



THOMAS HOSPITALS

TOTAL KNEE REPLACEMENT GUIDE

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General Information

Welcome

Thank you for choosing the Joint Connection at Thomas Memorial Hospital to help restore you to a higher quality of living with your new prosthetic joint.

Annually, over 700,000 people undergo total joint replacement surgery. Primary candidates are individuals with chronic joint pain from arthritis that interferes with daily activities, walking, exercise, leisure, recreation, and work. The surgery aims to relieve pain, restore your independence, and return you to work and other daily activities.

Total knee replacement patients typically recover quickly. Patients will be able to walk the day of surgery. Generally, patients are able to return to a variety of activities over the next several months.

The Joint Connection has implemented a comprehensive planned course of treatment. We believe that you play a key role in promoting a successful recovery. Our goal is to involve you in your treatment through each step of the program. This guide will give you the necessary information to promote a more successful surgical outcome.

Your team includes physicians, physicians' assistants, nurses, and physical therapists specializing in total joint care. Every detail, from pre-operative teaching to post-operative exercising, is considered and reviewed with you.

The Purpose of this Guide

Preparation, education, continuity of care, and a pre-planned discharge are essential for optimum results in joint surgery. Communication is essential to this process. This Guide is a communication and education tool for patients, physicians, physical therapists and nurses. It is designed to educate you so that you know:

- What to expect every step of the way
- What you need to do
- How to care for your new joint

Remember, this is just a guide. Your physician, physician's assistant, nurses, or therapist may add to or change any of the recommendations. Always use their recommendations first and ask questions if you are unsure of any information. Keep this Guide as a handy reference for at least the first year after your surgery.

General Information

Overview of The Joint Connection at Thomas Memorial Hospital

The Joint Connection is unique. It is a dedicated center within the hospital. Patients typically have their surgery on Monday, Tuesday, Wednesday or Thursday and return home after a short stay in the hospital.

Features of The Joint Connection program include:

- Nurses and therapists who specialize in the care of joint patients
- Emphasis on individual care
- Education of family and friends to participate as “coaches” in the recovery process
- Assistance with discharge planning
- A comprehensive patient guide for you to follow from six weeks pre-op until three months post-op and beyond
- Coordinated after-care program
- A resource nurse who is available to answer questions

Benefits over other institutions include:

- Private room for every patient
- Isolated staff and unit for joint replacement patients
- Increased attention and protection of joint replacement patients
- Trained, motivated and dedicated joint replacement staff

Frequently Asked Questions *About Total Knee Surgery*

We are glad you have chosen The Joint Connection at Thomas Memorial Hospital to care for your knee. Patients have asked many questions about total knee replacement. Below is a list of the most frequently asked questions along with their answers. If there are any other questions that you need answered, please ask your surgeon or Joint Connection resource nurse. We want you to be completely informed about this procedure.

What is osteoarthritis and why does my knee hurt?

Joint cartilage is a tough, smooth tissue that covers the ends of bones where joints are located. It helps cushion the bones during movement, and because it is smooth and slippery, it allows for motion with minimal friction. Osteoarthritis, the most common form of arthritis, is a wear-and-tear condition that destroys joint cartilage. Sometimes as the result of trauma, repetitive movement, or for no apparent reason, the cartilage wears down, exposing bone ends. This can occur quickly over months or may take years to occur. Cartilage destruction can result in painful bone-on-bone contact, along with swelling and loss of motion. Osteoarthritis usually occurs later in life and may affect only one joint or many joints.

What is a total knee replacement?

A total knee replacement is really a bone and cartilage replacement with an artificial surface. The knee itself is not replaced, as is commonly thought, but rather an implant is inserted on the bone ends. This is done with a metal alloy on the femur and plastic spacer on the tibia and patella (kneecap). This creates a new, smooth cushion and a functioning joint that can reduce or eliminate pain.

What are the results of total knee replacement?

Results will vary depending on the quality of the surrounding tissue, the severity of the arthritis at the time of surgery, the patient's activity level, and the patient's adherence to the doctor's orders.

When should I have this type of surgery?

Your orthopedic surgeon will decide if you are a candidate for the surgery. This will be based on your history, exam, x-rays, and response to conservative treatment. The decision will then be yours.

Am I too old for this surgery?

Age is generally not a factor if you are in reasonable health and have the desire to continue living a productive, active life. You may be asked to see your personal physician for his/her opinion about your general health and readiness for surgery.

Frequently Asked Questions *About Total Knee Surgery*

How long will my new knee last and can a second replacement be done?

All implants have a limited life expectancy depending on an individual's age, weight, activity level, and medical condition(s). A total joint implant's longevity will vary in every patient. It is important to remember that an implant is a medical device subject to wear that may lead to mechanical failure. While it is important to follow all of your surgeon's recommendations after surgery, there is no guarantee that your particular implant will last for any specific length of time.

Why might I require a revision?

Just as your original joint wears out, a joint replacement will wear over time as well. The most common reason for revision is loosening of the artificial surface from the bone. Wearing of the plastic spacer may also result in the need for a new spacer. Your surgeon will explain the possible complications associated with total knee replacement.

What are the major risks?

Most surgeries go well, without any complications. Infection and blood clots are two serious complications. To avoid these complications, your surgeon may use antibiotics and blood thinners. Surgeons also take special precautions in the operating room to reduce the risk of infections.

Should I exercise before the surgery?

Yes, consult your surgeon about the exercises appropriate for you.

Will I need blood?

On the rare occasion you may need blood after surgery, your surgeon will discuss this with you.

How long will I be incapacitated?

You will likely be out of bed the day of your surgery. The next morning patients will get up, sit in a chair or recliner, and walk using a walker or cane later that day.

How long will I be in the hospital?

Most knee replacement patients will be hospitalized for 1-2 days after surgery. There are several goals that must be achieved before discharge. Occasionally, patients may be candidates for outpatient knee replacement.

General Information

Frequently Asked Questions *About Total Knee Surgery*

What if I live alone?

Three options are usually available to you. Most patients return home and receive help from a relative or friend. If deemed necessary by your surgeon, you can have a home health nurse and physical therapist assist you at home for two or three weeks. You may also stay at a sub-acute facility following your hospital stay, depending on your insurance, but this must be discussed and planned by you and your surgeon prior to your surgery.

Will I need a second opinion prior to the surgery?

The surgeon's office secretary will contact your insurance company to pre-authorize your surgery. If a second opinion is required, you will be notified.

How do I make arrangements for surgery?

After your surgeon has scheduled your surgery, the Pre-Admission Testing Department will contact you several weeks before your surgery date to complete a medical screening on the phone and schedule an in-person clinic visit for pre-admission testing.

How long does the surgery take?

The hospital reserves approximately 1-2 hours for surgery. Some of this time is taken by the operating room staff to prepare for the surgery.

Do I need to be put to sleep for this surgery?

You may have a general anesthetic, which most people call "being put to sleep." Some patients prefer to have a spinal or epidural anesthetic, which numbs the legs only and does not require you to be asleep. The choice is between you, your surgeon, and the anesthesiologist. For more information, read "Anesthesia" in the Appendix of this Guide.

Will the surgery be painful?

You will have discomfort following the surgery, but we will try to keep you as comfortable as possible with the appropriate medication. We encourage utilizing oral medications versus intravenous.

Who will be performing the surgery?

Your orthopedic surgeon will perform the surgery. An assistant often helps during the surgery.

General Information

Frequently Asked Questions *About Total Knee Surgery*

How long, and where, will my scar be?

Surgical scars will vary in length, but most surgeons will make it as short as possible. It will be straight down the center of your knee, unless you have previous scars, in which case your surgeon may use an existing scar. There may be some lasting numbness around the scar.

Will I need a walker, crutches, or a cane?

Yes, we do recommend that you use a walker, cane or crutches. The Joint Connections staff or social worker can arrange for them if necessary.

Where will I go after discharge from the hospital?

Most patients are able to go home directly after discharge. Rarely, some patients may transfer to a sub-acute facility, where they will stay from three to five days. You and your surgeon must discuss this option to help you with this decision and make the necessary arrangements. You should check with your insurance company to see if you have sub-acute rehab benefits.

Will I need help at home?

Yes, for the first several days or weeks, depending on your progress, you will need someone to assist you with meal preparation, etc. Family or friends need to be available to help if possible. Please have these arrangements in place prior to admission.

Preparing ahead of time, before your surgery, can minimize the amount of help needed. Having the laundry done, house cleaned, yard work completed, clean linens put on the bed, and single portion frozen meals will help reduce the need for extra help.

