PANORAMA ORTHOPEDICS & SPINE CENTER

MANUAL FOR TOTAL HIP ARTHROPLASTY

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PANORAMA
Orthopedics & Spine Center

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INTRODUCTION AND PHILOSOPHY

You have been diagnosed with end stage arthritis or a failed previous joint replacement. While this problem has seriously affected the quality of your life, there is a cure. You have decided to proceed with a first time or revision hip replacement.

This manual is designed to prepare you for Total Hip Replacement Surgery and contains information on all aspects of your upcoming care, including preadmission, admission, surgery, rehabilitation, and follow-up care. If something is done to you that contradicts this manual, please question it. If something could be done better, please bring it to the attention of any member of the Total Joint Team. We ask that you read this manual in its entirety.

It is the philosophy of the Total Joint Team to focus on all aspects of care so as to increase your satisfaction; not only with the surgery itself, but also with the process you go through before and after surgery. The main indication for total joint replacement is pain. Pain relief is achievable in more than 95% of patients in nationwide groups of patients and in our own patients. We will try any other method before surgery, to relieve your pain if it is at all possible. However, if there is bone on bone contact or evidence of loosening of a previous implant, surgery is indicated. A successful replacement will provide a stable limb that, although not like a normal joint, will provide good to excellent function in more than 95% of patients. Other reasons for surgery exist and, if applicable, will be discussed with you.

Arthritis simply means loss of cartilage within a joint. Cartilage is the soft covering over the bone ends forming the joint. When this covering is lost, the joint becomes painful, stiff and function is lost. There are three types of arthritis that are treated with total joint replacement:

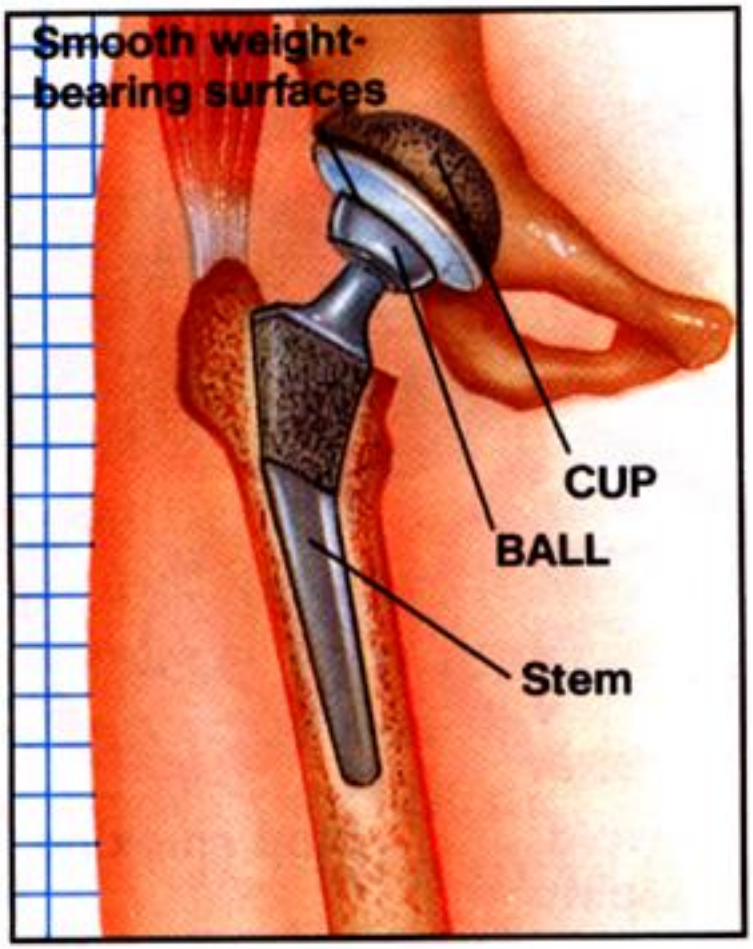
Osteoarthritis, or degenerative arthritis is the most common type of arthritis and is caused by a wearing a way of cartilage. Osteoarthritis is seen to run in families. It is also seen in people that have abnormal joints either from development or previous surgery, and those that have overused joints throughout their lives.

Rheumatoid arthritis is also known as “crippling arthritis” and can also be hereditary. This disease process is thought to be a rejection of the body’s own tissues (autoimmune disease). Medication can control this disease but when the cartilage within the joint is destroyed, total joint replacement is the only option.

Post-traumatic arthritis is the third major type of arthritis often treated with total joint replacement. This problem is caused by an injury to the joint (such as with falls or car accidents), which destroys cartilage, bone or both.
Total joint replacement has been in widespread use since the early 1970s for total hip replacement and the late 1970s for total knee replacement. The technology has progressed rapidly and long term results of many groups of patients, including our own, show cemented

total hips to last about 15 years in more than 80% of patients. Cemented replacements have been the standard. In the mid 1980s, uncemented implants were introduced. These have a theoretical life expectancy equal to that of the patient but are usually placed in younger patients who will be more active and more likely to wear them out. The surgeons at Panorama Orthopedics & Spine Center work closely with the manufacturers of total joint implants and will keep you aware of new technology as it pertains to your situation.

In a total joint replacement, bony surfaces of the joint are prepared to allow application of metal and plastic devices to substitute for the destroyed cartilage and/or bone. The ligaments and tendons are, for the most part, preserved so that function of the joint is not compromised. At times, ligament reconstruction is a necessary part of the total hip replacement.



TOTAL JOINT TEAM

This guide will serve as a valuable resource in helping you understand what is involved with this type of surgery, explaining your rehabilitation and answering any questions that you may have. Keep this manual with you as a source of important information and guidelines, both at home and at the hospital. If you need additional information not covered in this guide, the personnel at Panorama Orthopedics & Spine Center will be happy to provide it for you. We use a team approach to joint replacement and rehabilitation. As a result, you will meet a variety of healthcare providers as you progress from surgery to recovery. The following is a summary of the people you will meet over the course of your hip replacement process:

Joint Replacement Surgeons

- Perform surgery and direct your care.
- Visit you on daily rounds in the hospital.
- Evaluate you on follow-up appointments at Panorama Orthopedics & Spine Center.

Primary Care Physician or Hospital Internist

- Assesses your medical status preoperatively.
- Identifies potential problems related to your general medical condition
- Visits you on daily rounds in the hospital.
- Manages the medical aspect of your care while in the hospital.

Anesthesiologist

- Will call or meet with you prior to surgery.
- Will discuss with you and determine which type of anesthesia is most appropriate.

Physician Assistants

- Visit you on daily rounds in the hospital.
- Help with discharge plan

Surgery Scheduling Coordinator

- Review insurance and obtain approval as necessary.
- Advise you to schedule a pre-operative medical workup by your primary care physician.
- Schedule a pre-operative visit to the hospital and/or provide hospital information.
- Advise you to schedule preoperative education class at the hospital.
- Schedule surgery at appropriate facility.

Medical Assistant

- Will answer questions regarding your surgery.
- Will assist with prescription refills following surgery.
- Will help coordinate your care in the hospital based upon your doctor’s orders.

- Answer questions related to your hospital stay.

Disability Coordinator

- Processes FLMA, long term and short term disability paper work
- Written notifications for work restrictions or releases

Physical Therapist and Occupational Therapist

You will begin physical/occupational therapy in the hospital the day following your surgery. Depending on your progress, some patients may require additional inpatient therapy and will be discharged to a rehabilitation facility. Other patients may initially receive in-home therapy until they are ultimately ready to progress to outpatient physical therapy. The roles of these physical/occupational therapists are to:

- Instructs and assists you with your exercise and walking program
- Instructs you on safety precautions and "do's and don'ts"
- Evaluates your physical capabilities with adaptive equipment, instructs you in methods of handling day to day activities following joint replacement surgery
- Demonstrates temporary lifestyle changes that are needed
- Assesses your progress on a daily basis while in the hospital or rehabilitation facility and on a regular basis once you are home.
- Assists the physician in deciding whether you are safe to be discharged home or require further inpatient rehabilitation.

