

Total Knee Replacement

Table of Contents

Before Your Surgery

General hospital Information.....	2
Before You come In For Surgery.....	3
Diet.....	4
What To Bring To The Hospital.....	5

Your Hospital Stay

Breathe.....	6
Move.....	7
Total Knee Plan of Care.....	8
Pain.....	11

After Your Surgery

Total joint Replacement – Discharge Education.....	12
Exercises Before and After Your Knee Surgery.....	13
Patient Education Literature.....	15
Living with Your New Joint.....	18

GENERAL HOSPITAL INFORMATION

St. Joseph Campus

428 Biltmore Avenue
Asheville, North Carolina 28801

Hospital Operator (828)213-1111
Orthopedic Unit (828)213-3491
Education Office (828)213-3485
Patient room (828)213-3+room #

Visiting Hours are 10:00 until 8:30 pm.

Cafe 428 (St. Joseph campus cafeteria) is located on the 2nd floor, north end.

Hours:

Breakfast 6:15-10:00	Continental Breakfast 10:00-11:00
Lunch 11:00-2:00	Deli, Soup, Salad & Grill 2:00-4:30
Dinner 4:30-7:00	Deli, Soup, Salad & Grill 7:00-10:00

Vending machines can be found on the 2nd floor outside of the cafe and also on the 2nd floor at the south visitor's elevator.

Mission is a non-smoking facility
You cannot smoke on campus.

If you smoke, try to stop. If you can not stop, cut down. This will help with the healing process and speed your recovery.



BEFORE YOU COME IN FOR SURGERY

For All Orthopedic Surgery Patients:

- Prepare or purchase frozen meals, canned soups or easy to prepare foods for use after you return home.
- Review home assessment checklist and prepare your home.
- Discuss advanced directives with your family. Complete these forms, if desired, and have them notarized. Bring copies with you to the hospital.
- Obtain any equipment you anticipate needing. (See O.T sheet)
- Make sure you have a safe, sturdy chair with arms on it for support that does not sit low.
- Do not take any medications that can thin your blood for at least 1 week before your surgery. This includes: Aspirin, Advil, Aleve, Bufferin, Motrin, Ibuprofen, Naprosyn, Nuprin, Dolobid, Feldene, NSAIDS, vitamin E, vitamin B6, Gingko Biloba, Ginseng, garlic and all herbal supplements. We also request that you discontinue all herbs for at least 1 week before. If you take Aspirin or Coumadin that is prescribed by a physician, please discuss this with your surgeon.
- Report any health changes such as a cold or upper respiratory infection, or signs of any infection immediately to your surgeon. Infections increase your risk of complications with surgery.
- If you have problems with constipation you may need to take a laxative or enema the night before your surgery.
- Make a complete list of all medications that you take, including over-the-counter, non-prescription medicines, herbs and vitamins. Bring this list with you to the hospital.
- Make a list of all your health problems, major surgeries and hospitalizations and diseases you have had if any. Also list all your allergies to medicines, foods, linens, the environment or others and what reactions you have to each allergy.

DIET

We want you to be well hydrated and well nourished when you come in for surgery. Continue to follow your family doctor's advice if you are eating a special diet. Each day in the hospital you will receive a menu to complete for the following day's meals. In preparation for surgery:

- Drink eight to ten glasses of water each day. Limit alcoholic beverages and those that contain caffeine.
- Eat foods high in Fiber, Vitamin C and Iron

Anesthesia and pain medications can slow down your GI tract and cause abdominal pain, cramping and constipation. Following the above diet will help to avoid these problems. However, some patients require stool softeners or a laxative to keep them regulated. Remember that laxatives can become habit forming so speak to your physician if you are requiring frequent laxatives once you are discharged home.

It is always best to get your nutrients naturally from food, but you may take a supplement in addition to, or instead of changes in your diet if you desire or if your doctor instructs you to do so. If you take an iron supplement, take it with orange juice or something high in vitamin C to increase its absorption.