Will I need physical therapy when I go home?

Yes. Patients are encouraged to utilize outpatient physical therapy. The Joint Connection staff, with assistance from Care Management will assist with discharge planning needs related to outpatient physical therapy. If you need home physical therapy, we will arrange for a home health physical therapist to provide therapy at your home. Following this, you may go to an outpatient facility three times per week for physical therapy. The length of time required for this type of therapy varies with each patient.

How long until I can drive and get back to normal?

The ability to drive depends on whether surgery was on your right leg or your left leg and the type of car you have. If the surgery was on your left leg and you have an automatic transmission, you could be driving at two weeks. If the surgery was on your right leg, your driving could be restricted as long as six weeks. Getting “back to normal” will depend somewhat on your progress. Consult with your surgeon or therapist for their advice on your activity.

Frequently Asked Questions *About Total Knee Surgery*

Will I be able to get back to work?

We recommend that most people take at least one month off from work, unless their jobs are quite sedentary and they can return to work with a cane or walker. Your Physical Therapist can make recommendations for joint protection and energy conservation on the job.

How often will I need to be seen by my doctor following the surgery?

You will be seen for your first post-operative office visit two to four weeks after discharge. The frequency of follow-up visits will depend on your progress. Many patients are seen at six weeks, twelve weeks, and then every couple of years. Your surgeon will provide specific follow-up instructions.

Are there any permanent restrictions following this surgery?

Very few permanent restrictions are imposed after surgery. In some circumstances, your surgeon may recommend avoidance of certain types of activities.

What physical/recreational activities may I participate in after my recovery?

You are encouraged to participate in low-impact activities such as walking, dancing, golf, hiking, swimming, bowling, and gardening.

Will I notice anything different about my knee?

Yes, you may have a small area of numbness to the outside of the scar, which may last a year or more. Kneeling may be uncomfortable for a year or more. Some patients notice some clicking when they move their knee. This is usually the result of the artificial surfaces.

General Information

Pre-Operative Information

Scheduling Information

- Your surgeon's office will schedule your knee replacement surgery with a surgery scheduler at Thomas Memorial Hospital. At that time, the scheduler will provide the date of surgery to your surgeon.
- The surgery scheduler at Thomas Memorial Hospital will also notify the surgeon's office of an appointment for you for pre-admission testing. The preference is that the pre-admission testing appointment occurs approximately two weeks before your surgery. See the Appendix for information regarding urine specimen collection during your pre-admission testing visit.
- Your surgeon's office will notify you of the scheduled dates for your surgery as well as for pre-admission testing.
 - Should you have concerns about the surgery date, please contact your surgeon.
 - Should you need to adjust your appointment for pre-admission testing you may call 304-766-3967.

Anticipate a Pre-Admission Testing Phone Call

Prior to your in-person pre-admission testing appointment, you will receive a phone call from the Pre-Admission Testing Department for a phone interview to obtain medical history information. It is helpful if you have a list of your medications and doses and any other medical information available for this call.

Phone Numbers:

- The Joint Connection Unit: 304-766-5445 (phone) 304-766-5447 (fax)

Contact Your Insurance Company

Before surgery, you will need to contact your insurance company to find out if a preauthorization, a pre-certification, a second opinion, or a referral form is required. It is very important to make this call because failure to clarify these questions may result in a reduction of benefits or delay of surgery. In most cases, the surgeon will also contact the insurance company, but we recommend that you understand your insurance company requirements.

If you do not have insurance, please notify the registration staff when they call you for pre-registration that you will need help in making payment arrangements.

General Information

Pre-Operative Information

Scheduling Information Continued...

After your surgery has been scheduled, you will be called for pre-registration information. You will be asked to have the following information ready when you are contacted:

- Patient's full legal name and address, including county
- Home phone number
- Marital status
- Social Security Number
- Name of insurance holder, his/her address, phone number, work address, and work phone number
- Name of your insurance company, mailing address, policy and group numbers, and insurance card
- Your employer, address, phone number, and occupation
- Name, address, and phone number of nearest relative
- Name, address, and phone number of someone to notify in case of emergency
(This can be the same as the nearest relative)
- Bring your insurance card, driver's license or photo I.D., and any co-payment required by insurance company with you to the hospital, unless paid in advance.

Depending on your insurance carrier, and your estimated out of pocket expenses, the hospital may require a portion of your copay/deductible to be paid in advance of the surgery date.

Billing for Services

After your procedure, you will receive separate bills from the anesthesiologist, the radiologist, pathologist, physical therapist, and the surgical assistant (if applicable). If your insurance carrier has specific requirements regarding participation status, please contact your carrier.

Medical and Anesthesia Clearance

Prior to your surgery, you may need to see your family doctor or other specialist to obtain pre-operative medical clearance. This is in addition to seeing your surgeon pre-operatively. Depending on your medical status and history, your surgeon may refer you for medical clearance from another provider. During the pre-admission testing process, depending on your medical status and history, the anesthesiologist may refer you for medical clearance from another provider.

Start Pre-Operative Exercises - (See pages 14-20)

Many patients with arthritis favor their joints, and thus the joints become weaker, which interferes with their recovery. It is important that you begin an exercise program before surgery. The exercises are detailed later in this book.

Review "Exercise Your Right"

The law requires that everyone being admitted to a medical facility has the opportunity to make advance directives concerning future decisions regarding their medical care. Please refer to the Appendix for further information. Although you are not required to do so, you may make the directives you desire. If you have advance directives, please bring copies to the hospital on the day of surgery.

General Information

4 WEEKS Before Surgery:

Identify a “Coach”

Identify someone who can assist you with care and PT throughout your recovery.

Start Iron, Vitamins (if Instructed by Your Surgeon)

Prior to your surgery, you may be instructed by your surgeon to take multivitamins as well as iron. Iron helps build your blood.

Read “Anesthesia” (Appendix)

Total Joint Surgery does require the use of either general anesthesia or regional anesthesia. Please read the “Anesthesia” article provided by our Anesthesia Department in the Appendix of this Guide.

Stop Smoking

It is essential to stop smoking before surgery. By impairing circulation and decreasing oxygen to the tissues, smoking decreases healing, increases risk for infection, and decreases the ability to do physical therapy effectively. In some situations your medical condition may lead your surgeon to test for nicotine before and/or after your surgery. This may lead to delay and possible cancellation of your surgery.

10 DAYS Before Surgery:

A pre-operative visit with your surgeon may be requested. You should call your surgeon’s office 7-10 days prior to your surgery to ask any questions or express concerns about your surgery and rehabilitation.

STOP Medications That Increase Bleeding

STOP all anti-inflammatory medications such as Aspirin, Motrin, Naproxen, Vitamin E, etc. These medications may cause increased bleeding. If you are taking a blood thinner, you will need special instructions for stopping the medication. If you have specific questions regarding medications, please consult your surgeon.

Prepare Your Home for Your Return from the Hospital

Have your house ready for your arrival back home. Clean, do the laundry, and put it away. Put clean linens on the bed. Prepare meals and freeze them in single serving containers. Cut the grass, tend to the garden, and finish any other yard work. Pick up throw rugs and tack down loose carpeting. Remove electrical cords and other obstructions from walkways. Install night lights in bathrooms, bedrooms, and hallways. Arrange to have someone collect your mail and take care of pets or loved ones, if necessary.

General Information

DAY BEFORE Surgery:

Find Out Your Arrival Time at Hospital

Call your Surgeon's office on the day before the surgery (or on Friday if your surgery is on Monday) to find out what time your procedure is scheduled. You will be asked to come to the hospital two hours before the scheduled surgery to give the nursing staff sufficient time to start IVs, prep, and answer questions. It is important that you arrive on time to the hospital because sometimes the surgical time is moved up at the last minute and your surgery could start earlier. If you are late, it may create a significant problem with starting your surgery on time. In some cases, lateness could result in moving your surgery to a much later time.

Night Before Surgery

Do Not Eat or Drink

Do not eat or drink anything after midnight, EVEN WATER, unless otherwise instructed to do so. No chewing gum. No tobacco products (including smokeless).

What to Bring to the Hospital

Personal hygiene items (toothbrush, powder, deodorant, razor, etc.); watch or wind-up clock; hand-held mirror to use at bedside; shorts, tops, culottes; well-fitted slippers; and flat shoes or tennis shoes.

For safety reasons, DO NOT bring electrical items. You may bring battery-operated items.