Your Responsibilities **As A Member of the Total Joint Replacement Team**

- Ask questions about anything you do not understand.
- Let clinic and hospital staff know about any problems.
- Do as much for yourself as permitted both before and after discharge from the hospital.
- Participate in exercise program as outlined by your surgeon.

PHONE NUMBERS AND ADDRESSES

Panorama Orthopedics & Spine Center
660 Golden Ridge Road, Suite 250
Golden, CO 80401-9522
303-233-1223: Office 800-258-5250: Toll free 303-233-8755: Fax

Panorama Orthopedics & Spine Center, North Office
8510 Bryant Street
Suite 120
Westminster, CO 80031

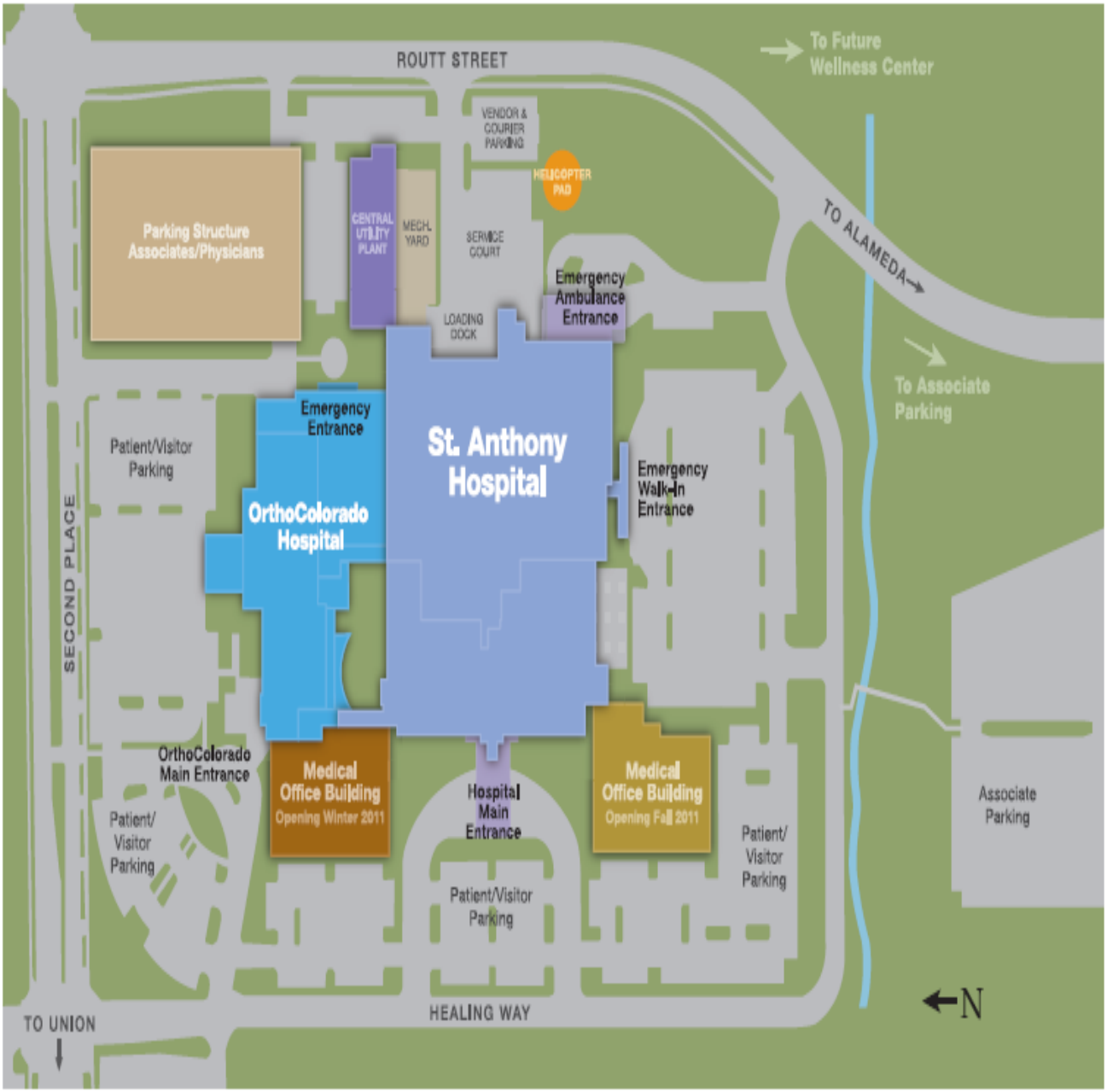
Panorama Orthopedics & Spine Center, South
7851 S. Elati St., Suite 103
Littleton, CO 80120

Ortho Colorado Hospital
11650 West 2nd Place
Lakewood, Colorado 80228
720-321-5000 Main Number

Saint Anthony Hospital
11600 W. 2nd Pl.
Lakewood, CO 80228
720-321-0000

St. Anthony Medical Campus

OrthoColorado Hospital open June 2010 **St. Anthony Hospital** opening June 20, 2011



OrthoColorado Hospital
11650 W. 2nd Place
Lakewood, Colorado 80228

St. Anthony Hospital
11600 W. 2nd Place
Lakewood, Colorado 80228

St. Anthony Hospital
Centura Health.

DIRECTIONS TO THE HOSPITAL:

OrthoColorado Hospital
St. Anthony Medical Campus
11650 West 2nd Place
Lakewood, CO 80228

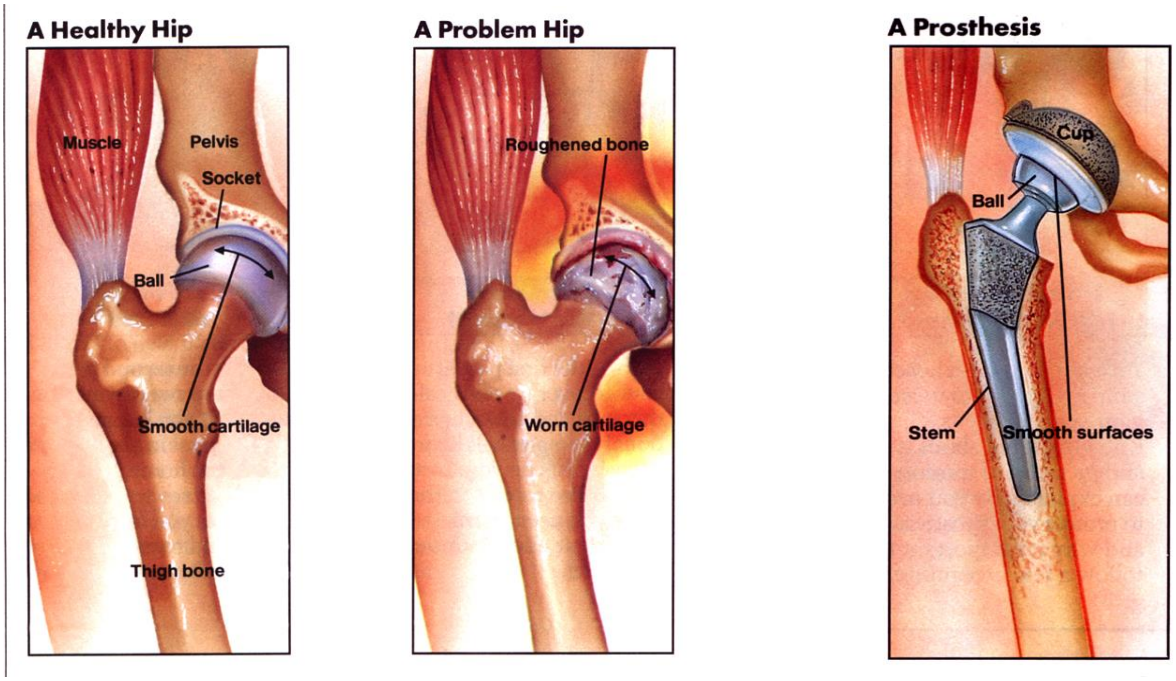
OrthoColorado Hospital is located in Lakewood just off Union at 2nd Place. From West 6th Avenue, take the Simms/Union Exit and go south on Union Boulevard. Turn left at the stoplight at 2nd Place and follow the signs to self park or valet parking.

