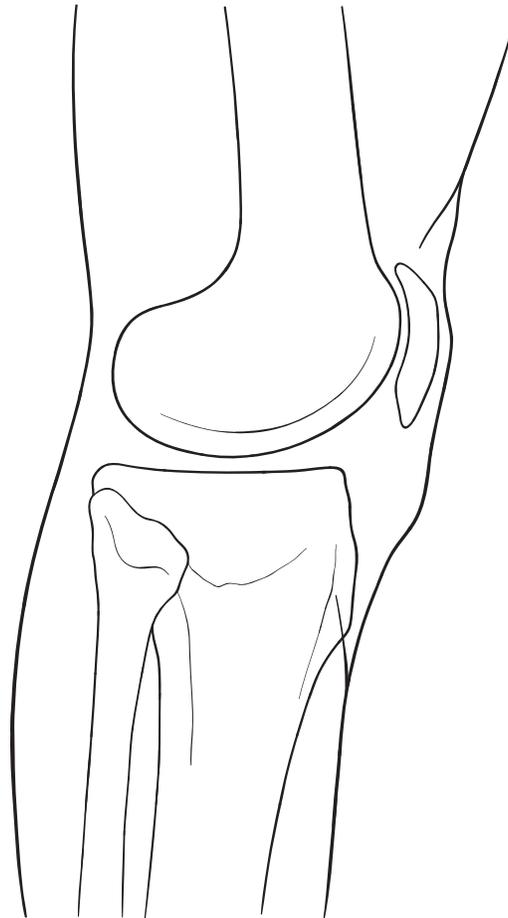




Your Total Knee Knee Replacement Operation



Originally developed by:

VA Medical Center
4101 Woolworth
Omaha, Nebraska 68105

Revised for Portland VA Medical Center by:

Melodie Dahl, RN
Rose Boynton, RN, BSN
Alan Albright, PA
Mark Adams, PT

Total Knee Replacement

This booklet is intended to help you understand your operation and the recovery process. Total knee replacement offers many patients with knee disease the hope that they will walk again free of pain. When you come to the hospital for your pre-operative visit, you will receive this handbook.

On the day you come for the surgery, please bring all your paperwork for insurance or disability. This paperwork will be signed by your provider while you are in the hospital. Bring a list of the medications you are currently taking, and the times you take them during the day. Do not bring your medications to the hospital. The hospital will supply these for you, and the staff will dispense them to you.

The operation involves three bones of the leg, the femur, tibia and patella. The **femur** is the bone extending from the hip to the knee (thigh bone). The **tibia** is the inner and larger bone of the leg below the knee (shin bone). The **patella** (or knee cap) is the focus of the operation (**Figure 1**).

In this operation the knee joint and the end of the femur and tibia are replaced by synthetic components.

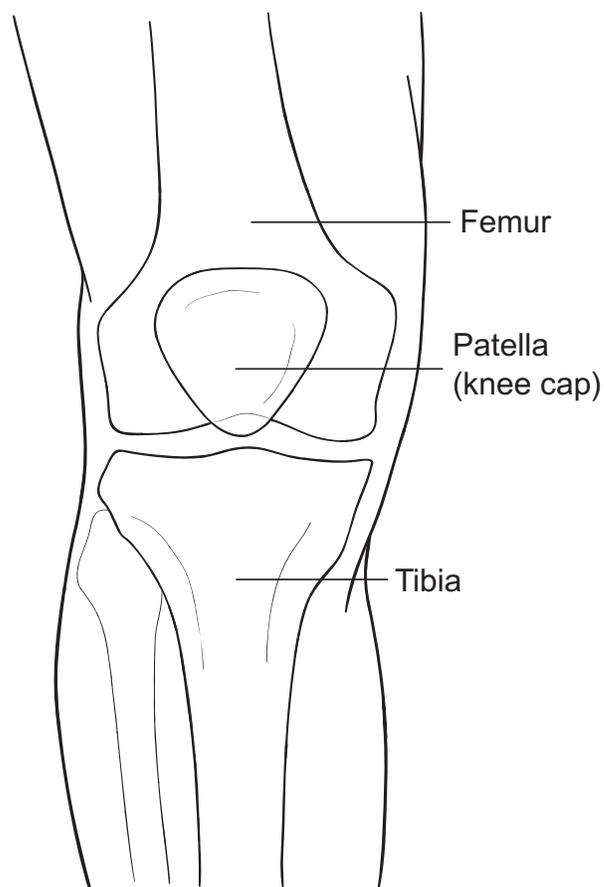


Figure 1. The Knee Components

Explanation of the Operation

Severe arthritis and/or injury to the knee joint may cause some people to develop an inflamed, painful knee joint. Once the knee joint becomes non-functional, an operation may be necessary. The operation is intended to do two things: 1) resurface the knee joint and 2) straighten “bow legging” or “knock knees” (**Figure 2**).