High Fiber, Vitamin C and Iron Rich Diet

The high fiber diet emphasizes fiber-rich foods including fruits, beans, vegetables and whole grains. It is used to prevent and treat a number of diseases including colon problems, high cholesterol, diabetes, obesity and constipation. You will be prone to constipation after surgery due to pain medicines, iron tablets and decreased activity levels. Increasing fiber into your diet now will help to alleviate this problem.

When including extra fiber in your diet, do it...

- *Slowly* - fiber can cause side effects such as gas, bloating or diarrhea
- *With water* - fiber can be constipating. Drink eight to ten glasses of water per day.
- *With exercise* - inactivity can lead to constipation.

Iron Rich Foods

Protein foods: Liver, lean beef, poultry, veal, lamb, pork, eggs, fish, oysters, dried peas and beans, tofu, pumpkin, sesame and sunflower seeds

Fruits: Dried fruit and prune juice

Vegetables: Leafy dark greens, such as spinach, chard, kale, mustard greens

Grains: Hot cereal such as oatmeal & cream of wheat, iron fortified breads, pastas, rice and dry cereals

Miscellaneous: Blackstrap molasses, parsley

For higher iron absorption, eat these foods with foods rich in Vitamin C.

Vitamin C Rich Foods

Oranges	Tangerines	Brussel sprouts	Limes	Grapefruit
Cantaloupe	Broccoli	Strawberries	Lemons	Tomato juice
Alfalfa sprouts	Tomatoes	Greens: beet, kale, mustard and collard		

WHAT TO BRING TO THE HOSPITAL

Miscellaneous:

- List of medications, allergies, medical history
- The milligram dosage of Coumadin taken the night before, if applicable
- Copy of Advanced Directives, if applicable
- Name and phone number of an emergency contact

Clothing:

- Shorts or loose fitting pajama bottoms, or gowns & robe
- Remember where your incision will be. Do not bring clothing that binds across your incision.

Toiletries:

- Toothbrush & toothpaste
- Comb & brush
- Deodorant
- Shaving supplies
- Denture products
- Lip balm - this can be used only after oxygen is removed

Books, magazines, music, stitchery, etc.

Low heel, non-skid shoes with a back for walking

Equipment:

- Walker
- Crutches, if your doctor approves



** If you have a walker or crutches, please bring them to the hospital to be adjusted by your physical therapist. Please make sure your name is on your equipment. If you don't have a walker or crutches, you can obtain these before your admission or they can be issued to you at the hospital and billed to your insurance company. If you are going to Thoms Rehab or another rehab facility, this equipment can be issued there.

You may need additional equipment to help you maintain independence and safety during your recovery. Please see the Occupational Therapy Equipment sheet for this list of supplies.

YOUR HOSPITAL STAY

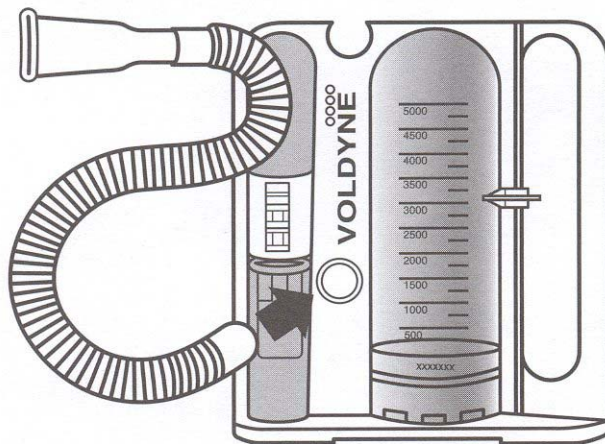
To avoid a possible lung problem like pneumonia –

BREATHE!

Your nurse will be reminding you to Cough and Deep Breathe frequently.