TOTAL HIP REPLACEMENT

The goals of total hip replacement (also called hip arthroplasty) are to provide relief of pain and discomfort, improve function and enhance joint stability.

The hip joint is essentially a ball and socket joint. Many people with joint disease suffer pain in the hip and severely restricted range of motion. These problems force many people to walk with a limp.

Using a combination of metal and plastic, the joint implant surgeon creates a new ball and socket, which will glide smoothly.



During the past three decades, many advances in hip arthroplasty have been made and several types of prostheses are available for use. The metals used are either a chrome cobalt alloy or a titanium alloy. The plastic used is a high-density plastic polymer called polyethylene.

There are currently several methods used for attaching the prosthesis to the bone and providing stable fixation.

1. Bone Cement – Acts as a glue or grouting material.
2. Press Fit – Depends on a very tight fit of the device in the bone. No cement is used.

The type of prosthesis used for surgery is determined by the surgeon and is based on a number of factors, including bone quality, height, weight, and age. The surgeon will discuss the type of prosthesis with you prior to surgery and recommend the type of implant best suited to your needs

RISKS OF SURGERY

A total joint replacement is major surgery. Complications are rare but we feel you should be aware of these in order to make an informed decision about your surgery. Potential complications are outlined below.

Infection

Infection occurs in less than 1% of all total joint replacements but if it does, it can be devastating. This can take the form of a superficial wound infection requiring antibiotics and/or operative exploration and cleansing, or a deep infection down to the implant which might require implant removal, wheelchair use, prolonged intravenous antibiotics and a period of two months until another implant can be placed. On very rare occasions, the joint cannot be redone. You are given antibiotics before, during and after your surgery to minimize the risk of infection.

Your surgeon generally will not use external stitches or staples. He will seal the incision with Dermabond, "Super-glue for surgeons". The Dermabond will become dry and eventually will wear off. It is water-proof so you may shower approximately 3 days after surgery. **DO NOT** put any ointments, oils, lotions or cream on your incision for **AT LEAST** 4 weeks after surgery. Call the office if you experience any of the following:

- ***Bright red, "angry" appearance on skin or around surgical site.***
- ***Any type of drainage (bloody, green or yellowish fluid from the incision).***
- ***Increase swelling that is not responsive to rest, ice and elevation***
- **A GOOD RULE OF THUMB IS, WHEN IN DOUBT, CALL (303) 233-1223 AND ASK FOR TRIAGE!**

Infection is also possible, throughout your life, many years after total joint replacement. This is thought to occur by bacteria from a distant site traveling to the implant. Bladder or kidney infections are the most common source of delayed infections **but dental abscesses**, infected ingrown toe nails, other foot surgery or bacterial sinus infections can all pose a threat. If these infections occur, they should be treated immediately and our office notified. Also, simple teeth cleaning can cause bacteria from the mouth to get into the blood stream. This poses a threat to the implant and antibiotics should be taken for this minor procedure as well as all dental appointments. Please refrain from having **dental work done two weeks prior to surgery** and for **six weeks after surgery** and notify your dentist that you will be having a total joint replacement. Your surgeon or dentist should put you on preventive antibiotics for all dental appointments. This precaution should be observed for the rest of your life.

Please notify us if you experience any signs of infection in the operative joint even if it is many years following your surgery.

Blood Clots

Blood clots can form in the veins of your calf or thigh. Clots can break away and travel to and lodge in your lungs (pulmonary embolism). A pulmonary embolism can be life threatening. Care is taken to minimize the risk of blood clots with a blood-thinning agent, Xarelto. The thinness of the blood will be monitored. The main risk with Xarelto is excessive thinning of the blood, causing bleeding. Your surgeon will prescribe Xarelto 10mg once a day for 30 days. Early activity has been shown to be the best way to minimize the risk of blood clots.

- ***If you experience an increase in swelling in the leg, ankle or foot that does not respond to rest and elevation.***
- ***If there is tenderness, swelling or redness of the calf or inner thigh.***
- ***If you develop chest pain, shortness of breath or coughing up blood.***
- ***You should seek immediate medical treatment in the nearest emergency room. Many people develop blood clots without any sign of a problem.***
- **A GOOD RULE OF THUMB IS, WHEN IN DOUBT, CALL (303) 233-1223 AND ASK FOR TRIAGE OR, IF AFTER HOURS, GO TO THE NEAREST EMERGENCY ROOM.**

Pain

The total joint replacement is most often done for pain relief. However, we cannot guarantee that the procedure will relieve all of your pain.

Your surgeon will prescribe pain medication while you are in the hospital and will write prescriptions for pain medication when you are discharged. Always take your pain medications with food. Narcotic pain medication may cause constipation, nausea, dizziness, sweats, interruptive sleep patterns, and other side effects. If you noticed an adverse reaction to our pain medication, please notify our pharmacy tech at (720) 497-6662. Or, if after hours, call our main number to speak with our on call physician assistant.

It is very important to drink plenty of fluids following surgery and we also recommend taking a stool softener daily to help prevent constipation. Keep a laxative such as Milk of Magnesia (or your choice) available as needed. If you develop severe constipation or do not have a bowel movement for 72 hours following discharge, please notify your primary care physician.

Anesthesia Complications

There are risks associated with all anesthetic types. These risks will be discussed with you by your anesthesiologist, and will include heart attack and stroke. A spinal anesthetic will be used if at all possible. The spinal numbs your from the waist down, and you will not feel pain. Medicine is injected into a small catheter and the nerve roots are numbed. The spinal does require a needle stick, but this area is well numbed prior to the stick. You will be given sedation through your IV during surgery, unless you decline, so you are not aware of the actual surgery. There is less risk of stroke or heart attack during surgery when a spinal is used rather than general anesthetic. There is also less risk of blood clots and less surgical blood loss. Not all patients are candidates for spinal anesthetic. These reasons, if applicable, will be discussed with you by your anesthesiologist.

Bone Fracture

During surgery, your bone can crack with the insertion of the implant. This would be addressed at the time of surgery with screws or wires and should not affect your recovery.

Blood Loss

Since total joint replacement is a major operation, excessive blood loss can occur during and after surgery. Your surgeon will order a "Type & Cross match" lab test to ensure bank blood will be available should your condition require transfusion. Blood from the blood bank is screened well and we feel it is safe. All appropriate blood loss sparing techniques will be used during your surgery.

Blood Vessel Injury

There is a possibility of damage to a blood vessel during surgery. This disruption in circulation could result in poor or inadequate healing, damage to the tissue surrounding the hip, excessive bleeding during surgery or increased risk of blood clots. Your surgeon will take every precaution during surgery to maintain the integrity of the vascular system.

Nerve Damage

There are major nerves that cross all major joints. There is a small possibility that one of these nerves can be damaged during surgery or afterwards. If so, this would leave you with weakness or numbness of the lower leg and foot, possibly requiring a permanent brace. You will most likely experience numbness or "hypersensitivity" in the area around the incision. This will usually resolve itself in the first year after surgery; however, the scar itself will remain numb.

Leg Length Discrepancy

Equal leg lengths postoperatively are very important. Stability of your total joint replacement is even more important. Measurements are taken during surgery and every attempt is made to maintain equal leg lengths. In some cases, however, a small leg length difference is evident postoperatively. This is done intentionally for implant stability.