You must bring the following to the hospital:

- A copy of your advance directives
- Insurance card, driver's license/photo I.D., and co-payment required by your insurer

Shower Prep Prior to Surgery

You will need to shower with a special soap the night before and morning of your surgery. You will receive the soap at your pre-admission testing appointment. For example, if your surgery is on Monday, take a shower with the special soap on Sunday night and again Monday morning. See the Appendix for more detail.

Special Instructions

You will be instructed by your physician about medications, skin care, showering, etc.

- DO NOT take medication for diabetes on the day of surgery
- Please leave jewelry, valuables, and large amounts of money at home
- Makeup must be removed before your procedure
- No nail polish

Directions:

- 1. Pour the special soap on a washcloth.**
- 2. Wash all areas of your body, except face and vaginal area, with the special soap.**
- 3. Thoroughly wash the area where you are going to have surgery.**
- 4. Rinse as usual. Dress as usual.**

Your surgeon recommends this special soap to reduce the amount of germs on your skin prior to surgery.

Pre-Operative Information

Pre-Operative Exercises, Goals, and Activity Guidelines

Exercising Before Surgery

It is important to be as fit as possible before undergoing a total knee replacement. Always consult your physician before starting a pre-operative exercise plan. This will make your recovery much faster. Eleven exercises are shown here that your physician may instruct you to start doing now and continue until your surgery. You should be able to do them in 15-20 minutes, and it is typically recommended that you do all of them twice a day. Consider this a minimum amount of exercise prior to your surgery.

Also, remember that you need to strengthen your entire body, not just your leg. It is very important that you strengthen your arms by doing chair push-ups (Exercise #8) because you will be relying on your arms to help you get in and out of bed, in and out of a chair, walk, and to do your exercises post-operatively.

Stop doing any exercise that is too painful.

Pre-Operative Knee Exercises (See the following pages for descriptions)

1. Ankle pumps	20 REPS	2X/Day
2. Quad sets (knee push-downs)	20 REPS	2X/Day
3. Gluteal sets (bottom squeezes)	20 REPS	2X/Day
4. Abduction and adduction (slide heel out and in)	20 REPS	2X/Day
5. Heel-slides (slide heel up and down)	20 REPS	2X/Day
6. Short arc quads	20 REPS	2X/Day
7. Long arc quads	20 REPS	2X/Day
8. Armchair push-ups	20 REPS	2X/Day
9. Seated hamstring stretch	5 REPS	2X/Day
10. Straight leg raises	20 REPS	2X/Day
11. Knee extension stretch	20 MIN	2X/Day

Pre-Surgery Exercise Notes

An important factor in successful knee replacement is performing exercises both before and after your surgery.

The next page provides instructions should you prefer to see video instructions for the exercises.

If you don't have access to the internet or app, or if you just prefer written instructions, you can see the exercises on the following pages with written instructions and pictures.

Exercises may be performed on a bed or sofa if preferred instead of the floor.

Pre-Operative Information

Home Exercise Program Login Instructions

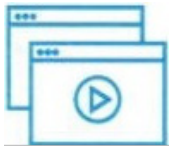
Login URL: *thomashealth.medbridgego.com*

Your Access Code:
3JFEAQGM

TWO WAYS TO ACCESS:



Use the MedBridgeGO* app.
Access your home exercise program with our mobile app for iOS and Android.
Search The App Store or Google Play for “MedBridgeGO”.



Open in your browser to access your home exercise program.

BY ACCESSING ONLINE YOU CAN:



View interactive HD exercise videos to guide you with easy-to-follow instructions.



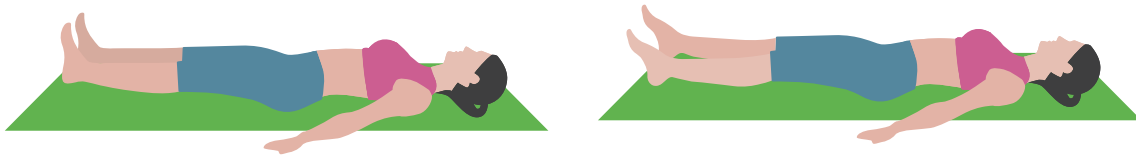
Gain a deeper understanding of your condition and the road to health recovery.

*Disclaimer: This program provides exercises related to your condition that you can perform at home. As there is a risk of injury with any activity, use caution when performing exercises. If you experience any pain or discomfort, discontinue the exercises and contact your healthcare provider.

Pre-Operative Information

Home Exercise Program: Supine Ankle Pumps

Reps: 20 Sets: 2 Hold: 3 Daily: 2 Weekly: 5



Flex foot. Point toes. Repeat 20 times.

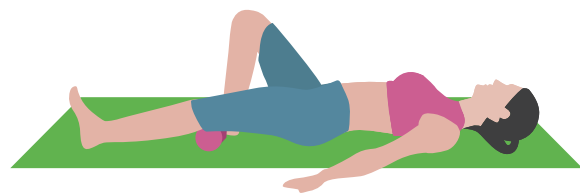
Setup - Begin lying on your back with your legs straight.

Movement - Slowly pump your ankles by bending and straightening them.

Tip - Try to keep the rest of your legs relaxed while you move your ankles.

Home Exercise Program: Supine Quad Set

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5



Lie on back, press knee into mat, tightening muscles on front of thigh. Do NOT hold breath. Repeat 20 times.

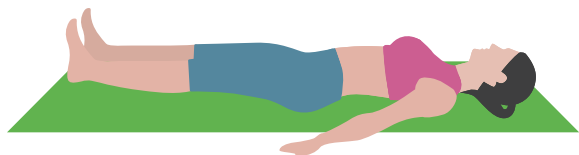
Setup - Begin lying on your back with one knee bent and your other leg straight with your knee resting on a towel roll.

Movement - Gently squeeze your thigh muscles, pushing the back of your knee down into the towel.

Tip - Make sure to keep your back flat against the floor during the exercise.

Home Exercise Program: Supine Gluteal Sets

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5



Squeeze bottom together. Do NOT hold breath. Repeat 20 times.

Setup - Begin lying on your back with your hands resting comfortably.

Movement - Tighten your buttock muscles, then release and repeat.

Tip - Make sure not to arch your low back during the exercise or hold your breath as you tighten your muscles.

*Disclaimer: This program provides exercises related to your condition that you can perform at home. As there is a risk of injury with any activity, use caution when performing exercises. If you experience any pain or discomfort, discontinue the exercises and contact your healthcare provider.

Pre-Operative Information

Home Exercise Program: Supine Hip Abduction

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5



Lie on back, slide legs out to side. Keep toes pointed up and knees straight. Bring legs back to starting point. Repeat 20 times.

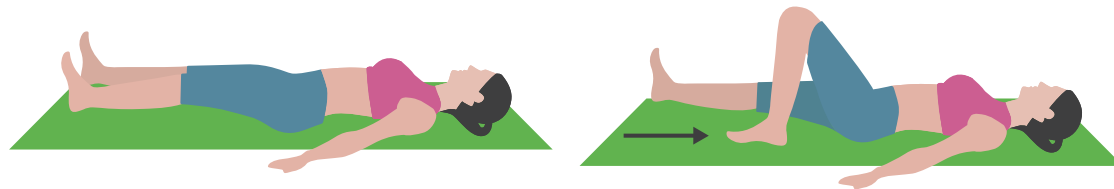
Setup - Begin lying on your back with your legs straight.

Movement - Move one leg out to the side as far as you can without bending at your side.

Tip - Make sure to keep your back on the ground and do not move your upper body during the exercise.

Home Exercise Program: Supine Heel Slide

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5



Lie on couch or bed. Slide heel toward your bottom. Repeat 20 times.

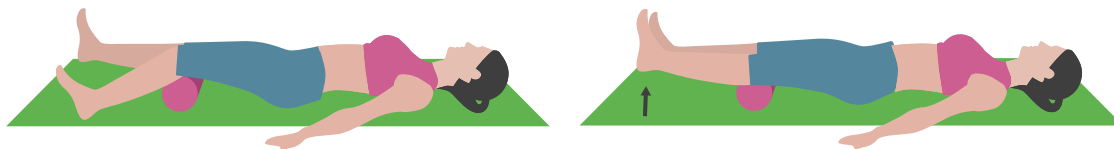
Setup - Begin lying on your back with your legs straight.

Movement - Slowly slide one heel on the floor toward your buttocks, until you feel a stretch in your knee or upper leg, then slide it back out and repeat.

Tip - Make sure not to arch your low back during the exercise or hold your breath as you tighten your muscles.

