists. While not required, it is highly recommended to have someone to assist you the first 48-72 hours after discharge on a full-time basis and perhaps part-time the 1st WEEK or two after this. If you live alone or are in an environment at home where your safety is in question (i.e. PT/OT goals not met), you may be recommended for placement in a rehabilitation center. These facilities are usually available to a patient for a 3-5 day stay, with emphasis on returning the patient home in a short period after aggressively addressing any problems with patient independence. If you live alone or are not progressing rapidly enough in therapy sessions and it is unlikely you will be able to do so in a rehab setting, a sub-acute facility may be recommended for a longer period of recuperation. The choices available are influenced by insurances in some aspects and, therefore, will need to be discussed by the patient, the case manager, and the insurance companies as warranted.

What can I expect the first few days after discharge?

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

Expect a time of transition. You may feel overwhelmed the 1st day or two after discharge and may even feel you've made a mistake coming home so soon. This may occur even after discharge from a rehab or sub-acute floor. Be patient, and give yourself some time to adjust. Many patients report that after the 1st day or two of practical problem solving and establishing a routine, they experience a change in their progress and notice a definite upward trend to their recuperation.

Do I need someone to stay full-time with me when I go home?

It is our recommendation that someone be with you the first 24-72 hours after discharge. Many patients do live alone and we realize this is not always possible. But if you have a relative or a friend who offers to stay with you, take this offer for your own ease of mind. Many times patients have family members or friends who stay with them all day in the hospital. While this is certainly welcomed, it is often more helpful that this person be available after you leave the hospital. If you do live alone and either are discharged from rehab or from the orthopaedic floor with no help available at home, perhaps a friend or neighbor can call you daily to check on your progress. In addition, if home care has been arranged, these visits usually can be arranged so that someone is checking on you daily. The case manager will be discussing options available for your particular circumstances, and together you will develop a discharge plan, which addresses your particular situation.

When can I shower?

In general once your incision is dry, showering is reasonable. This may be the case in the hospital or soon after you are discharged. Emersion such as bathing, swimming, or hot tubs should not be undertaken before 3 days the staples are removed

When can I go up and down stairs?

Stair climbing will be practiced in the physical therapy program before you leave the hospital. Most patients can climb stairs before leaving the hospital. If you live in a 2-story home and have practiced stair climbing, stairs can be done one to two times a day after discharge depending upon your needs and your comfort level.

Will I need pain medicine after I'm discharged from the hospital?

Most patients do require a short-term course of pain medicine. Renewals on these prescriptions can be obtained by calling our offices. Expect to be on some type of pain medication for several weeks after discharge. Most patients take these medications especially at night or before therapy sessions.

How long will I need to use my walker or crutches?

Walkers and/or crutches are used the 1st 6 weeks after surgery. You then will be allowed to use a cane, which again will be for 6 weeks. After that time, most patients do not need any support for walking.

When can I go outside?

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

From the physician's aspect, you may go outside at any time. Comfort and safety should be the primary guidelines for doing this. We suggest starting with short trips at first, perhaps to therapy or church. Gradually increase the number and length of outside activities, as you feel more comfortable.

When can I drive?

Driving routinely is not permitted before 6 weeks from the time of your surgery. However, some physicians will allow the patient to drive earlier if they feel the patient can do so safely. The type of surgery, side of surgery (left vs. right leg), and the patients overall general condition plays a part in this decision.

If you feel you will need to drive earlier than the 6-week routine prescribed, you should discuss this with your surgeon and obtain his approval.

When will I be able to return to work?

This varies with each patient. In general, patients usually do not return to work until after their first check-up at 6 weeks from surgery. Some patients do return to work earlier if they can do so safely. This should be discussed with your physician so that the best decision for your individual situation is made.

When will I be able to participate in sports activities?