Dislocation

Dislocation is a risk for total hip replacement because the components of the hip are not locked together. This usually occurs with some type of injury such as a fall or car accident. It can also occur because of inappropriate body positioning. Correct positioning will be emphasized in this manual and by your nurses and therapists. If a dislocation occurs, you will be placed under anesthesia and the hip relocated. You would then need to wear a brace for 6-8 weeks. Occasionally, the hip cannot be relocated without repeat surgery. If multiple dislocations occur, revision of the total hip replacement might be necessary.

Natural Wear and Implant Failure

The implanted components of a total joint replacement are mechanical pieces and can wear out or break. Therefore, we recommended annual evaluation with X-rays following your joint replacement. We do **not** recommend high impact activities such as jogging for exercise and racquet sports following joint replacement.

Reaction to Materials

Total joint replacements are made of materials foreign to your body. These materials have been thoroughly tested but a small risk of allergic reaction exists. This risk is not high enough to warrant testing. If you are allergic to metals, let a member of the team know.

Also, there have been reported cases of cancer in association with total joints. This is not any more frequent than in the general population, and therefore, is thought not to be the cause of the tumor. Your surgeon may implant the following materials at his discretion: cobalt-chrome alloy, titanium metal/alloy, polyethylene plastic, stainless steel, hydroxyapatite (synthetic bone crystals), ceramics, bone cement, Zirconium and bone graft. Some of these materials may not have final approval by the Food and Drug Administration, but are under ongoing investigation.

PREPARATION FOR SURGERY

PRIOR TO ADMISSION

1. When you decide to have surgery, you will speak with one of our Surgery Schedulers. They will schedule your surgery date, time, preoperative testing and your time of arrival at the hospital. They will also schedule your first post-operative visit. This information will all be written out and mailed to you.

2. See your family doctor or internist for a history and physical examination. **If this is not done, your surgery will be cancelled.**

3. The Ortho Colorado nurses will inform you of what of your regular medications to take or not take pre-operatively.

4. Practice the exercises listed in this book so you will be familiar with them immediately after surgery

5. Elevate the surgical leg as much as possible the first 2-3 weeks after surgery.

6. If you smoke, you should attempt to stop smoking. Your family doctor or internist can help you with this. If you cannot stop smoking permanently, if you can abstain for 24 hours before surgery, this is of benefit. It is essential not to smoke for at least 48 hours after surgery. All hospitals are non-smoking facilities.

7. Wear loose, casual clothing. Do not wear makeup or jewelry to surgery.

8. Get a good night's rest.

9. If you wear dentures, contact lenses or eyeglasses, you will be asked to remove them prior to your surgery.

10. Notify your surgeon if there is a change in your medical condition (cold, infection, fever, etc.) prior to your surgery. It may be necessary to reschedule your surgery.

11. Please bring your Insurance card and a photo ID with you to the hospital.

12. Do not schedule dental work 2 weeks before surgery and please wait 6 weeks after surgery before scheduling any dental appointments.

13. Notify your surgeon if you are having any minor medical procedures done within one month of your surgery.

14. If you are on an anticoagulant medication currently, we would recommend bridge therapy prior to, and after surgery if needed. This will likely be coordinated by your PCP and/or cardiologist. Typical protocol includes instructions to discontinue Aspirin and Coumadin 5 days prior to surgery, then begin Lovenox 40 mg one SUBQ every am; except morning of surgery. If Lovenox is taken the day of surgery, surgery will be rescheduled.

SURGICAL SITE INFECTIONS AND PRE-OPERATIVE SKIN PREPARATION:
WHAT YOU CAN DO:

Before surgery, your body needs to be thoroughly cleansed with a special soap. This is because all humans have bacteria and germs that live on their skin. These bacteria normally help us by digesting dead skin cells and other materials found on our bodies, clothing and furniture. When you have surgery, these bacteria can sometimes cause an infection. You will need to get a special soap to use for the 5 days leading up to surgery called Hibiclens (Chlorhexidine Gluconate solution 4.0%). This soap can be purchased over the counter from most pharmacies without a prescription. This must be used in placed of your normal soap for the 5 days leading up to surgery. **If you have questions after reading this information, please call 720-321-5030 to speak with a nurse.**

CAUTION: DO NOT USE HIBICLENS (CHLORHEXIDINE GLUCONATE 4.0%) ON YOUR HEAD OR FACE. AVOID CONTACT WITH YOUR EYES. (IF CONTACT OCCURS, FLUSH EYES THOROUGHLY WITH WATER). DO NOT USE IF YOU ARE ALLERGIC TO CHLORHEXIDINE GLUCONATE OR ANY INACTIVE INGREDIENTS IN THIS SOAP. AVOID USE IN THE GENITAL AREA AS IRRITATION MAY RESULT. USE YOUR REGULAR SOAP IN THAT AREA.

Special Instructions:

- **DO NOT SHAVE THE SURGICAL AREA FOR 5 DAYS BEFORE SURGERY!!**
- **Wash hair using normal shampoo and wash face with regular soap or cleanser.**
- **Use a fresh, clean washcloth and some Hibiclens soap and wash from your neck down. This is very important!**
- **Rinse your body thoroughly and use a fresh clean dry towel to dry your body.**
- **Do not use any lotions, powders or creams after shower.**
- **Repeat this for the 5 days leading up to surgery.**
- **On the day of surgery repeat above and avoid using any lotions, powders, creams, hair products, makeup or deodorant after that shower.**

MEDICATION CONSIDERATIONS PRIOR TO SURGERY

Do not take aspirin or arthritis medications one week before surgery. This includes Motrin, Naprosyn, Celebrex, or other arthritis type medication. Also, do not take Vitamin E, Glucosamine or MSM one week prior to surgery. The use of these medications interferes with blood clotting. Prednisone, however, should be continued. You may take Tylenol as needed for pain.

NUTRITION PRIOR TO SURGERY

Your diet can influence how well your body is able to heal after surgery. The following are some recommendations to prepare your body for your upcoming surgery:

- Eat more fruits and vegetables. They are rich in vitamins and minerals that help your body heal.
- Limit red meat and increase lean protein including chicken, turkey, and seafood. Reducing saturated fats will help decrease the incidence of constipation post-operatively.
- Maintain a high-fiber diet including whole grain breads, cereals, rice, fruits and vegetables to help avoid constipation.
- Drink plenty of fluids, especially water, before and after surgery to prevent dehydration and constipation.
- Limit foods rich in Omega-3 fatty acids including fish, walnuts, and pumpkin seeds, as these have a blood-thinning effect which may hinder the healing-process.
- You may wish to take Probiotics, which are healthy bacteria that help to strengthen the immune system. Probiotics may be found in yogurt or in acidophilus or lactobacillus supplements available at vitamin retailers and natural grocery stores. **Note: Do not take Probiotics if you are taking antibiotics.**
- Do not be concerned if your appetite lessens following surgery, as this is very common. Be sure to drink plenty of fluids and try eating 6-8 small well-balanced meals throughout the day as tolerated.

POST-OPERATIVE MOOD CHANGES

The immobility, pain, and isolation that may occur after hip replacement surgery can lead to feelings of sadness, anxiety, and loss of control. Anticipating some of the negative feelings you may experience following surgery is the best way to be prepared. Our most successful patients plan ahead for this period of immobility. They may do so by arranging visits from family and friends, collecting books and DVDs to be read and watched, and engaging in new and familiar activities that are manageable within the limitations of a recent hip replacement. Be sure to maintain good nutrition and to ask for help if you feel overwhelmed by feelings of anxiety or depression following surgery.

HOSPITAL STAY

SURGERY

*You will be greeted by a nurse in the surgery department. She will ask you several questions and then take you to the operating room where you will move to the operating room table. This table works extremely well during surgery but is not very comfortable. You will notice many people performing multiple tasks while preparing you for surgery. The anesthesiologist will speak with you and will initiate the anesthesia being used. You will be placed on monitors and the nurses will prepare you for surgery. Once the anesthetic has been given, a catheter will be placed into your bladder to drain your urine during surgery. This catheter will stay in place until the day after surgery so we are able to manage fluid intake and output. Every attempt will be made to do this in a way that respects privacy.