Slowly breathe in through your nose
Slowly breathe out through your mouth
Every third breath, breathe in through your
nose and with your lungs still full,
COUGH

You may also be given an Incentive Spirometer to help you exercise your lungs. If your doctor orders this for you, your nurse will bring it to you and instruct you on its use.



To prevent possible blood clots or bowel problems and to improve the mobility of your new joint-

MOVE!

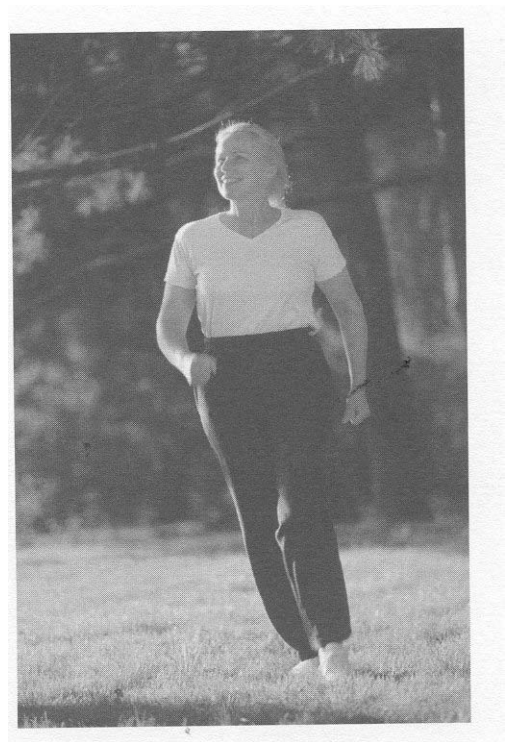
Moving helps speed the healing process.

Ted hose (tight compression stockings) as well as SCDs (sequential compression devices) or plexipulse boots may be placed on your legs to also help prevent blood clots from occurring. You will be instructed on circulation exercises such as ankle pumps and circles to improve blood flow and to keep blood from pooling in your lower legs, which will decrease the chances for blood clots. Moving is also good for your heart and your lungs.

Muscles weaken when they are not being used. The less you do, the weaker you are likely to become.

Physical Therapy helps to get you in shape with stretching and exercises to strengthen your muscles. They will be instructing you on how to get in and out of bed and how to walk with your new joint.

After you go home, you will need to continue the exercises three to four times daily that you learned in the hospital until your doctor tells you to stop.



TOTAL KNEE PLAN OF CARE

Day of Surgery

When you arrive on the nursing unit, your nurse will meet you in your room with the recovery room nurse. The recovery room nurse will report information to your nurse about what has happened so far. If you have family waiting, they will usually be allowed to be with you after nurses finish their report and get you settled in.

Your nurse will listen to your heart, lungs and stomach, check your surgical bandage and check your circulation. It is not uncommon to see some drainage on your bandage. Your vital signs will be checked very frequently for a while and then at least every 4 hours for the first 24 hours. It is not unusual for your blood pressure to be a little low during this time. You may be quite drowsy for the first day due to the anesthetic and pain relieving drugs.

Pain and nausea medication will be given to you if you need it. The nurse will discuss the options for pain medicine with you. Many patients receive their pain medicine through the IV via a pump called a PCA, or patient controlled analgesia. The nurse will set it up and explain how it works. If you are nauseated please tell your nurse. You will also be getting antibiotics through your IV every eight hours for 1-2 days.

We will remind you to deep breathe and cough and pump your ankles up and down. You may have oxygen to wear overnight.

You may need to turn and reposition often. Please call your nurse to help with this.

You may have a stocking called a TED hose on your non-operative leg to help blood flow. This should be on at all times except during bathing. You may also have an SCD, or sequential compression device, on your legs or Plexipulse boots on your feet to help prevent blood clots. These should be on your legs at all times except while walking.

You may have a drainage tube called a hemovac coming from the area around the incision. This is to drain fluid out of the area around your incision to help decrease swelling and pain. It is not unusual for the drainage to look bloody. This drain will be removed in 1-2 days.