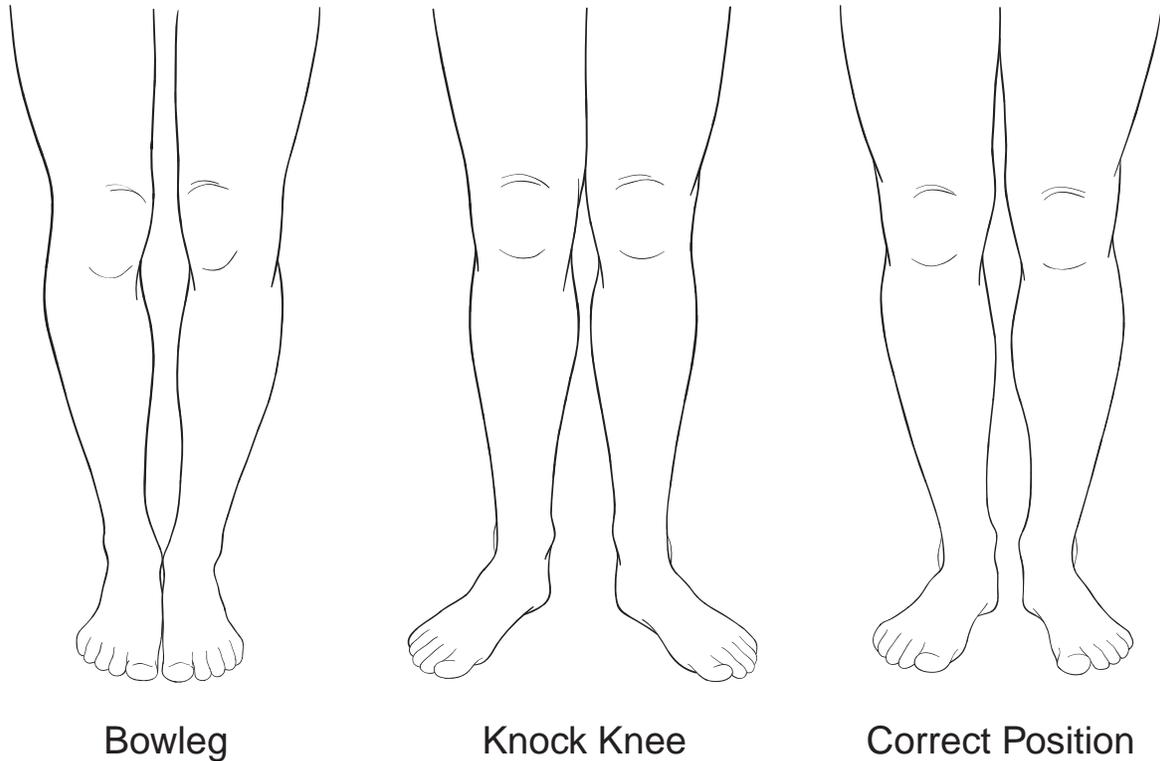


Figure 2. Knee Disorders

Artificial Knee Parts

There are three replacement parts involved in the total knee operation (**Figure 3**). The top part which attaches to the femur (**femoral compartment**) is made of stainless steel.

The bottom part attaches to the tibia (**tibial compartment**). It acts as a base for the femoral part to slide on.

The part that is used to replace the knee cap is called the **patellar button**. Both the tibial part and the patellar button are made of special plastic that wears slowly.