Home Exercise Program: Supine Short-Arc Quad

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5



Lie on back, place towel roll under thigh. Lift foot, straightening knee. Do not raise thigh off roll. Repeat 20 times.

Setup - Begin lying on your back with a towel roll under one knee with your heel resting on the ground.

Movement - Tighten the muscles in your upper leg to straighten your knee, hold, then return to the start and repeat.

Tip - Make sure to keep your back flat against the floor as you move your leg.

*Disclaimer: This program provides exercises related to your condition that you can perform at home. As there is a risk of injury with any activity, use caution when performing exercises. If you experience any pain or discomfort, discontinue the exercises and contact your healthcare provider.

Pre-Operative Information

Home Exercise Program: Seated Long-Arc Quad

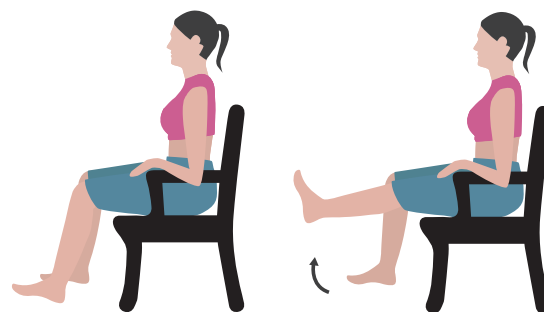
Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5

Sit with back against chair. Straighten knee. Repeat 20 times.

Setup - Begin sitting upright in a chair.

Movement - Slowly straighten one knee so that your leg is straight out in front of you. Hold, and then return to starting position and repeat.

Tip - Make sure to keep your back straight during the exercise.



Home Exercise Program: Arm-Chair Push Up

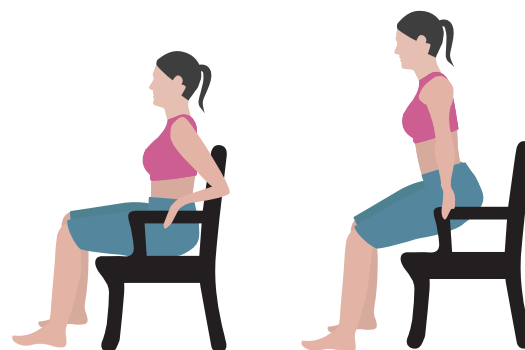
Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5

First, sit in an armchair. Place hands on armrests. Straighten arms, raising bottom up off chair seat if possible. Feet should be flat on floor. Repeat 20 times.

Setup - Begin sitting upright with your feet resting flat on the floor and your hands on the armrest.

Movement - Straighten your arms, lifting your body off of the chair. Hold briefly, then lower back down and repeat.

Tip - Make sure to use a sturdy chair and use your legs to balance as needed. Do not shrug your shoulders during the exercise.



This exercise will help strengthen your arms for walking with crutches or a walker.

Home Exercise Program: Seated Hamstring Stretch

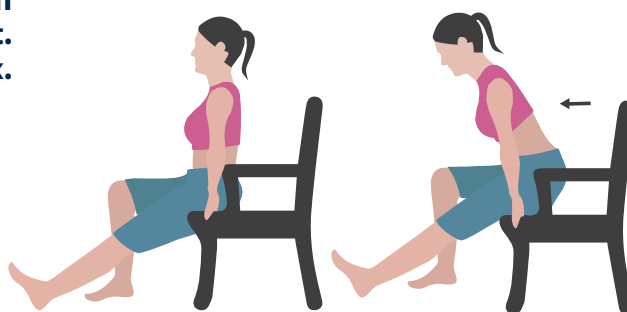
Reps: 5 Sets: 1 Hold: 20-30 sec Daily: 2 Weekly: 5

Sit on chair, couch or bed with leg extended. Lean forward and pull ankle up. Stretch until pull is felt. Hold for 20-30 seconds. Keep back straight. Relax. Repeat 5 times.

Setup - Begin sitting upright with one leg straight forward and your heel resting on the ground.

Movement - Bend your trunk forward, hinging at your hips until you feel a stretch in the back of your leg. Hold this position.

Tip - Make sure to keep your knee straight during the stretch and do not let your back arch or slump.



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Pre-Operative Information

Home Exercise Program: Small Range Straight Leg Raise

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5



Lie on back, unaffected knee bent, and foot flat. Lift opposite leg up 12 inches. Keep knee straight and toes pointed up. Relax. Repeat 20 times.

Setup - Begin lying on your back with one knee bent and your other leg straight.

Movement - Tighten your abdominals and lift your straight leg a small distance from the floor. Then lower it back down and repeat.

Tip - Make sure to keep your low back flat against the floor and your knee straight during the exercise.

Home Exercise Program: Seated Passive Knee Extension

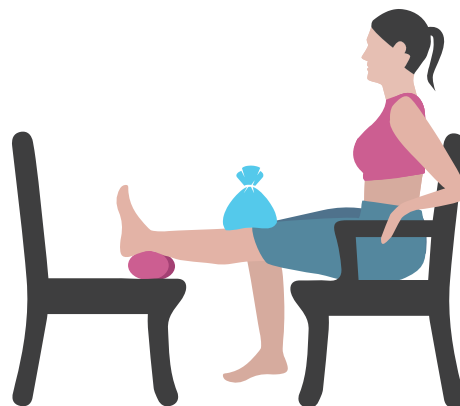
Reps: 1 Sets: 5 Hold: 20 min Daily: 1 Weekly: 5

Prop foot of operated leg up on chair. Place towel roll under ankle and ice pack over knee. Put 5-10 lbs. of weight on top of knee (a 5- 10 lb. bag of rice works well). Do for 20 minutes.

Setup - Begin sitting upright in a chair with another chair or sturdy surface in front of you.

Movement - Slowly place the heel of your foot of your surgical leg on the chair in front of you so that your leg is as straight as possible and hold this position.

Tip - Keep your toes pointing toward the ceiling and keep your leg as relaxed as possible during the stretch.



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Day of Surgery - What to Expect Before Surgery

In a Short Stay Unit, patients are prepared for surgery. This includes starting an IV and scrubbing your operative site. Your operating room nurse as well as your anesthesiologist may interview you. They may escort you to the operating room where you will see your surgeon, if you have not seen him in the Short Stay Unit. Following surgery, you may be taken to a Recovery Unit vs. recovery area where you will remain for one to two hours. During this time, pain control is typically established, your vital signs will be monitored, and an x-ray may be taken of your new joint. You will then be taken to The Joint Connection Unit where a total joint nurse will care for you. Only one or two very close family members or friends should visit you on this day (if permitted). Most of the discomfort occurs the first 12 to 24 hours following surgery, so during this time, you will be receiving pain medication through your IV and by mouth. You will be out of bed the first day. It is very important that you begin ankle pumps on this first day. This will help prevent blood clots from forming in your legs. If your surgery is in the morning, you will begin Physical Therapy on the day of surgery. You should also begin using your Incentive Spirometer and doing the deep breathing exercises that you learned during the pre-operative education instruction.

On the day after surgery, you are expected to bathe and be out of bed by 7:00 a.m and seated in a recliner in your room. Please bring loose clothing to the hospital. Shorts and tops are usually best. Long pants are restrictive.

Your surgeon and/or physician's assistant will visit you today. The physical therapist will assess your progress and get you walking with either a cane or a walker with daily physical therapy. Intravenous (IV) pain medication should be stopped and you may begin oral medication. Your coach is encouraged to be present as much as possible. Visitors are welcome, preferably late afternoons or evenings.

Physical therapy will continue daily during your stay and typically includes walking stairs. Your coach is encouraged to be here during your physical therapy, when permitted.

From the time your surgery ends we will be preparing you for discharge.

When your goals have been met you will be discharged.

In many cases, discharge occurs on the day after surgery.

Day of Discharge - What to Expect After Surgery

If You are Going Directly Home:

The majority of patients are discharged from the hospital to home, which is the preference when possible. Someone responsible needs to drive you home. You should receive written discharge instructions concerning medications, physical therapy, activity, etc. We will arrange for assistive equipment if needed. Soon after discharge most patients begin outpatient physical therapy, which is the preference when possible. If the patient requires home health services, the hospital will arrange for this.

If You are Going to a Sub-Acute Rehab Facility:

Every effort is made to prepare you for discharge to home from the hospital. On occasion it is determined that a patient may benefit from going to a sub-acute rehab facility from the hospital. The decision to go home or to a sub-acute facility will be made collectively by you, the joint care resource nurse, your surgeon, physical therapist and your insurance company. Every attempt will be made to have this decision finalized in advance but it may be delayed until the day of discharge, based on your progress.