You might have a catheter in your bladder to drain your urine. It is usually removed early the next morning.

You may be allowed to have ice chips and sips of clear liquids when you get to your room. Your nurse will talk to you about when you will be allowed to eat solid foods.

You may have an exercise machine placed on your leg called a CPM, or continuous passive motion machine. This machine bends and straightens your leg to improve the flexibility of your knee. You will need to use the machine 6-8 hours per day. A nurse or physical therapist will place this on your leg. If your doctor does not want you to use this machine, you will be instructed on exercises to bend and straighten your knee. Your goal, whether you have the machine or not, is to be able to bend the knee to a go degree angle before you are discharged. When not exercising, a pillow may be placed under the ankle to help straighten the leg. Never put a pillow under your knee.

You will be receiving a blood thinner as your doctor orders to help prevent blood clots.

Your Physical Therapy (PT) may begin later in the afternoon or on the day after surgery. This may include walking with a walker and sitting in a chair. Please do not try to get up on your own yet. Ask the nurse or physical therapist to help you with bathroom needs.

First Day After Surgery

Early this morning you will have blood drawn by the lab to check your iron level and check your blood clotting level.

If you had a catheter in your bladder overnight, it is usually removed early this morning. Call the nurse to help you with bathroom needs.

Your doctor or his associate will come by to see you daily. You may want to make a list of questions for them each day so you will be prepared when they come.

We will want you to continue to deep breathe and cough and pump your ankles up and down. Use the Incentive Spirometer (IS) if your doctor has ordered this for you. Your oxygen level will be checked and we may remove the oxygen if your level is normal.

Your nurse will be listening to your heart, lungs and stomach and checking your surgical bandage and circulation. Your vital signs will be taken at least every 4 hours today.

Continue to call the nurse for help to turn and reposition.

Continue to wear the stockings and SCD or Plexipulse boots on your legs at all times to help the blood flow. You may have the wound drainage tube removed today if allowed by your doctor.

You may be able to eat solid foods today. Meal times are about 7:30, 11:30 and 4:30. Once you are eating okay, you may be able to take pain pills instead of IV pain medicine. You may find that you feel better with pain pills rather than IV drugs. When you are taking pain pills, you will need to call and ask the nurse for them when needed. Your IV fluids may be discontinued if you are eating and drinking well and taking pain pills instead of IV medicine.

You will receive a blood thinner as your doctor orders.

Continue to use the CPM machine or exercises to gradually increase the angle of the bend. The more you bend the knee, the less pain you will have and the better motion you will gain. When not exercising, place a pillow under the ankle, not the knee, to help straighten the leg.

Your Physical Therapy will start with exercises, getting out of bed, possibly walking with a walker and sitting in a chair. It is not uncommon to feel light-headed or nauseated during this time. It is beneficial for you to sit up in the chair for about an hour. P T usually sees you twice a day. They will gradually be increasing your activity. Often times, the therapist will let you know that they will be in soon to allow you time to ask for pain medicine before your physical therapy session.

Second Day After Surgery until Discharge

Again this morning you will have blood drawn by the lab to check your iron level and blood clotting level. Continue to deep breathe and cough and use the IS. Pump your ankles up and down.

Your nurse will listen to your heart, lungs and stomach and check your surgical bandage and circulation. Your vital signs may be checked less frequently today if everything has been stable.

Continue to call the nurse to help you turn and reposition.

Continue to wear the stockings and SCD or Plexipulse boots on your legs at all times. You should be eating solid foods. Be sure to ask for pain pills when you need them. You will receive a blood thinner as your doctor orders.

Continue to use the CPM or exercises to increase the bend of your knee. When not exercising, place a pillow under the ankle, not the knee, to help straighten the leg. Try to bend knee to a 90 degree angle.