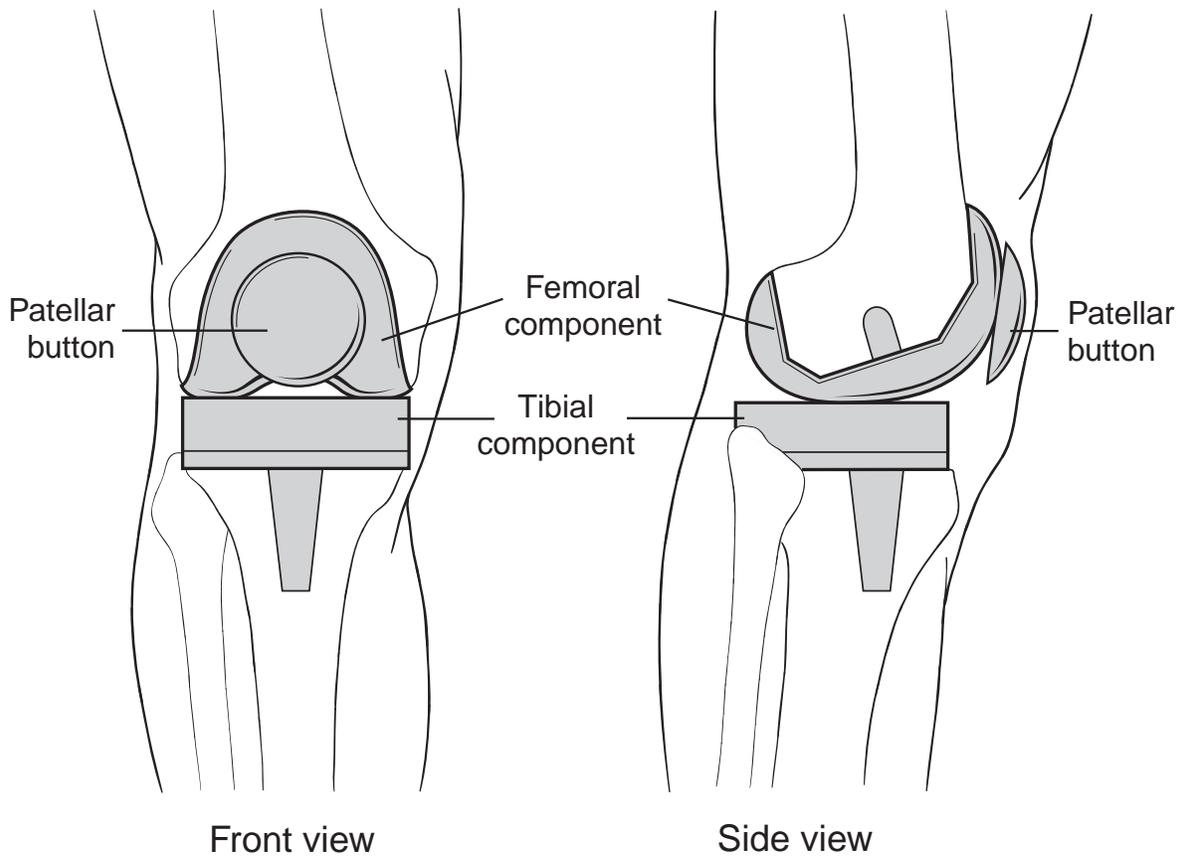


Figure 3. Knee Replacement Parts

On the Day of Your Surgery

You will be admitted the day of your surgery and you will be reevaluated on that day.

Length of the Operation

Most people want to know how long their operation will be. The actual time spent operating will vary from one to two hours or longer. After the operation, you will be sent to the recovery room. You will not return to your room until later in the day.

After the Operation (Post-operative Period)

You will return from the recovery room on a stretcher. An overhead trapeze (steel triangle) will be on your bed. The trapeze is to assist you when moving around in bed.

You will be given intravenous antibiotics during the first 24-48 hours to protect against infection. You may also be sent home with antibiotics to take by mouth. If these are prescribed, it is very important to take all the antibiotics given as they are ordered.

Possible Post-op Expectations

An ice pack may be on your knee for the first 24 hours.

Your leg will be placed on a pillow. The pillow will be under your calf and heel - not directly under the knee. Your doctor will decide when you no longer need to keep your leg elevated on the pillow, or the foot of the bed elevated.

A knee immobilizer or a large bulky bandage will cover your leg from your foot to the top of your thigh. You will be able to see your toes. Your toes will be checked often for color and warmth (**Figure 4**).