If the decision is made to transfer you to a sub-acute facility, we will arrange for appropriate transportation. Your transfer papers will be completed by the nursing staff. Either your primary care physician or a physician from the sub-acute facility will be caring for you in consultation with your surgeon. Expect to stay several days based on your progress. Upon discharge home, instructions will be given to you by the sub-acute rehab staff.

Sub-acute stays must be authorized by your insurance company prior to payment. A patient's stay in a sub-acute rehab facility must be done in accordance with guidelines established by Medicare. Upon evaluation of your progress, you will either meet the criteria to benefit from sub-acute rehab or your insurance company may recommend that you return home with other arrangements. Therefore it is important for you to make alternative plans preoperatively for care at home.

In the event sub-acute rehab is not approved by your insurance company, you can go to sub-acute rehab and pay privately. The majority of our patients do so well that they do not meet the guidelines to qualify for sub-acute rehab. Keep in mind that insurance companies do not become involved in social issues, such as lack of caregiver, animals, etc. These are issues you will have to address before admission.

Caring For Yourself At Home

When you go home, there are a variety of things you need to know for your safety, your recovery, and your comfort.

Control Your Discomfort

- If needed, take your pain medicine at least 30-60 minutes before physical therapy.
- Gradually wean yourself from prescription medication to a non-prescription pain reliever. You may take two extra-strength Tylenol® Analgesic in place of your prescription medication up to four times per day.
- Change your position every 45 minutes throughout the day.
- Use ice for pain control. Applying ice to your affected joint may decrease discomfort, but do not use for more than 20 minutes each hour because in some cases the ice can cause damage to the skin and incision. You can use it before and after your exercise program. A bag of frozen peas wrapped in a kitchen towel makes an ideal ice pack. Mark the bag of peas and return them to the freezer so they can be used as an ice pack again later.

Body Changes

- Your appetite may be poor. Drink plenty of fluids to keep from getting dehydrated. Your desire for solid food will return.
- You may have difficulty sleeping, which is normal. Do not sleep or nap too much during the day.
- Your energy level will be decreased for at least the first month.
- Pain medication that contains narcotics promotes constipation. Use stool softeners or laxatives, if necessary.

Blood Thinners

You may be given a blood thinner to help avoid blood clots in your legs. There are a variety of blood thinners that may be used. Some may require outpatient monitoring with lab work. Be sure to follow the instructions by your surgeon for blood thinners and lab work (if applicable).

Caring For Yourself At Home

Stockings

Some surgeons request that you wear compression stockings based on your medical condition. These may be below or above the knee depending on the circumstances. These stockings are used to compress the veins in your legs. This helps to keep swelling down and reduces the chance for blood clots.

- If swelling in the operative leg is bothersome, elevate the leg for short periods throughout the day. It is best to lie down and raise the leg above heart level.
- Wear the stockings continuously during the day.
You may remove it at night during sleep unless your surgeon requests otherwise.
- Notify your physician if you notice increased pain or swelling in either leg
- Ask your surgeon when you can discontinue the stockings. Usually this will be done three weeks after surgery.

Caring For Your Incision

- Keep your incision dry.
- Keep your incision covered with a light dry dressing until your first follow-up appointment with your surgeon, unless instructed otherwise.
- Check with the nursing staff prior to discharge to determine when you may shower the area. This decision often depends on the various wound closure device and dressing combinations, and is therefore tailored to each patient.
- Some patients will have a wound closure system called Dermabond or Zipline. These wound closures have specific instructions for their use. Please check with the nurse for any specific questions you may have.
- Notify your surgeon if there is increased drainage, redness, pain, odor, or heat around the incision.
After showering, put on a dry dressing.
- Take your temperature if you feel warm or sick. Call your surgeon if it exceeds 100.5° F.

Caring For Yourself At Home

Dressing Change Procedure (Physician-Specific Instructions May Apply)

Always wash hands prior to touching the wound or any dressing changes. One of the goals of The Joint Connection is to provide education to patients and coaches on care of the joint replacement. This care includes dressing changes. Please make certain that you understand the techniques needed for wound care and bandage changes prior to discharge. Do not hesitate to ask your surgeon for advice.

Recognizing & Preventing Potential Complications

Signs of Infection

- Increased swelling and redness at incision site
- Change in color, amount, odor of drainage
- Increased pain in knee
- Fever greater than 100.5° F

Prevention of Infection

- Take proper care of your incision as explained.
- Consult with your surgeon with regard to taking prophylactic antibiotics with dental work or other potential contaminating procedures
- Notify your physician and dentist that you have a joint replacement.

Blood Clots in Legs

Surgery may cause the blood to slow and coagulate in the veins of your legs, creating a blood clot. This is why you take blood thinners after surgery. If a clot occurs despite these measures, you may need to be admitted to the hospital to receive intravenous blood thinners.

Signs of blood clots in legs

- Swelling in thigh, calf, or ankle that does not go down with elevation.
- Pain, heat, and tenderness in calf, back of knee or groin area. **NOTE: Blood clots can form in either leg.**

Prevention of Blood Clots

- Ankle pumps
- Walking
- Compression stockings
- Blood thinners

Pulmonary Embolus

An unrecognized blood clot could break away from the vein and travel to the lungs. This is an emergency and you should CALL 911 if suspected.

Signs of a Pulmonary Embolus

- Sudden chest pain
- Difficult and/or rapid breathing
- Shortness of breath
- Sweating
- Confusion

Prevention of Pulmonary Embolus

- Prevent blood clot in legs
- Recognize a blood clot in leg and call physician promptly

Total Knee Replacement Exercise & Goals

Activity Guidelines

Exercising is important to obtain the best results from total knee surgery. Always consult your physician before starting a home exercise program. You may receive exercises from a physical therapist at an outpatient facility or at home. In either case, you need to participate in an ongoing home exercise program as well. These goals and guidelines are listed on the next few pages.

Weeks One and Two

After one to two days you should be ready for discharge from the hospital. Most joint patients go directly home.

Your goals for the period are to:

- Continue with walker or cane unless otherwise instructed.
 - Walk at least 300-400 feet/daily with support.
 - Climb and descend a flight of stairs (12-14 steps) with a rail once a day.
 - Actively bend your knee at least 90°.
 - Straighten your knee completely.
 - Independently sponge bathe or shower and dress.
 - Gradually resume homemaking tasks.
 - Do 20 minutes of home exercises twice a day, with or without the therapist, from the program given to you.
-

Weeks Two to Four

Weeks two to four will see you recovering to more independence. Even if you are receiving outpatient therapy you will need to be very faithful to your home exercise program to be able to achieve the best outcome.

Your goals for the period are to:

- Achieve one to two week goals.
- Wean from full support to a cane as instructed.
- Walk at least one quarter mile.
- Climb and descend a flight of stairs (12-14 steps) more than once daily.
- Bend your knee more than 90°.
- Straighten your knee completely.
- Independently shower and dress.
- Resume homemaking tasks.
- Do 20 minutes of home exercises twice a day with or without the therapist.
- Begin driving if left knee had surgery. You will need permission from therapist.

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Total Knee Replacement Exercise & Goals

Activity Guidelines Continued

Weeks Four to Six

Weeks four to six will see much more recovery to full independence. Your home exercise program will be even more important as you receive less supervised therapy.

Your goals for this time period are to:

- Achieve one to four week goals.
- Walk with a cane.
- Walk one quarter to one half mile.
- Begin progressing on stair from one foot at a time to regular stair climbing (foot over foot).
- Actively bend knee 110°.
- Straighten your knee completely.
- Drive a car (either right or left knee had surgery).
- Continue with home exercise program twice a day.

Weeks Six to Twelve

During weeks six to twelve you should be able to begin resuming all of your activities.

Your goals for this time period are to:

- Achieve one to six week goals.
- Walk with no cane and without a limp.
- Climb and descend stairs in normal fashion (foot over foot).
- Walk one half to one mile.
- Bend knee to 120°.
- Straighten knee completely.
- Improve strength to 80%.
- Resume activities including dancing, bowling, and golf.

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Post-Surgery At Home Exercise Notes

An important factor in successful knee replacement is performing exercises both before and after your surgery.

The next page provides instructions should you prefer to see video instructions of the exercises.

If you don't have access to the internet or the app, or if you just prefer written instructions, you can see the exercises on the following pages with written instructions and pictures.