You will continue Physical Therapy twice a day and your goal is to become more independent with performing self-care, walking with a walker, sitting in the chair and increasing your activity level. Please call the nurse for help to get up and walk or go to the bathroom until your therapist tells you that you are safe to go alone. Your doctor may ask an Occupational Therapist to visit you to show you some long-handled tools to make life easier and safer for you at home.

Your surgical bandage may be changed today. It will be changed daily or more often if there is a lot of drainage. Once this bandage is removed, you will have a TED hose placed on your surgical leg. If you are going to need the bandage changed at home, your nurse will instruct a family member how to change it.

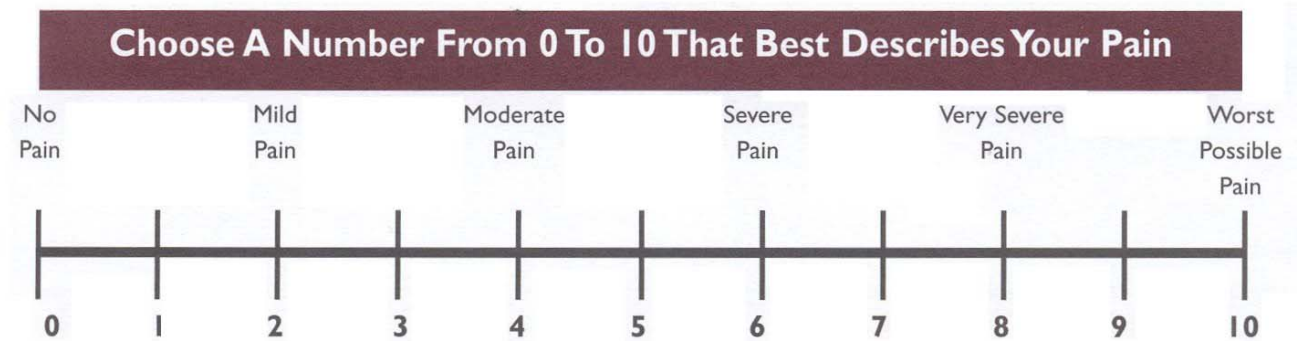
You may need a laxative if your bowels are not moving yet. Please call your nurse to discuss this.

A Discharge Planner will come to talk to you about plans for when you leave the hospital. They will make any arrangements for physical therapists to come to your house or for you to go to a rehabilitation hospital or nursing facility for extra therapy before you are safe and ready to go home. This is based on each patient's individual needs. You are usually in the hospital 3-4 nights.

You may take a shower when your surgeon approves and your IV & drain are out, your bandage can be removed and you can walk into the bathroom. A waterproof dressing called Tegaderm may be used to cover your incision if your doctor orders.

PAIN

We want your post-operative experience to be as comfortable as possible. Your physician will order pain medications that your nurse will administer as you need them. Some patients will be set up with a pain medicine pump called a Patient Controlled Analgesia pump, or PCA, immediately after surgery. This pump will allow you to administer your own medication through your IV by pushing a button. The nurse will explain to you how the pump works if your physician orders this for you. We ask that your family members not push the button for you as this can cause over-sedation. Once you are eating and drinking adequately, your nurse will switch you over to pain pills by mouth. Your nurse will frequently be asking you about your pain level to determine if you are getting relief of your pain. The following scale helps us to determine your level of comfort:



*If you are not getting relief of your pain, please discuss this with your nurse so that adjustments to your medication can be made, if necessary. Using an ice pack to the affected area may help to relieve your discomfort. Our goal is for you to have optimal pain relief without over-sedation.

AFTER YOUR SURGERY

TOTAL JOINT REPLACEMENT- DISCHARGE EDUCATION

You can prevent an infection by keeping your surgical wound clean. Your nurse will tell you how to keep it clean after surgery. Your doctor may want your bandage to be changed daily when you go home. Your nurse will instruct you or a family member how to do this. Do not take a tub bath until allowed by your doctor.