You will start in the pre-op area 2 hours before your surgery where they will get you all prepped and ready. The surgeon will come in to meet with you there and mark the correct side that will be operated on. You will be positioned on your side for the Total Hip Replacement. When the surgery is complete, you will be transported to the Recovery Room, also known as the Post Anesthesia Care Unit.

RECOVERY ROOM

*Once in the Recovery Room, you will be closely monitored by highly trained intensive care nurses. Your surgeon will notify your family of your condition. Your pain should be under control; if it is not, bring this to the attention of your nurse. X-rays may be taken if necessary. Blood output through your drain will be followed closely. Most likely, you will be breathing additional oxygen through a nasal tube. You will be in the Recovery Room for approximately two hours. Many patients require a longer stay but this is not necessarily a reason for concern.

You will be transported to the Orthopedic Unit when you are medically stable.

THE HOSPITAL ORTHOPEDIC NURSING UNIT

A team approach to Total Joint patients has been established and is headed by your Surgeon. You will be cared for by experienced orthopedic nurses, their aides, and physician assistants. Your care will follow a protocol designed to maximize your recovery.

Your post-operative schedule:

- Day of surgery – Rest, pain management. Once medically stable, your nurse will assist you to sit up at the edge of the bed. Depending on your surgeons orders, you may even initiate standing and walking using a walker and your nurses assistance.

- Post-operative Day # 1 – IV lines, oxygen, Foley catheter, and wound drain will be removed. Lab work will be drawn on a daily basis. You will be assisted out of bed and into a chair. The Physical & Occupational Therapists will begin working with you and progress to walking in the hallway. You will be allowed to put your **FULL** weight on the operated leg. You will be started on oral pain medications if tolerated. Blood may be given to you if necessary.

- Post-operative Day # 2 – Therapies will be advanced in order to prepare you to go home. Dressings will be changed. Those patients scheduled for transfer to rehabilitation/skilled nursing facility will also discharge on this day if their medical condition is stable.

When you are discharged home, you should be:

- Ambulating with the correct use of a walker or crutches.
- Able to get in and out of bed with minimal or no assistance.
- Bathing and dressing while maintaining your precautions.
- Using safe techniques in daily activities around the home.
- Climbing and descending stairs safely and correctly as necessary.
- Independent in a home exercise program or home therapies.
- Able to identify your medications, name the side effects, and know when to take them.
- Able to take care of your incision as directed.
- Be able to use home equipment safely and effectively.
- Know your follow-up appointment with your nurse practitioner or surgeon.

PO ST-OPERATIVE VISITS TO THE OFFICE

We will ask you to return to the office at routine times after your discharge from the hospital. You will be seen in our office one to three weeks from the time of surgery for an incision/wound check.

All patients are seen in the clinic six to eight weeks following surgery for examination, wound check and X-rays. Most restrictions will be lifted at this time. Remember, home exercises should be continued for at least three months postoperatively.

Further follow up visit may occur at three or six months as determined by your surgery.

We ask that you see your primary care physician within one month from the date you are discharged from the hospital or rehab/skilled nursing facility. This visit will ensure that you are as physical fit as possible and allow you to maximum your recovery.

Should you have the need for more frequent follow up visits, you may be asked to return at shorter intervals. Should you desire to schedule an appointment for any reason whatsoever, you are always welcome to do so.

REHABILITATION OR EXTENDED CARE/SKILLED NURSING

Transfer to an Inpatient Rehabilitation Unit or Extended Care/Skilled Nursing Facility (SNF) will be done only for those patients needing additional closely monitored therapy at the time of discharge from the hospital. Therapy is a continuation of what you have read in this manual and learned in the hospital. Criteria for transfer to Rehabilitation or Extended Care depend on these factors:

1. Help at home, bed and bath on same level and activity level before surgery.
2. Your progress in the hospital after your surgery.
3. Your overall health.

Transfer to Rehab is only for those patients who exhibit a need and we feel it is a very positive step in the recovery process.

The Rehab/SNF is a place where people go for additional therapies for one to three weeks. Patients with many conditions are on this type of unit. Because the rehabilitation following major surgery takes longer the older you get, most of the patients on these units are older.

The Rehab or SNF is not a hospital but a care facility where the focus is on independence. This means that although there are nurses 24 hours per day, the nurse to patient ratio is different than in the hospital. Be assured that the nurses are all well qualified and will attend all medical matters.

Therapies are done on an individual and group basis. The average length of stay is one week. Rehabilitation or SNF is covered by Medicare and most major insurance groups. Insurance coverage will be verified by the Hospital Discharge Planner. Your insurance company will determine which type of facility will be utilized.

You will be getting dressed daily, so please bring several changes of clothes that you normally wear at home. Some exercises are done in a therapy gym, so slacks or sweats are helpful. Meals are served in a central dining room. You will be encouraged to bathe, dress and perform daily hygiene activities independently with the assistance of your therapists.

You will be followed by a team of health care professionals at the rehab/skilled nursing:

- A medical physician is the leader of the team and will write all orders including, pain medication and discharge orders.
- Nurses
- Physical and Occupational Therapists
- Discharge Planner or Case Manager

Your surgeon and/or nurse practitioner will follow your progress during the postoperative clinical visits.

The goal of this team is to safely return you to your pre-surgery living situation. This implies a comfort level with activities of daily living. Your mobility skills are practiced and increased daily so that you will be able to take care of yourself.

Your discharge date is decided upon in conferences between nurses, therapists, social workers, you and your family. Any home therapists or equipment that might be required are arranged before discharge.

Your incision will be checked before discharge. You may shower without covering the incision when you return to your own home.

When discharged from the Rehabilitation Facility or SNF, you should be:

1. Participating in a home exercise program (independently or with the assistance of home therapists).
2. Independent in ambulation with the correct use of a walker, crutches or cane.
3. Able to get in and out of bed safely and independently.
4. Independent in bathing and dressing, or with assistance from family.
5. Using safe techniques in daily activities around the home.
6. Climbing and descending stairs safely and correctly as necessary.
7. Following positional restrictions as ordered by your surgeon.
8. Getting in and out of a car correctly and safely.
9. Able to take care of your incision as directed.
10. Given necessary home equipment, and be able to use it effectively.
11. Know when to see your nurse practitioner or surgeon for your follow-up appointment.

PHYSICAL AND OCCUPATIONAL THERAPY HIP REPLACEMENT

The following material on your Physical and Occupational Therapies has been proven to provide for effective recovery for total joint patients.

All therapists you come in contact with should be familiar with the following protocol. You should also be familiar with the described therapies and refer to them frequently. If you feel an exercise or movement is being instructed incorrectly, please bring your concerns to the attention of the therapist, nursing staff or your surgeon. Nothing done to you should contradict this manual.

A Physical Therapist works mostly on exercises and walking.

An Occupational Therapist works mostly on activities of daily living assistance such as dressing and bathing.

Physical and Occupational Therapy

Physical and Occupational Therapy will begin the day following your total joint replacement surgery. Your therapists will teach you all necessary precautions to allow proper healing and functioning of your new joint. You will be taught exercises, transfer techniques (e.g. getting in and out of bed), walking with a walker or crutches, stair-climbing, and activities of daily living (e.g. dressing, bathing). This manual is provided to you so that you will know what to expect while in the hospital, and as a reminder for doing activities properly once you are home again. Your therapists will teach these activities as described in this manual, and are available by telephone to answer any questions you may have once you are home.

PRECAUTIONS FOLLOWING TOTAL HIP REPLACEMENT

After hip replacement surgery, it is important to follow certain positional precautions for about six weeks to prevent dislocation of the new hip joint. Your surgeon or the Total Joint Nurse will tell you when you no longer need to follow hip precautions. These precautions are as follows:

~ Do not bend greater than 90° (square) at the hip. This means you may sit up straight, but should not bend forward while sitting.