Activity Guidelines

1. Ankle Pumps
2. Quad Sets (Knee Push-Downs)
3. Gluteal Sets (Bottom Squeezes)
4. Abduction/Adduction (Slide Heels In & Out)
5. Heel Slides (Side Heels In & Out)
6. Short Arc Quads (PVC Pipe Exercise)
7. Straight Leg Raises
8. Seated Heel Slide
9. Extension Stretch
- 10-17. Advanced Exercises may be reviewed by your physical therapist.

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Post-Operative Care

Home Exercise Program Login Instructions

Login URL: *thomashealth.medbridgego.com*

Your Access Code:
AFY7GQJC

TWO WAYS TO ACCESS:



Use the MedBridgeGO* app.
Access your home exercise program with our mobile app for iOS and Android.
Search The App Store or Google Play for “MedBridgeGO”.



Open in your browser to access your home exercise program.

BY ACCESSING ONLINE YOU CAN:



View interactive HD exercise videos to guide you with easy-to-follow instructions.



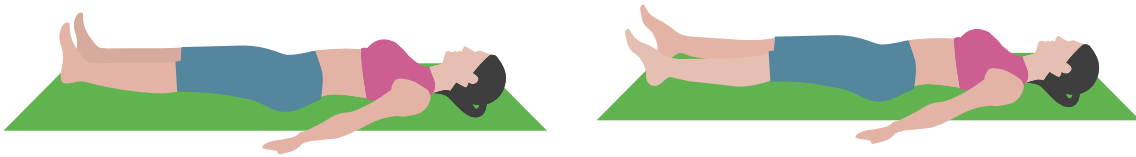
Gain a deeper understanding of your condition and the road to health recovery.

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Post-Operative Care

Home Exercise Program: Supine Ankle Pumps

Reps: 20 Sets: 2 Hold: 3 Daily: 2 Weekly: 5



Flex foot. Point toes. Repeat 20 times.

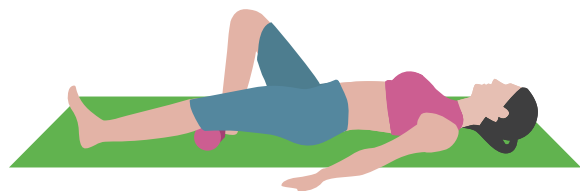
Setup - Begin lying on your back with your legs straight.

Movement - Slowly pump your ankles by bending and straightening them.

Tip - Try to keep the rest of your legs relaxed while you move your ankles.

Home Exercise Program: Supine Quad Set

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5



Lie on back, press knee into mat, tightening muscles on front of thigh. Do NOT hold breath. Repeat 20 times.

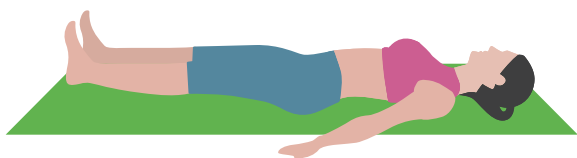
Setup - Begin lying on your back with one knee bent and your other leg straight with your knee resting on a towel roll.

Movement - Gently squeeze your thigh muscles, pushing the back of your knee down into the towel.

Tip - Make sure to keep your back flat against the floor during the exercise.

Home Exercise Program: Supine Gluteal Sets

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5



Squeeze bottom together. Do NOT hold breath. Repeat 20 times.

Setup - Begin lying on your back with your hands resting comfortably.

Movement - Tighten your buttock muscles, then release and repeat.

Tip - Make sure not to arch your low back during the exercise or hold your breath as you tighten your muscles.

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Post-Operative Care

Home Exercise Program: Supine Hip Abduction

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5



Lie on back, slide legs out to side. Keep toes pointed up and knees straight. Bring legs back to starting point. Repeat 20 times.

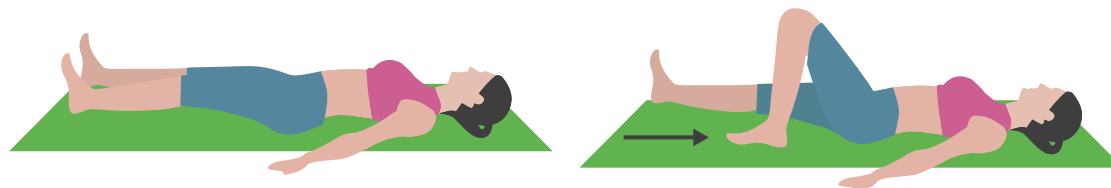
Setup - Begin lying on your back with your legs straight.

Movement - Move one leg out to the side as far as you can without bending at your side.

Tip - Make sure to keep your back on the ground and do not move your upper body during the exercise.

Home Exercise Program: Supine Heel Slide

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5



Lie on couch or bed. Slide heel toward your bottom. Repeat 20 times.

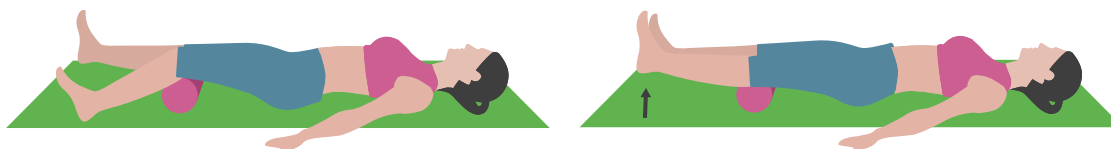
Setup - Begin lying on your back with your legs straight.

Movement - Slowly slide one heel on the floor toward your buttocks, until you feel a stretch in your knee or upper leg, then slide it back out and repeat.

Tip - Make sure not to arch your low back during the exercise or hold your breath as you tighten your muscles.

Home Exercise Program: Supine Short-Arc Quad

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5



Lie on back, place towel roll under thigh. Lift foot, straightening knee. Do not raise thigh off roll. Repeat 20 times.

Setup - Begin lying on your back with a towel roll under one knee with your heel resting on the ground. **Movement** - Tighten the muscles in your upper leg to straighten your knee, hold, then return to the start and repeat. **Tip** - Make sure to keep your back flat against the floor as you move your leg.

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Post-Operative Care

Home Exercise Program: Small Range Straight Leg Raise

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5



Lie on back, unaffected knee bent, and foot flat. Lift opposite leg up 12 inches. Keep knee straight and toes pointed up. Relax. Repeat 20 times.

Setup - Begin lying on your back with one knee bent and your other leg straight.

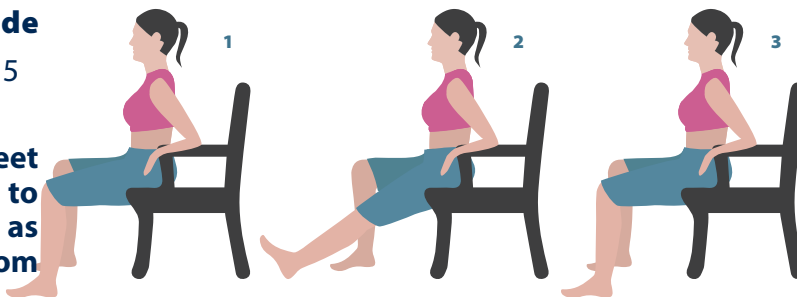
Movement - Tighten your abdominals and lift your straight leg a small distance from the floor. Then lower it back down and repeat.

Tip - Make sure to keep your low back flat against the floor and your knee straight during the exercise.

Home Exercise Program: Seated Heel Slide

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5

Sitting in straight-back chair, slide feet underneath chair. Keep hips on chair. Try to gently stretch and bend knee as far as possible. Plant foot and move bottom forward in chair. Repeat 20 times.



Setup - Begin sitting upright with your surgical leg straight forward, foot resting on the floor.

Movement - Slowly slide your heel backward, bending your knee as far as you can. Hold briefly, then return to the starting position and repeat.

Tip - Make sure to keep your foot in line with your leg and do not let your foot rotate outward or inward during the exercise.

Home Exercise Program: Seated Passive Knee Extension

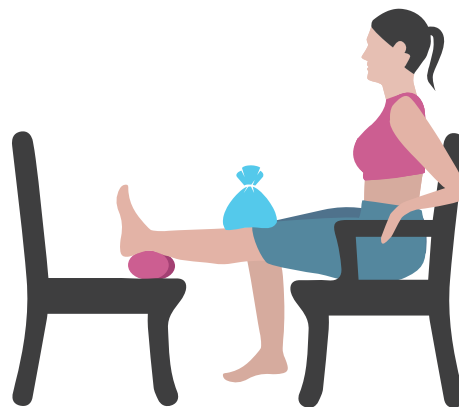
Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5

Prop foot of operated leg up on chair. Place towel roll under ankle and ice pack over knee. Put 5-10 lbs. of weight on top of knee (a 5- 10 lb. bag of rice works well). Do for 20 minutes.