Your nurse will provide you with written discharge instructions and review them with you before you go home. Prescriptions for pain medicine and other medicines may be given to you. Pay careful attention to:

- Your medicines, including how to take your pain medicine
- How to change the dressing, and how often to change it
- The follow-up appointment with your orthopedic surgeon
- Precautions if you go home on a blood thinner
- Your instructions from your Physical Therapist, including exercises and precautions

*Call your orthopedic surgeon's office if you have any questions or concerns after you are discharged. Be sure to call your surgeon's office if you notice any of the following:

Signs of an infection:

- Fever
- Redness or swelling of the wound
- Increased drainage or pus from the wound
- Increased pain or swelling in the joint

Other symptoms to watch for:

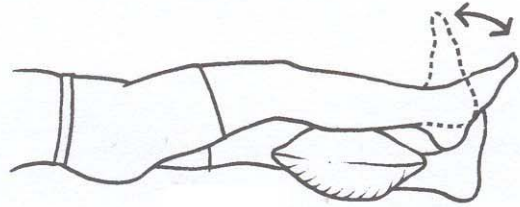
- Swelling that doesn't go away with rest and elevation of the limb
- Pain behind your knee or calf (both are signs of a blood clot)
- Chest pain
- Shortness of breath
- Coughing up blood
- Severe pain in the joint that is getting worse
- Excessive bruising or bleeding if you are on a blood thinner

EXERCISES FOR BEFORE AND AFTER YOUR KNEE SURGERY

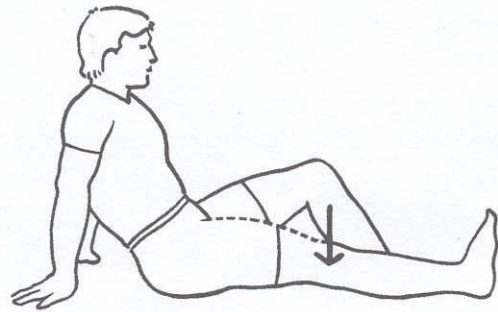
Start Practicing NOW to Better Prepare Your Muscles for Surgery

The following exercises should be done 10 times each, 3 -4 times per day.

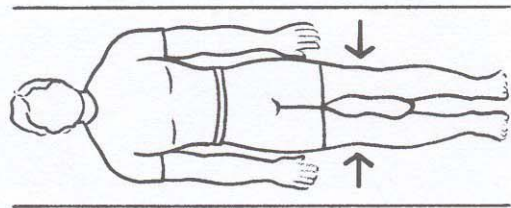
1. Ankle Pumps - Point your foot and toes away from you, then pull them back toward you.



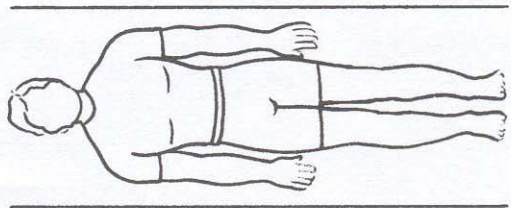
2. Quad Sets - Lying in bed with your leg stretched out in front of you, press the back of your knee down into the bed. Hold for a count of ten. Relax and repeat.



3. Knee Squeezes - Place a towel roll between your knees and squeeze your knees together against the roll. Hold for a count of ten. Relax and repeat.