Depending upon what activity you want to participate in will determine when you can start these again. Swimming, walking distances (hiking), bicycle riding, golfing, and other low impact sports activities can likely be tried after a few weeks. Returning to high impact activities such as jogging, tennis, or aerobics exercises will probably not be recommended for quite some time. Your return to any of these activities should be discussed with your surgeon.

When will I be able to have sexual intercourse after my surgery?

In most cases, sexual activities can be resumed when the patient feels comfortable enough to do so. If the patient has been cautioned to maintain certain position restrictions, these restrictions will need to be followed in this instance also. In general, most patients resume their normal sexual activities between 4-6 weeks following surgery.

Helpful Hints During Hospitalization

While you are hospitalized for your total joint surgery various staff members will be working with you to assure that you receive the best care possible as well as the most effective transfer from hospital to home or other facility.

The hospitalization period no doubt will be a time of some level of anxiety for most patients. While this is common, hopefully by reviewing the information presented here as well as the other patient topics, your fears will be lessened and you will be better prepared to actively participate in all phases of your decision for total joint surgery.

1. COME PREPARED

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

- **INFORMATION TO BRING** - As discussed in the pre-operative helpful hints, be sure to bring your lists of medications and questions with you. This will assist the staff throughout your hospital stay and will allow you to have all the topics important to you discussed with the appropriate personnel. Bring your insurance card, any insurance information helpful to your care, and any other papers you have received regarding your surgery.
- **EQUIPMENT** - As mentioned in the pre-operative information, please bring any assistive devices you are currently using or plan to use. You should also bring with you shoes or slippers that have a non-skid sole, and are closed in the back.

2. DOCTORS ROUNDS - DAILY CHECK-UPS

The residents assigned to your care typically make rounds twice a day, early in the morning before breakfast and again late in the afternoon. If you have any questions or concerns regarding your progress, please take advantage of these times to get answers. Dr Scully and Shelby will make rounds daily also, but not necessarily at the same time as the residents. However, the residents and Dr Scully communicate frequently to review your case and make any adjustments in your care that are necessary.

3. PHYSICAL AND OCCUPATIONAL THERAPY - BE READY FOR A WORKOUT - Expect two sessions of physical therapy and one session of occupational therapy beginning on the first post-operative day and continuing daily while in the hospital. The therapists will work with you to help achieve your goals for discharge and recommend any changes that may be necessary in your discharge plan. A very helpful benefit to patients is to have whomever will be caring for you at home attend at least one session of physical/occupational therapy. By doing so, this person will be familiar with what the plan of care is for you, will know your restrictions, and also know what areas to assist you with after discharge. Please request this session with your therapist prior to discharge if it is not discussed.

4. HOME CARE - Once you, your case manager, and your physician have agreed on the discharge plan that best fits your needs, the case manager will refer any home care needs to the hospital based home care department. The staff here will then review your discharge plan, check your insurance coverage, and make all necessary arrangements for any home care that is required. The home care nurse making these arrangements may meet with you to review the arrangements or may communicate this information through your case manager.

5. DAY OF DISCHARGE - The day of discharge from the hospital can be a hectic one. By following these hints we hope to make the day an easier one.

- Expect to attend at least the A.M. therapy session. This allows for another review session and also gives you a chance to ask any last minute questions.
- You should receive a copy of your physical therapy exercises and any instructions pertinent to your rehabilitation after discharge.
- Be sure that you have all information regarding any home care arrangements made, including a telephone number of the agency assigned to your care in case of any problems.
- Discharge instructions should be discussed and a copy given to you by the case manager and the nurse who is discharging you.

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

- Be sure any dressing supplies or equipment ordered are given to you prior to discharge.
- If you live out of state, have any pain medicine prescriptions filled here prior to leaving the hospital. This is usually necessary, since the pain medicine ordered is often a narcotic and most states will not honor a prescription written by an out of state physician.
- If you are traveling any distance home, take your pain medicine before you leave the hospital to allow for a more comfortable trip home.
- If you are being transferred to the rehab unit here or to another facility, be sure that you have the name and telephone number of your case manager or physician as a contact person for the rehab personnel to reach for any questions regarding your care.