Setup - Begin sitting upright in a chair with another chair or sturdy surface in front of you.

Movement - Slowly place the heel of your foot of your surgical leg on the chair in front of you so that your leg is as straight as possible and hold this position.

Tip - Keep your toes pointing toward the ceiling and keep your leg as relaxed as possible during the stretch.



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Post-Operative Care

Home Exercise Program: Seated Long-Arc Quad

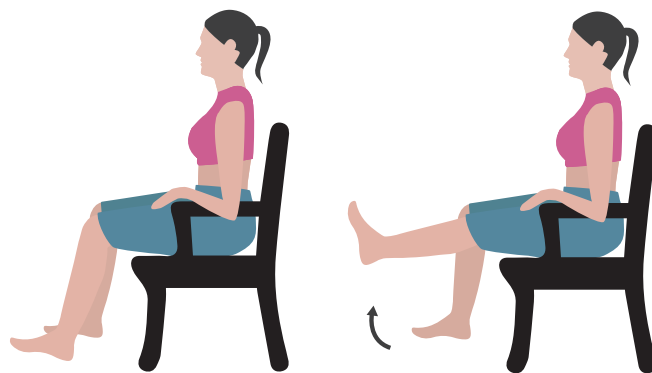
Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5

Sit with back against chair.
Straighten knee. Repeat 20 times.

Setup - Begin sitting upright in a chair.

Movement - Slowly straighten one knee so that your leg is straight out in front of you. Hold, and then return to starting position and repeat.

Tip - Make sure to keep your back straight during the exercise.



Home Exercise Program: Wall Quarter Squats

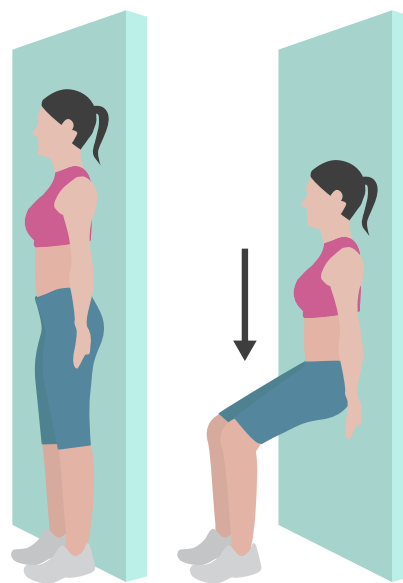
Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5

With feet shoulder-width apart and back to wall, slide down wall until knees are at 30-45 degrees of bend. Return to upright position. Do this with your therapist first. Your Physical Therapist may have you do this holding the back of a chair. CAUTION: YOU SHOULD NOT BEND KNEES ENOUGH TO CAUSE PAIN.

Setup - Begin standing upright in front of a wall.

Movement - Lean back into a squat against the wall with your knees bent to 45 degrees, and hold this position.

Tip - Make sure your knees are not bent forward past your toes and keep your back flat against the wall during the exercise.



Home Exercise Program: Heel/Toe Raises with Counter Support

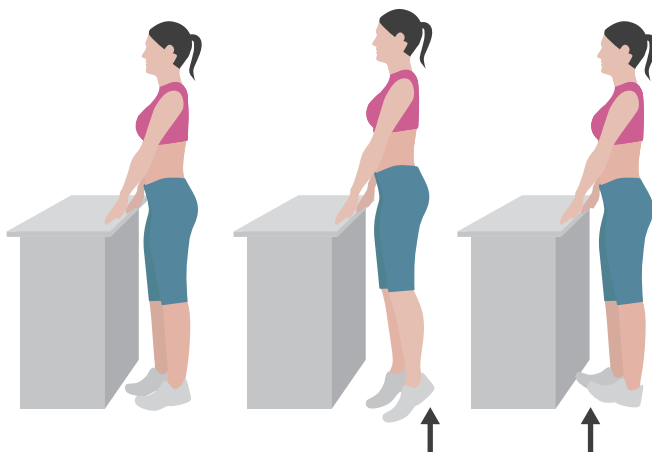
Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5

Standing, hold on to a firm surface.
Raise up on toes. Go back on heels.

Setup - Begin in a standing upright position with your hands resting on a counter in front of you.

Movement - Rise up onto your toes, hold briefly, then lower back down and lift the balls of your feet off the ground. Repeat.

Tip - Make sure to maintain an upright posture and use the counter to balance as needed.



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Post-Operative Care

Home Exercise Program: Standing March

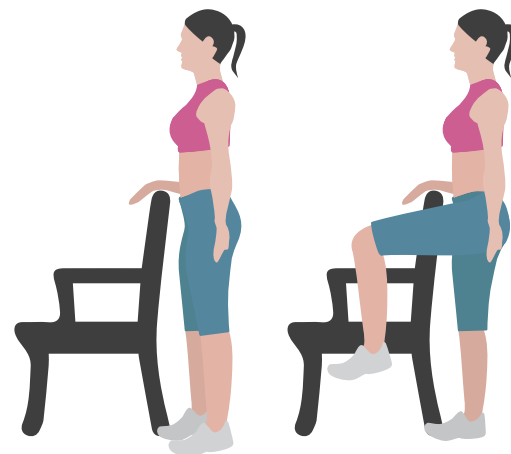
Reps: 20 Sets: 1 Hold: 3 Daily: 2 Weekly: 5

Standing, march in place.

Setup - Begin in a standing upright position holding on to a stable object for support.

Movement - Lift one knee up to waist height, then slowly lower it back down and repeat with your other leg. Continue alternating between each leg.

Tip - Make sure to keep your back straight and maintain your balance during the exercise.



Home Exercise Program: Lateral Step Ups

Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5

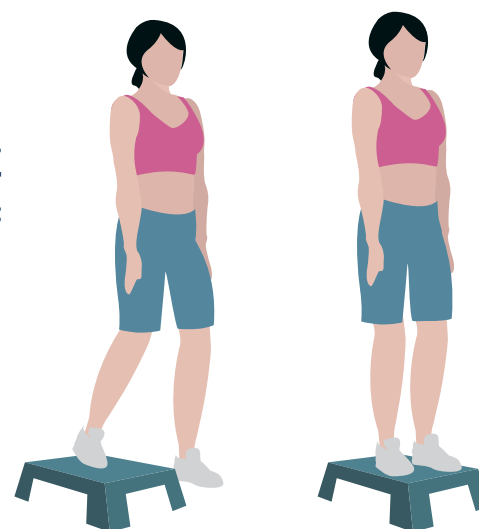
With foot of involved leg on step, straighten that leg. Return. Use a step or book. Height of step will depend on your strength. Start low. You may exercise good leg as well. NOTE: PLEASE DO

THESE WITH YOUR THERAPIST FIRST.

Setup - Begin standing with a small step or platform at one side.

Movement - Step up onto the platform with the foot closest to the platform, then follow with your other foot. Return back down to the starting position and repeat.

Tip - Make sure to maintain good posture during the exercise. Don't let your body twist as you step up.



Home Exercise Program: Backward Step Ups

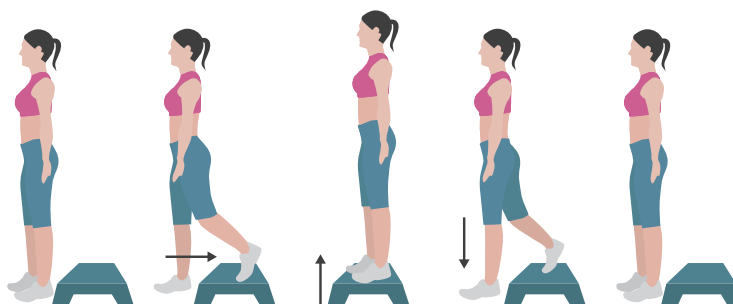
Reps: 10 Sets: 2 Hold: 5 Daily: 2 Weekly: 5

Step backwards with one foot then the other. Step off forward in the same way. Do this with your therapist first. Use a step or book. Ask therapist how high it should be.

Setup - Begin standing in front of a step.

Movement - Slowly step backward onto the step with one foot, then follow with your other foot. Return to the starting position and repeat.

Tip - Make sure to maintain your balance during the exercise and do not let your knee collapse inward.