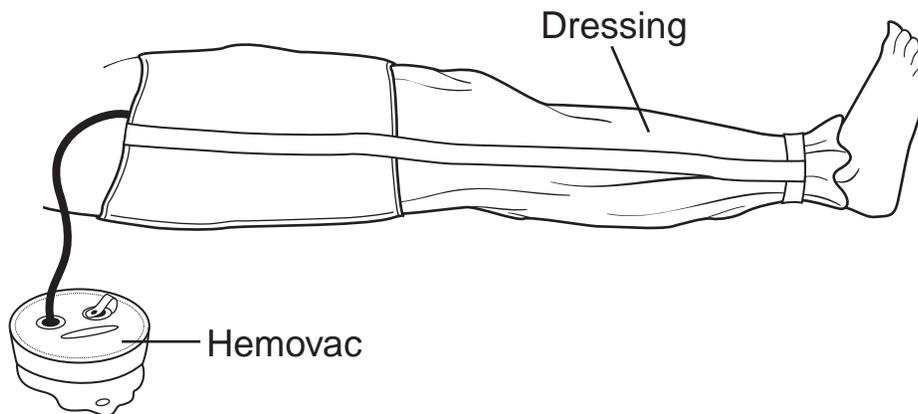


Figure 4. Post-op Expectations

Coming from under the bandage may be a plastic tubing. This tubing connects to a little container called a **hemovac**. The hemovac collects any drainage from the operation site. Don't be alarmed if the drainage is bloody. The nurses will be measuring and emptying this drainage. The hemovac is usually kept in place two to three days. Your doctor will remove it when the amount of drainage has decreased. You will be on antibiotics while the drain is in place.

The large bandage is removed within one week after your operation. It will be replaced by a small bandage.

You will be in the hospital in your floor bed for 4-5 days.

Another option after surgery is being put into a Continuous Passive Motion (CPM) machine for the first week. This is a machine which will bend and straighten your leg continually. The flexion is started at a small degree and it is advanced daily until, ideally, you achieve a 90° flexion with the operative leg. If your leg is put into a CPM machine, your dressing will be smaller and more flexible.

After your dressing is removed, elastic stockings may be placed on both of your legs to help improve circulation. The nurses will ask you to wiggle your toes and make circles with your ankles. These movements also help to improve circulation.

Physical Therapy Instructions

On the day after your operation, you will be seen by a physical therapist. The therapist will instruct you in exercises to perform. In addition, the therapist will give you crutch walking or walker instructions. You will be taught how to move and place your knee after the operation.

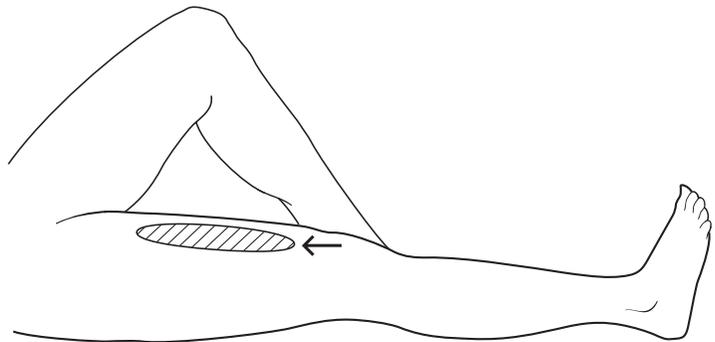
The therapist will teach you how to get in and out of your bed and chair safely. It is important to keep your knee straight and stiff when moving with the bulky dressing on. P.T. will visit you in your room.

The exercises will begin on the day following your knee operation. The exercises will help strengthen the thigh muscles that bend the knee.

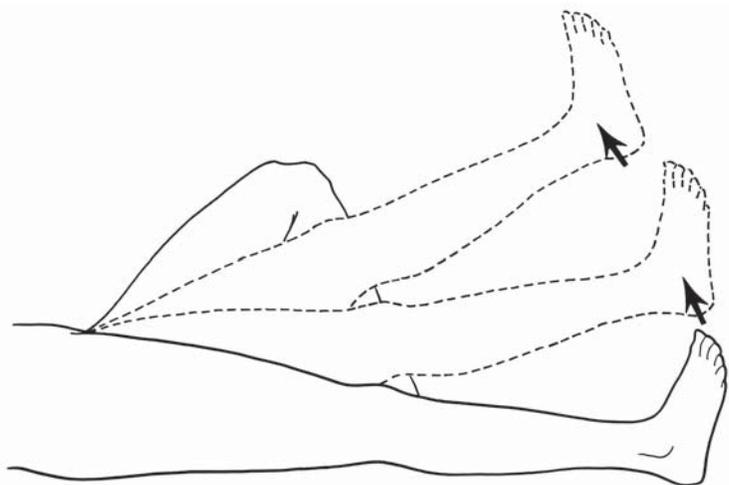
The following is a list of the exercises you will perform.