General Do's and Don'ts After Total Joint Surgery (The First 12 Weeks)

1. You will be told how much weight bearing you can do prior to your discharge. Do not advance this until you have seen your physician or been instructed to increase your weight bearing.
2. Do continue using the devices (crutches or walker) you have been instructed to use. Do not change this assistive device without checking with your physician.
3. Do continue to wear your elastic stockings until your 6-week check-up. You may remove these at night when in bed or for short periods during the day but in general these need to be worn.
4. Do continue taking your pain medicine as needed. Call the office if you need a refill, but remember to call in advance, not when you only have one pain pill left. This is especially important if you are taking a narcotic pain medicine because in most instances these prescriptions CANNOT be telephoned to your pharmacist. Prescriptions for a narcotic medicine generally need to be picked up by a family member or mailed to the patient, so keep this in mind.
5. Do maintain any and all position restrictions given to you by your therapist or doctor.
6. Do call your surgeon's office if you have questions regarding your progress or activities. Do not drive a car or return to work unless you have first checked with your physician.

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

Hip Home Exercise Program

Pre-operatively, do the exercises daily if possible; for weeks 1-6 do the exercises 3 times a day; weeks 7-12 do exercises 2 times a day; and for weeks 13-26 do exercises daily.

1. ANKLE PUMPS - Bend your knees up and down. Do 20 repetitions.
2. QUAD SETS - Keeping your knee straight, tighten your thigh muscle by pushing the back of your knee down on the bed. Hold for a count of 5. Relax. Do 20 repetitions.
3. HAMSTRING SETS - Keeping your knee straight, push your heel into the bed. Hold for a count of 5. Relax. Do 20 repetitions.
4. TERMINAL KNEE EXTENSIONS - Lying on your back with a roll under your knee, so that it is slightly bent, straighten your knee and hold for a count of 5. Relax. Do not lift your leg off the roll. Do 20 repetitions.
5. GLUTEAL SETS - Either lying flat on your back or sitting, squeeze your buttocks together and hold for a count of 5. Relax. Do 20 repetitions.
6. HIP ABDUCTIONS - Lying flat on your back, have someone slide your leg out to the side, keeping your knee straight and toes pointed up toward the ceiling. Then let them bring your leg back in. DO 10 repetitions.
7. KNEE FLEXION - Sitting in a chair leaning against the backrest, bend your knee on the operative side and slide your foot as far back under the chair as possible. DO NOT LEAN FORWARD while performing this exercise.

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

Metal Detectors and Implant Cards

All patients who have undergone total joint replacement receive a metallic implant card. The purpose of this card is to identify the patient as having an implant and avoid problems with future problems during security screening.

While most patients have no trouble passing through metal detectors after total joint surgery, several patients have reported triggering the alarm. By carrying the implant card this assists you in being identified as having a total joint replacement.

Handicap Tags

Handicap tags are readily available to patients both before and after surgery. Please take advantage of this benefit if you feel this would be useful. Temporary permits are available, and require a physician's signature on the application. If you wish to apply for these, complete the required forms and either send or bring them to our office for the physician's signature. For more information regarding these tags, you can visit the [Florida Department of Highway Safety and Motor Vehicles](#) website, or you can call them at (850) 922-9000.

Infection After Total Joint Surgery

General Information

Infection after total joint surgery can be a serious occurrence. In our experience, and across the country, the risk of infection after total joint surgery is approximately 1/2% or less. This is equivalent to 1 case in 200 having an infection occur after surgery. In most cases, these infections can be cured. They may require the patient to be hospitalized longer, treated with antibiotics for a longer period, or perhaps even to undergo a second operative procedure.