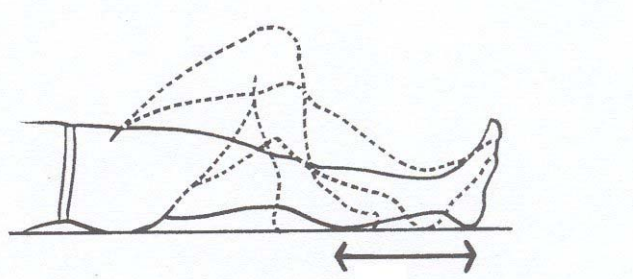


4. Buttock Squeezes - Lie on your back. Squeeze your buttocks together. Hold for a count of ten. Relax and repeat.

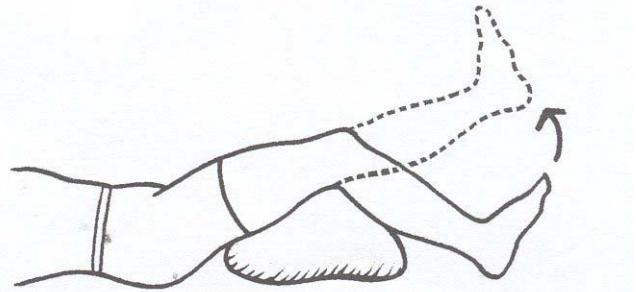


The following exercises should be done 10 times each, 3 -4 times per day.

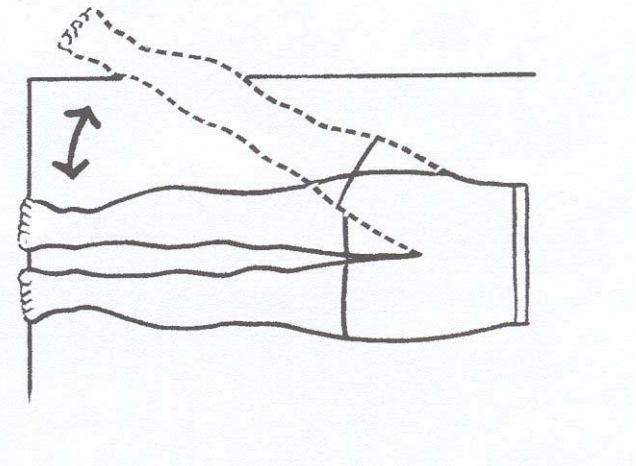
5. Heel Slides - Slide your heel up the bed toward your bottom then slowly slide it back down onto the bed



6. Knee Extension - Place a towel roll under your knee. Press the back of your knee into the towel roll and then lift your lower leg while keeping the back of the knee against the roll.



7. Hip Slides - Place a pillow between your legs. Keep your leg straight and slide it out to the side then back to the middle.



PATIENT EDUCATION LITERATURE

Highlights of Warfarin (Coumadin) Therapy

How Does Warfarin Work?

Warfarin lowers the body's ability to make blood clots. It keeps harmful blood clots from forming.

The following things can increase the risk of harmful blood clots:

Artificial heart valves	Some blood vessel, heart, and lung problems
Major joint surgery	Irregular heart beat

How Do I Take It?

- Take your dose at the same time each day, and do not take an extra catch up pill if you forget your dose.
- If you forget a dose, and it has been less than 12 hours since your last time, take that dose and return to your normal schedule the next day. If more than 12 hours have passed, wait for the next scheduled dose. Make sure you tell your doctor or pharmacist if you miss a dose.
- Do not take more or less than your doctor has prescribed. The dose is prescribed in milligrams. Do not take the pills by the color but by the number engraved on the tablet. You may have to break tablets in half along the score line. Never try to break a tablet into fourths.
- Do not stop taking the drug without first talking to your doctor or pharmacist. Check with your doctor if there is any question about your dose.

Why Are Blood Tests Done?

- Your doctor will want you to have a blood test called a PT or INR done. These tests are for the doctor to see how well the drug is working. These tests are very important - don't skip them.
- Your dose might change from time to time based on your blood test. Too little drug in your system puts you at risk for a harmful blood clot, and too much drug in your system can cause bleeding. Your doctor uses the results of the blood tests to adjust the amount of drug you need.

How Can I Avoid Cuts and Bleeding?