~ Do not bring your knees together & do not cross your operated leg over the midline of your body.

~ Do not roll your operated leg inward. Keep toes pointed straight forward or slightly outward.

~ Do not roll your operated leg outward. Keep toes pointed straight forward or slightly outward.

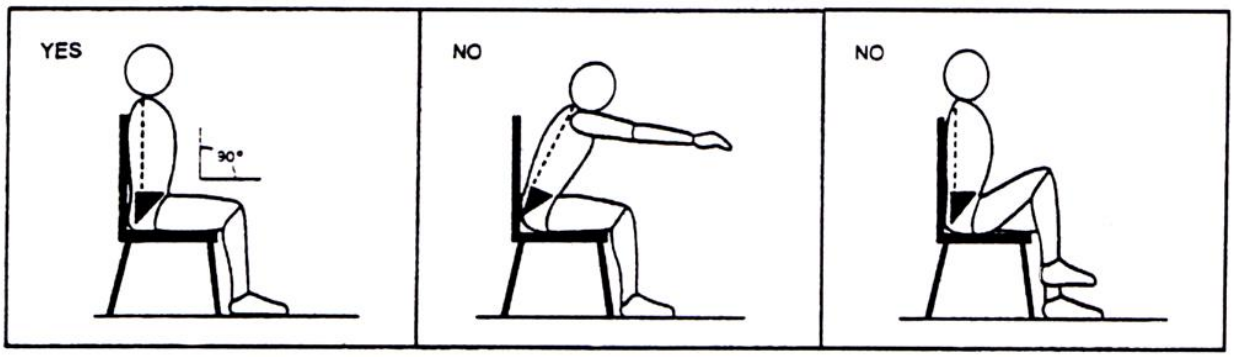
~ Do not twist your body over your operated hip to reach for objects.

The following illustrations should help clarify these precautions, and your therapist will carefully teach you to perform activities of daily living while following these precautions.

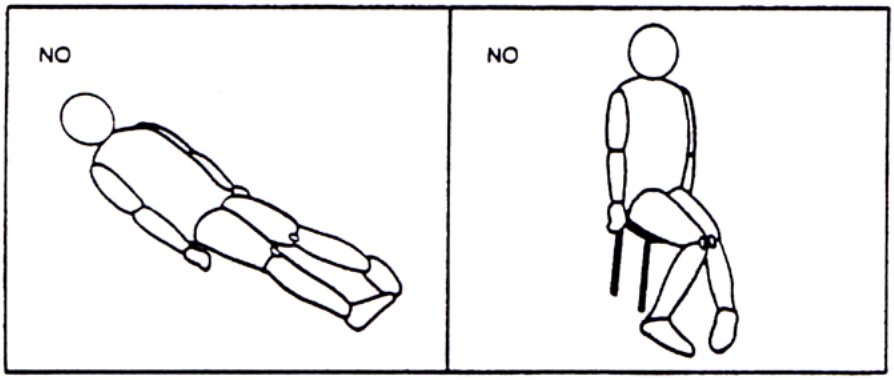
Caring For Your total Hip Replacement

Until the healing process is completed, there are some precautions you must follow to avoid dislocation of the hip. The length of time you must avoid certain movements and positions is a decision made by your physician. Please ask a member of the total joint team if you have questions regarding these precautions.

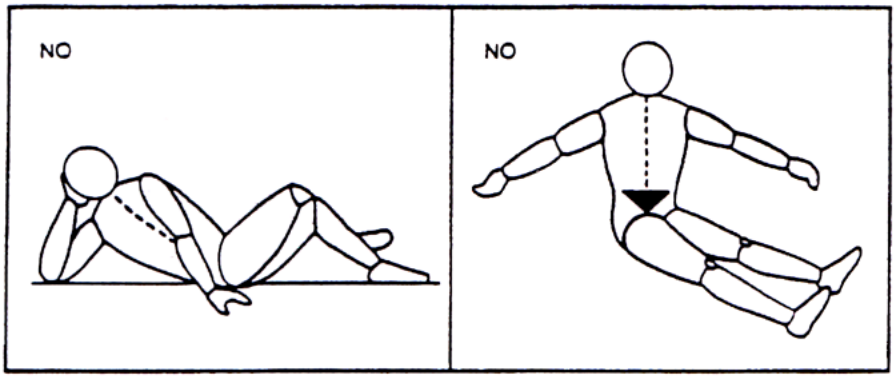
During Your Recovery Process



1. DO NOT bend your hip further than a 90 degree angle (a square corner).



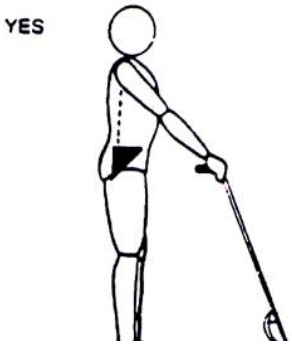
2. DO NOT turn your leg inward (Toes and knees should face forward or out.)



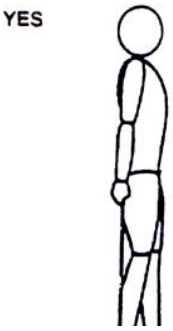
3. DO NOT cross your legs or allow your leg to cross the midline of your body.

During your recovery period, you must constantly be aware of your hip position. Some of your daily activities will require special attention during this period, but can be accommodated with the appropriate aid or change in movement.

Activities Requiring Special Attention –

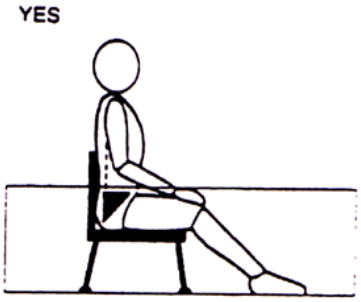


1. When stooping or ending to pick-up objects, use a long-handled reacher.

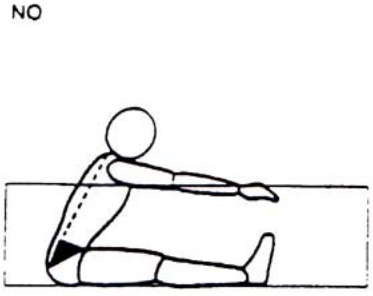


2. Use a long-handled device or other method as shown by your therapist for dressing especially pants, shoes and socks.

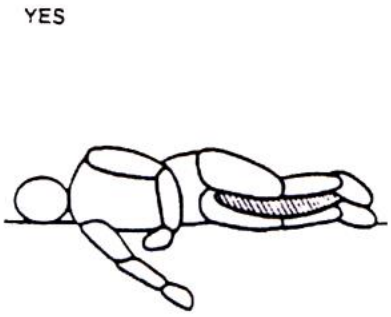
3. When rising from a sitting to a standing position DO NOT bend forward at the waist. Keep back straight



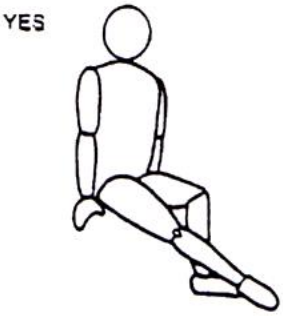
4. To get in and out of your bathtub, place a bath chair in the tub.



5. DO NOT reach forward while sitting in the bathtub. Keep soap and washcloth at your side.



6. When rolling over in bed, keep pillows between your knees.



7. To get in and out of your car keep the seat back, your hip extended, legs apart and foot turned out.

If you have any questions concerning the above activities, please ASK YOUR THERAPIST.

Weight-Bearing Following Hip Replacement

You will be allowed to bear as much weight as you can comfortably tolerate on the operated leg following surgery.

Your physical therapist will teach you how to ambulate using a walker, crutches or cane.