Signs of A Possible Infection

The signs of a possible infection are:

- a temperature elevation (especially if prolonged)
- localized swelling, redness, or tenderness
- purulent (pus) drainage from the incision
- any change in color or odor of drainage from the incision

Prevention of Infection

When a patient is hospitalized for a total joint replacement, the prevention of infection begins in the operating room. Surgery itself is performed in a sterile environment in the operating room, with special air filters to help provide clean air that is free of most bacteria. In addition, patients

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

receive antibiotics throughout their surgery via the IV line which is started upon admission to the surgical area.

During the hospitalization period, patients continue on their IV antibiotics for 24-48 hours as a preventive measure. In addition, careful examination of the incision, observation of any drainage, and monitoring of the patient's temperature are all preventive measures taken throughout hospitalization by the nurses and physicians caring for the patient.

At the time of discharge patients are given a list of discharge instructions which contains the signs of infection and whom to call if these signs become apparent.

Long range post-operative prevention of infection is maintained by total joint patients taking oral antibiotics prior to procedures which could possibly introduce bacteria into the bloodstream. Once a patient has undergone total joint surgery, he/she should always inform other physicians that they have a joint replacement.

Treatment of Infection

If a patient does develop an infection after total joint replacement surgery, it is either a superficial (localized) infection or a deep infection. Treatment for the infection will be based on several criteria. These criteria are:

- the type of organism causing the infection
- the organism's sensitivity to antibiotics
- the length of time of the infection
- the condition of the patient's bone

Once the diagnosis of the type of infection is made, treatment is done in one of the following ways:

- **Antibiotic Therapy** - Treatment for a superficial or localized infection consists of antibiotics given either by mouth or by IV. Treatment may be anywhere from 3 days to 1-2 weeks.
- **Incision and Drainage** - For more serious localized infections an I & D (incision and drainage), or "cleaning out" of the surgical area may be performed. This is a limited surgical procedure in which the wound is washed out and the patient is treated with antibiotics IV. In this procedure all of the original prosthetic components are retained.
- **Direct Exchange** - For a deep infection which has not advanced to the bone, the recommended treatment is to perform a "direct exchange." In this surgical procedure the total joint components are removed, the surgical area is cleaned, and new total joint components are inserted. These procedures are performed at the same time, and the patient is treated with IV antibiotics before, during, and after the surgery.
- **Delayed Exchange** - This treatment is performed for deep infections in which the bone is involved. In the first surgery, all total joint components are removed. The surgeon may then insert a temporary prosthesis which is a "spacer" made of cement and treated with antibiotics. This temporary prosthesis is left in place for a period of time (usually 6-8

Department of Orthopaedics

Division of Joint Replacement & Reconstructive Surgery

weeks), during which the patient is also maintained on IV antibiotics. A second surgical procedure is then done in which the surgeon inserts new total joint components. This 2 stage treatment of infection will necessitate separate hospital admission for each surgical procedure.

- **Fusion/Girdlestone** - If a total joint replacement patient's infection cannot be eliminated or if the condition of the bone is too severe to allow for the exchange treatments discussed above, the patient and surgeon may decide that the preferred option is to remove all of the total joint components permanently. In the case of a total knee patient, the procedure to be performed is called a fusion, and in the case of a total hip replacement the surgery would be a girdlestone procedure. The goal in both procedures is to provide a stable, solid, infection-free lower extremity which will allow the patient to perform activities of daily living. However, neither procedure allows normal joint function. Comfort and reasonable activities are still possible. Surgical fusion of a knee or girdlestone procedure of the hip is performed in less than 10% of all infection cases after total joint surgery or 1 in 2,000 cases.

In Summary

As stated above, the occurrence of an infection after total joint surgery can be a serious event. Infection may occur immediately after total joint surgery, after the patient goes home, or even years later. For this reason if an infection develops in any part of a total joint replacement patient's body, this should be addressed. All total joint replacement patients are advised to consult their physician if they experience any signs of an infection. In addition, these patients are advised to make any physicians they may see aware that they have a total joint replacement. Careful follow-up of total joint patients and appropriate communication between the patient and their physicians are always the best measures in the prevention of infection.