- Use an electric razor to avoid scratching skin.
- When brushing your teeth, use a soft toothbrush and floss gently.
- Avoid activity in which you may be injured.
- Avoid use of power tools.
- Use gloves while gardening.
- Wear sandals or shoes at all times to protect your feet. t

Call your doctor or dial 911 right away if you have any signs of a blood clot:

- Sudden dizziness
- Changes in vision
- Problems speaking or breathing
- Chest pain and shortness of breath

Call your doctor if you have any signs of bleeding:

- Blood in your urine (dark red or brown urine)
- Blood in your stools (dark, tarry stools)
- Lots of bruising
- Bleeding from the nose or bleeding from the gums
- Excessive bleeding with your menstrual period
- Blood in your vomit or spit •Sudden, severe headache

Small cuts may bleed longer when on this drug. If you get a cut, apply strong pressure for at least 5 minutes with a clean cloth. If you have a large bruise, you may use cold packs for the first 48 hours, but after that local heat (warm moist towels) can help.

What About Other Drugs When I'm Taking Warfarin?

- Your doctor and pharmacist should have a complete list of all of the prescribed and over-the-counter drugs that you take. This includes all laxatives, antacids, vitamins (especially vitamins E, C, and K), antibiotics, birth control pills, and ibuprofen (Advil, Motrin). Any herbal or homeopathic remedy (especially alfalfa, cinnabar, feverfew, garlic, ginkgo, ginseng, dong quai, co-enzyme Q, bilberry) should also be listed. These can affect how Warfarin works.
- Aspirin and aspirin products (Pepto-Bismol, Kaopectate, Alka-Seltzer, Goody's Powders) can be a problem and should not be used unless approved by your doctor.
- Tylenol, in small doses, or in regular doses, is the safest drug to use for headaches and minor aches.
- Do not start any new drugs without checking with your doctor or pharmacist.

What About Problems with Food?

- Eating a lot of foods high in vitamin K, such as liver, shellfish, and green leafy vegetables (lettuce, broccoli, turnip greens, cabbage, and others) can block the action of the drug.
- It is all right to eat these foods, but a steady diet with moderate amounts is best. Try and eat the same amount of these foods on a weekly basis.
- Alcohol can affect how the drug works and might increase your chance of bleeding. Amounts that are okay are no more than 2 ounces of hard liquor, a twelve-ounce beers, or 4 ounces of wine per day. Refrain from "binge" drinking. It is best to avoid drinking alcohol while you are on Warfarin.

What Else Do I Need to Know?

- Before taking this drug, tell your doctor if you have any bleeding or ulcers.
- Carry a “medical alert” card with you, showing that you are on a drug that can cause bleeding. Have your doctor’s name, address, and phone number on the card.
- Tell your dentist or any doctor that you are on this drug before any treatment.
- Store the pills in a tight, lightproof bottle. Do not store pills in the bathroom or leave them in the car, since the heat and moisture can destroy the drug.
- Don’t run out of Warfarin. Refill your medicine before you run out. Make sure you have refills remaining each time you have it filled.

LIVING WITH YOUR NEW JOINT

Observe your precautions and instructions given to you by your therapist. Continue to exercise the new joint frequently. Be active and walk frequently. Use appropriate supportive equipment for your safety.

Inform all of your healthcare providers that you have had a joint replacement, including your dentist. You may need to be on antibiotics prior to any dental work, including a cleaning, or any invasive procedures for two years following your surgery. Also, good dental care is important to the health of your new joint. Visit your dentist regularly.

Your new prosthesis may set off metal detectors in airports and some government buildings. You may be issued a card identifying your implant, if not you can request one from your doctor. Bear in mind that the card will not allow you to pass through an airport security check run by the Transportation Safety Agency. If your implant sets off the alarm you will be asked to step to one side for additional screening.

Continue to eat a diet high in fiber, Vitamin C and iron and drink plenty of fluids. This will help prevent constipation and help the healing process.

No driving until your doctor gives you permission to do so and when you are no longer taking pain medicines.



428 Biltmore Avenue, Asheville, NC 28801
www.missionhospitals.org

©Mission Hospital 2005