A. Early exercises (perform before and after the operation)

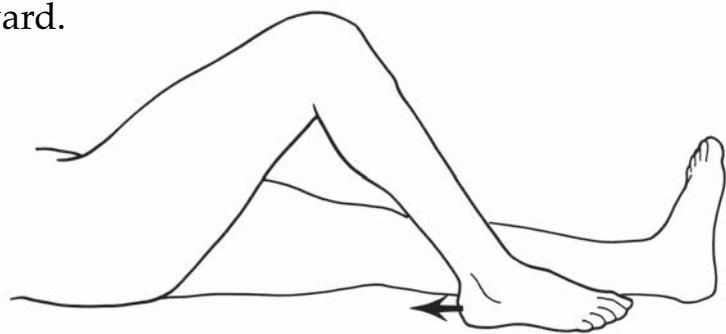
1. Lie on your back. Point your toes toward the ceiling. Tighten your thigh muscles. Keep the knee as straight as possible. Hold for a count of 5. Relax. Repeat.



2. Lying on your back or sitting, hold your knee as straight as possible. Lift your leg up as high as you can. Hold for a count of 5. Lower the leg and rest. Repeat.

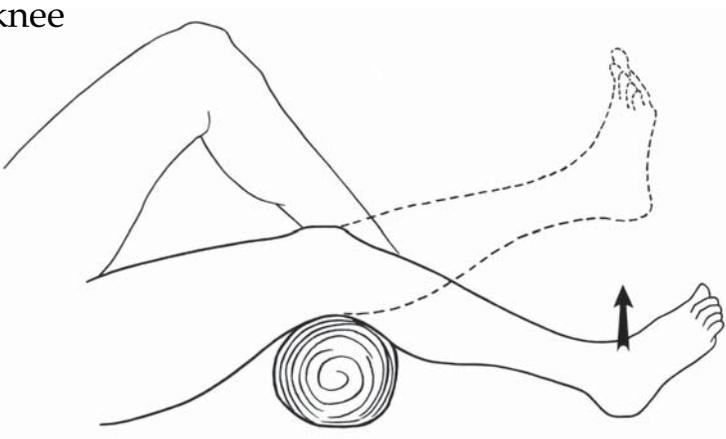


3. Lie on your back. Point toes upward. Keep the unaffected knee straight. Slide your heel up toward your buttocks. Then slide the heel out so that the knee straightens again. Repeat.



B. Advanced Exercise (perform after bulky dressing is removed).

1. Lie on your back. Keep affected knee over a pillow roll and bend approximately 30°. Straighten the knee. Lift the foot toward the ceiling. Hold to a count of 3. Lower the leg. Repeat.



Occupational Therapy Instructions

You will be taught how to dress and bathe during the time your activity is limited. After your sutures (stitches) are removed, you will be able to take a tub bath or a shower.

Any special equipment you might need at home will be given to you.

Home Instructions

Notify your doctor if you have any of these symptoms.

1. Fever
2. Changes in your operation site:
 - a. Reddened incision
 - b. Drainage from your incision or openings along your incision
 - c. The area around your incision becomes warm or hot to touch
3. Your knee becomes more painful

Do's & Don'ts

Do's

1. Do sit on chairs with arms. Use the chair arms to aid your rising to a standing position.
2. Do use two crutches or a walker for as long as your doctor has ordered.
3. Do remember to practice the thigh strengthening exercises every day. Practice them as often as possible during the day.
4. Notify your dentist of your total knee prosthesis prior to any dental treatment.
5. Elevate your leg periodically throughout the day, especially if there is an increase in edema in knee area.
6. Keep your check-up appointments.

Don'ts

1. Do not sleep with a pillow under your knee.
2. Do not drive a car for six weeks or until your doctor permits.
3. Do not walk on uneven ground without aid of a cane or crutches.
4. Avoid jarring activities (running).
5. Avoid heavy lifting, forceful turning or twisting of knee joint, strenuous sports or becoming obese.

Revised June 2003