Bed Positioning

Your surgeon will allow you to lie on either side with a large, firm bed pillow between your legs. When lying on your back, do not allow your leg to roll inward or outward.

Correct

Wrong

Correct

Bed Transfer

A firm mattress is best; avoid waterbeds without baffles and low beds. If you feel your bed is too low, ask someone to raise it with wood blocks under each leg.

You may get in or out of either side of the bed. Either way, you must be careful to follow your hip precautions when getting in or out of bed.

Remember:

1. Keep your operated leg out to the side at all times. Do not allow it to cross the midline of your body.

2. It is better to lean back somewhat rather than leaning forward, to avoid bending your hip too much.

3. Don't allow your leg to roll inward while getting in or out of bed.

Your therapists will teach you the best method to get in and out of bed.

Sitting

A firm chair with armrests is best. If the chair is too low, sit on firm pillows to maintain your hip in a 90 degree or less position. Soft pillows or cushions may cause your hip to turn inward.

1. To sit down, back up to the chair until you feel the back of your knees touching it.

2. Move your operated leg forward as you reach back for the armrests with both hands and lower yourself slowly to the edge of the chair. Once seated, you may scoot to the back of the chair, being careful to avoid bending forward past 90 degrees at your hips.

3. While sitting, maintain your hip at a right angle (90 degrees) or less. Leaning back in the chair may help you maintain good hip positioning**.** **Do not** lift your knee higher than your hip.

Correct

Correct

Wrong

Wrong

4. Be sure to keep your knees apart. **<u>Never</u>** cross your legs or allow your knees to turn inward. Use a firm pillow to keep your legs separated.

5. **Do not** twist your body while sitting.

Wrong

Wrong

Correct

Wrong

Walking

To walk, place the walker forward first, take a short step with the operated leg; then step slightly past the first foot with your strong leg, taking weight on your hands as needed.

It is best to turn toward your **non-operated** leg whenever possible to avoid turning the operated leg inward.

Correct

Wrong

Wrong

Using Crutches

You may progress to using crutches or a cane while in the hospital or at Rehabilitation if you and your therapist feel you are ready. The therapist will instruct you on the proper technique for using crutches/cane.

Stair Climbing

With crutches, step up with the strong leg first, and then bring the crutches and the operated leg up together. Going down, place the crutches on the next step, step down with the operated leg, then bring the strong leg down last. You may use a rail in place of one crutch as instructed by your physical therapist.

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Always Remember: Lead up with the good leg, lead down with the bad.

Toilet Transfer

This procedure is the same as getting in and out of a chair. Your therapist will recommend appropriate equipment for you, to assure that your hip does not bend past 90 degrees or rotate inward, and to make it easier for you to get up and down. A commode, raised toilet seat and/or toilet rails may be needed.

Using a commode or toilet rails:

1. Back up to the toilet until you feel it behind your legs. Reach back for the armrest as you slide your operated leg forward. Slowly lower yourself onto the toilet.

2. Do not lean forward on the seat in order to wipe yourself.

3. Do not twist while seated.

4. Do not let your operated leg dangle rotate inward.

5. Reverse the process for getting up. With your operated leg forward, push yourself up with the armrests, being careful not to bend forward.

Using a raised toilet seat:

1. Back up to the toilet until you feel it behind your knees. Slide your operated leg forward

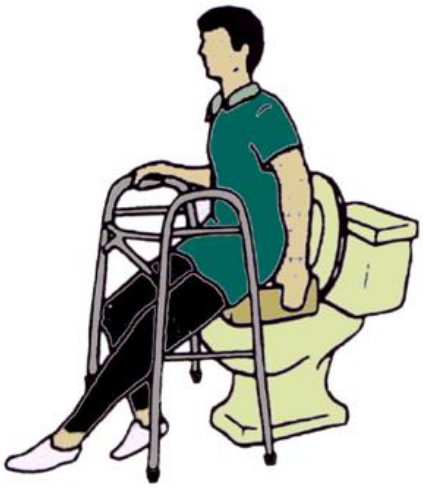
2. Then reach back with one hand for the raised toilet seat or your sink counter if it is next to the toilet. Keep your other hand on the walker, as you slowly lower yourself down.

3. Do not lean forward on the seat in order to wipe yourself.

4. Do not twist while seated.

5. Do not let your operated leg dangle or rotate inward.

6. Reverse the process for getting up. With your operated leg forward, place one hand on the walker. Then use the other hand on the raised toilet seat or the sink counter to push yourself up. Use your non-operated leg as much as possible to help keep your body from twisting.



Tub Transfer

In order to maintain your hip precautions you may need a shower chair with a back. Be sure it is high enough to prevent you from bending past 90 degrees when you sit down. You may also need a shower hose and long-handled sponge to wash.

1. Using the walker, walk to the side of the tub, next to the chair. Then turn toward your non-operated leg, until you are facing away from the tub.

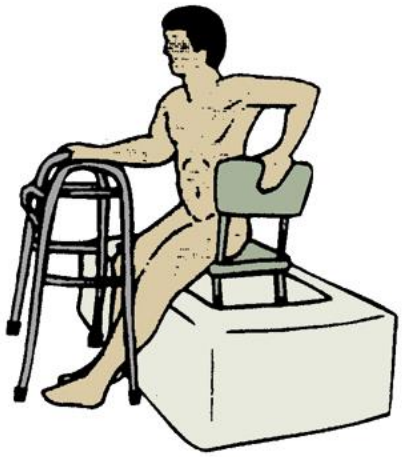
2. Back up until you feel the tub behind your legs.

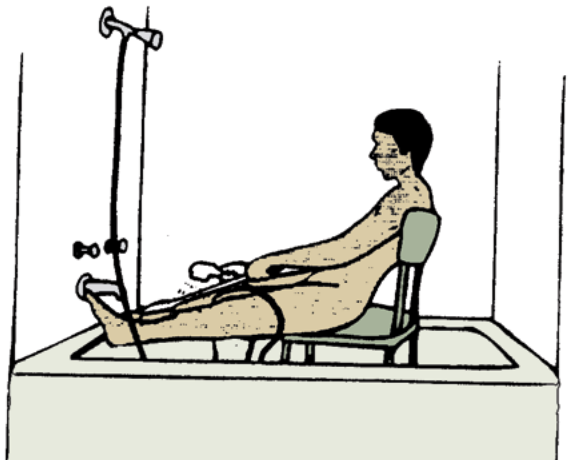
3. Slide your operated leg forward. Then reach back with one hand for the back of the chair. The other hand should remain on the walker as you slowly lower yourself down to the chair. Be sure your leg does not rotate inward.

4. Lean back to lift your legs over the side of the tub one at a time. Do not cross the midline of your body with the operated leg as you turn to sit facing the faucet.
5. Do not bend forward to turn on the faucets. You may need assistance to avoid this.

6. Reverse the process to get out of the tub. Lean back and turn in your chair while lifting your legs over the side of the tub one at a time. Do not bend past 90 degrees or cross the midline of your body as you turn or come to the edge of the chair.

7. To stand up, put one hand on the back of the chair. Slide your operated foot forward. Put your other hand on the walker and stand up.

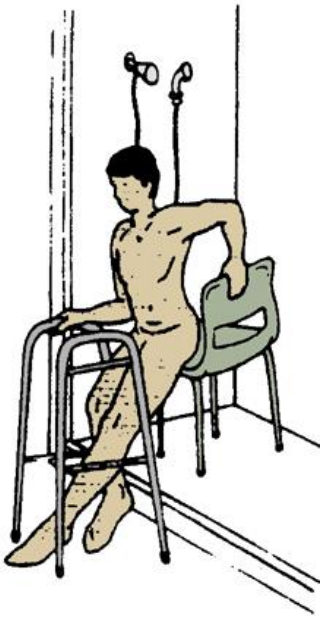




Shower Transfer

This procedure may be the same as for Tub Transfer when using a shower chair. By having a higher chair in the shower, it may make it easier to clear your legs once you are sitting. Once you are in the shower, you may choose to stand using your walker.

Stepping into the shower is allowed as you are able to put your full weight on the operated leg.



Dressing

When putting on pants, socks and shoes, you need to use the adaptive equipment provided by your Occupational Therapist. You need to sit at the edge of the bed or chair in order to keep from bending your hip past 90 degrees. Avoid twisting your body, turning your leg in, or letting your knees come together as you get dressed. **Do not** pick your foot up and place it on the opposite leg

in order to reach your foot. Do not stand to step in or out of pants or shoes. The following instructions are for underwear and pants.

1. Using your reacher, grab the front waist band of your underwear or pants. Lower the pants with your reacher, slipping it over your operated leg first.

2. After both feet are in, slide the pants up, keeping your knees separated and without bending forward. Pull pants over feet up above your knees as high as possible.

3. Then stand up to pull your clothes up to your waist and fasten them. Be sure you are well balanced in standing.

4. When undressing take the slacks and underwear off your waist while standing. Then sit down.

5. Remove pants from your non-operated leg first using the reacher.

The following instructions are for socks and shoes.

1. Slide your sock over the sock aid as shown.

2. Grasp both straps and drop the sock aid in front of the operated foot. Slip your foot into the sock and pull until the sock is on. Do not lift your knee above your hip while pulling the sock on. Once the sock is in place, drop the outside strap and pull the sock aid up toward you to remove it.

3. You may use the sock aid for the non-operated leg as well.

4. To remove the socks, use the hook on your shoehorn or "reacher" to push the sock off over your heel. Always use the shoehorn to the inside of your operated leg to avoid rotating your leg inward.

5. Wear slip-on shoes or use elastic shoelaces.

6. Use your long-handled shoehorn or "reacher" to put on or take off your shoes. Be careful to use the shoehorn to the inside of your operated leg. Lean back as you put on or take off your shoes or sit in a higher chair or bed to avoid bending past 90 degrees at the hip.

It is alright to have someone help you dress but it is important to know how to dress properly by yourself so that you can keep your hip safely positioned. If someone helps you, they must be aware of your precautions and keep your hip properly positioned. Be sure to watch carefully as they assist you.

Car Transfer

Many hip dislocations occur when getting in and out of a car. Please follow these instructions closely for 6 weeks after surgery.

You will want to make sure that any vehicle which you will be riding in is not too low and has adequate leg room to allow you to get in safely while following your hip precautions.

To get into the front passenger seat:

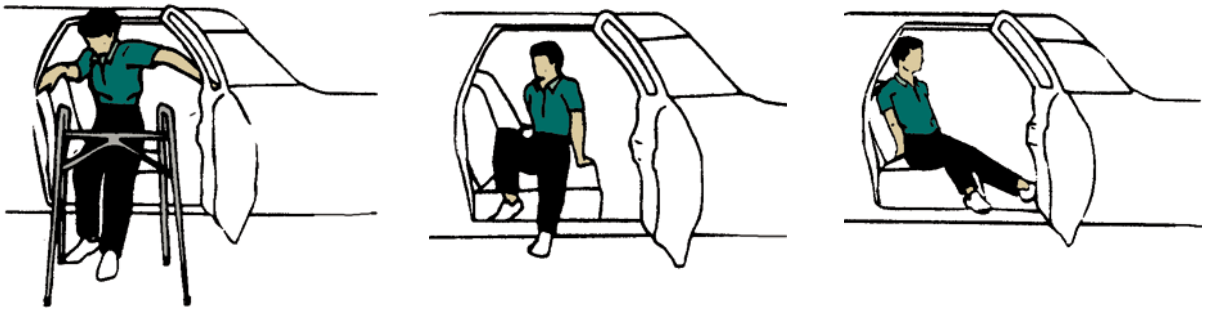
1. Make sure the seat is moved as far back as possible and slightly reclined. If it is too low or has bucket seats, put a firm pillow in the seat to make it higher and/or to make the seat level.

2. Back up to the car with your walker until you feel the car behind your legs.

3. Sit down on the side of the seat as you would on any chair. Don't lean forward.

4. **Lean back** onto the seat in a semi-reclined position with your hands behind you for support. Scoot yourself backward onto the seat until your legs will clear the front opening while keeping your hips less than 90 degrees of bending, and **do not** cross the midline of your body as you bring your legs into the car one at a time. Fasten your seat belt.

5. Reverse the process to get out. Begin by scooting toward the center of the car before you begin to turn, in order to clear your legs.



To get into the back passenger seat:

1. Follow the same procedure to back up to the car and sit down. Enter the side of the car that allows your operated leg to be toward the rear of the car. You may scoot across the seat and remain seated with your leg up if you can semi-recline against the opposite door and be seat-belted for safety. Do not use the back seat and pivot in to face forward unless there is adequate leg room to do so within your hip precautions. The car seat should be all the way back if you are sitting in the front seat.

Suggestions:

The following suggestions may help you at home or work to make it easier and safer.

1. Whenever possible, use a high stool when at a counter but be careful not to twist.

2. Minimize carrying objects, which compromise the grip on your walker or crutches. Use big pockets; slide objects along counters (especially pots and pans); and store objects where you will use them.

3. Do not bend down to pick up objects from the floor. Use your reacher. Have someone bring objects up to a table or counter level for you so they will be easy to retrieve when needed.

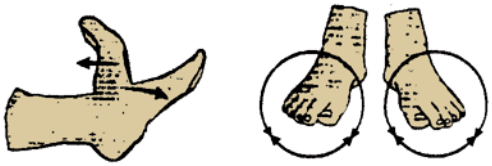
4. Remove throw rugs to prevent tripping or slipping on them.

5. If you use a walker bag, be sure it is not too deep so it causes you to bend too far forward.

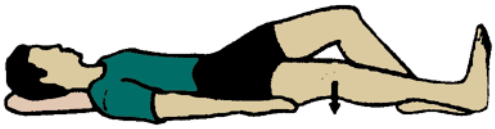
6. Have someone assist you to make clear open paths wherever you need to go. Rearranging furniture or temporarily storing unneeded items may make getting around much easier and safer.

Hip Replacement Exercises

1. Ankle Pumps
Actively pump your foot up and down. Next, move your ankle in circles. Do these frequently.



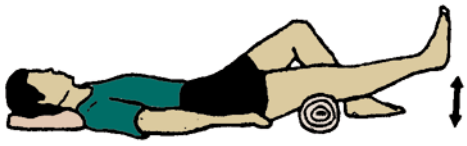
2. Quad Sets
Tighten the muscle on the top of your thigh by pushing the back of you knee down into the bed. Hold for 5 seconds.



3. Gluteal Sets
Squeeze buttocks together. Hold for 5 seconds.

4. Heel Slides
Bend hip and knee by sliding heel toward buttocks. Lower slowly.

5. Short Arc Quads
Place coffee can or towel roll under your knee. Raise heel off bed to straighten knee. Hold for 5 seconds.



- Exercises 1-3 should be done every hour during the day, 5-10 repetitions each.

- Exercises 4-6 should be done twice a day, starting with 10 repetitions each. Gradually increase the number of repetitions as much as possible.

- Your therapist may modify this list when appropriate. It is recommended that daily exercises be done for at least 3 months. If any exercise causes lasting pain or swelling which is still present the next morning, contact your therapist or your surgeon's office.

- Home or outpatient therapies will be arranged as appropriate.

CONCLUSION

The entire Total Joint Team is committed to the successful outcome of your surgery. We feel that our system works very well. Your surgery and recovery should proceed without problem. We have prepared this manual and organized our team so that you, the patient, are an active participant. We ask that you maintain a positive mental outlook throughout the entire process. Studies have shown that optimistic patients have better outcomes.

Thank you for reviewing this manual. Please keep it available for your reference as you more forward with your total joint process.

NOTES