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Activities of Daily Living Precautions and Home Safety Tips

Lying in Bed - Keep Knee Straight

Lie in bed with pillow under ankle. DO NOT put a pillow under your knee. Knee should be kept as straight as possible. Place a small pillow under your ankle to assist in straightening.

Standing Up From Chair

DO NOT pull up on the walker to stand

Sit in a chair with arm rests when possible.

1. Scoot to the front edge of the chair.
2. Push up with both hands on the armrests. If sitting in a chair without armrest, place one hand on the walker while pushing off the side of the chair with the other.
3. Balance yourself before grabbing for the walker.

Transfer-Bed: WHEN GETTING *INTO* BED

1. Back up to the bed until you feel it on the back of your legs.
(You need to be midway between the foot and the head of the bed).
2. Reaching back with both hands, sit down on the edge of the bed and then scoot back toward the center of the mattress. *(Silk pajama bottoms, satin sheets, or sitting on a plastic bag may make it easier).*
3. Move your walker out of the way, but keep it within reach.
4. Scoot your hips around so that you are facing the foot of the bed.
5. Lift your leg into the bed while scooting around. *(If this is your surgical leg, you may use a cane, a rolled bed sheet, a belt, or your theraband to assist with lifting that leg into bed).*
6. Keep scooting and lift your other leg into the bed.
7. Scoot your hips towards the center of the bed.

Transfer-Bed: WHEN GETTING *OUT OF* BED

1. Scoot your hips to the edge of the bed.
2. Sit up while lowering your non-surgical leg to the floor.
3. If necessary, use a leg-lifter to lower your surgical leg to the floor.
4. Scoot to the edge of the bed.
5. Use both hands to push off the bed. If the bed is too low, place one hand in the center of the walker while pushing up off the bed with the other.
6. Balance yourself before grabbing for the walker.

Post-Operative Care

Activities of Daily Living Precautions and Home Safety Tips

Transfer-Tub: GETTING INTO THE TUB USING A BATH SEAT

1. Place the bath seat in the tub facing the faucets.
2. Back up to the tub until you can feel it at the back of your knees. Be sure you are in front of the bath seat.
3. Reach back with one hand for the bath seat. Keep the other hand in the center of the walker.
4. Slowly lower yourself onto the bath seat, keeping the surgical leg out straight.
5. Move the walker out of the way, but keep it within reach.
6. Lift your legs over the edge of the tub, using a leg lifter for the surgical leg, if necessary.

HOLD ONTO BACK OF SHOWER SEAT.

NOTE: Although bath seats, grab bars, long-handled bath brushes, and hand-held showers make bathing easier and safer, they are typically not covered by insurance.

NOTE: ALWAYS use a rubber mat or non-skid adhesive on the bottom of the tub or shower.

NOTE: To keep soap within easy reach, make a soap-on-a-rope by placing a bar of soap in the toe of an old pair of pantyhose and attach it to the bath seat.

Transfer-Tub: GETTING OUT OF THE TUB USING A BATH SEAT

1. Lift your legs over the outside of the tub.
2. Scoot to the edge of the bath seat.
3. Push up with one hand on the back of the bath seat while holding on to the center of the walker with the other hand.
4. Balance yourself before grabbing the walker.

Walking

1. Move the walker forward.
2. With all four walker legs firmly on the ground, step forward with surgical leg.
Place the foot in the middle of the walker area. Do not move it past the front feet of the walker.
3. Step forward with the non-surgical leg.

NOTE: Take small steps. DO NOT take a step until all four walker legs are flat on the floor.

Transfer-Automobile

1. Push the car seat all the way back; recline it if possible, but return it to the upright position for traveling.
2. Place a plastic trash bag on the seat of the car to help you slide and turn frontward.
3. Back up to the car until you feel it touch the back of your legs.
4. Reach back for the car seat and lower yourself down. Keep your operated leg straight out in front of you and duck your head so that you do not hit it on the door frame.
5. Turn frontward, leaning back as you lift the operated leg into the car.

Activities of Daily Living Precautions and Home Safety Tips

Around the House - Saving energy and protecting your joints

Stair Climbing

1. Ascend with non-surgical leg first. (Up with the good).
2. Descend with the surgical leg first. (Down with the bad).

Kitchen

- Do NOT get down on your knees to scrub floors. Use a mop and long-handled brushes.
- Plan ahead! Gather all your cooking supplies at one time. Then, sit to prepare your meal.
- Place frequently used cooking supplies and utensils where they can be reached without too much bending or stretching.
- To provide a better working height, use a highstool, or put cushions on your chair when preparing meals.

Bathroom

- Do NOT get down on your knees to scrub bathtub.
- Use a mop or other long-handled brushes.

Safety and Avoiding Falls

- Pick up throw rugs and tack down loose carpeting. Cover slippery surfaces with carpets that are firmly anchored to the floor or that have non-skid backs.
- Be aware of all floor hazards such as pets, small objects, or uneven surfaces.
- Provide good lighting throughout. Install nightlights in the bathrooms, bedrooms, and hallways.
- Keep extension cords and telephone cords out of pathways. Do NOT run wires under rug. This is a fire hazard.
- Do NOT wear open-toed slippers or shoes without backs. They do not provide adequate support and can lead to slips and falls.
- Sit in chairs with arms. It makes it easier to get up.
- Rise slowly from either a sitting or lying position to avoid getting light-headed.
- Do not lift heavy objects for the first three months and then only with your surgeon's permission.

The Dos & Don'ts For the Rest of Your Life

Whether they have reached all the recommended goals in three months or not, all joint patients need to have a regular exercise program to maintain their fitness and the health of the muscles around their joints. With both your orthopedic and primary care physicians' permission you should be on a regular exercise program three to four times per week lasting 20-30 minutes. Impact activities such as running and singles tennis may put too much load on the joint and are not recommended. High-risk activities such as downhill skiing are likewise discouraged because of the risk of fractures around the prosthesis and damage to the prosthesis itself. Infections are always a potential problem and you may need antibiotics for prevention.

What to Do in General

- Ask your surgeon about taking antibiotics prior to dental work or invasive procedures, as these recommendations have recently been modified.
- Although the risks are very low for post-operative infections, it is important to realize that the risk remains. A prosthetic joint could possibly attract the bacteria from an infection located in another part of your body. If you should develop a fever of more than 100.5° or sustain an injury such as a deep cut or puncture wound you should clean it as best you can, put a sterile dressing or an adhesive bandage on it and notify your doctor. The closer the injury is to your prosthesis, the greater the concern. Occasionally, antibiotics may be needed. Superficial scratches may be treated with topical antibiotic ointment. Notify your doctor if the area is painful or reddened.
- Get a card from the surgeon's office that states you had a joint replacement. Carry the card with you, as you may set off security alarms at airports, malls, etc.
- When traveling, stop and change positions hourly to prevent your joint from tightening.
- See your surgeon yearly unless otherwise recommended.
(For more information about Lifetime Follow-Up Visits, see the Appendix)

Post-Operative Care

What to Do for Exercise Choose a Low Impact Activity

- Recommended exercise classes
- Home program as outlined in Patient Guide
- Regular one to three mile walks
- Home treadmill (for walking)
- Stationary bike
- Regular exercise at a fitness center
- Low-impact sports such as golf, bowling, walking, gardening, dancing, etc.

What NOT to Do

- Ask your surgeon about return to high impact activities such as running and high risk activities such as skiing.

Appendix

Exercise Your Right - Put Your Healthcare Decisions in Writing

It is our policy to place patients' wishes and individual considerations at the forefront of their care and to respect and uphold those wishes.

What are Advance Medical Directives?

Advance Directives are a means of communicating to all caregivers the patient's wishes regarding health care. If a patient has a Living Will or has appointed a Health Care Agent and is no longer able to express his or her wishes to the physician, family, or hospital staff, the Medical Center is committed to honoring the wishes of the patient as they are documented at the time the patient was able to make that determination.

There are different types of Advance Directives and you may wish to consult your attorney concerning the legal implications of each.

LIVING WILLS are written instructions that explain your wishes for health care if you have a terminal condition or irreversible coma and are unable to communicate.

APPOINTMENT OF A HEALTH CARE AGENT (sometimes called a Medical Power of Attorney) is a document that lets you name a person (your agent) to make medical decisions for you, if you become unable to do so.

HEALTH CARE INSTRUCTIONS are your specific choices regarding use of life sustaining equipment, hydration and nutrition, and use of pain medications.

On admission to the hospital you will be asked if you have an Advance Directive. If you do, please bring copies of the documents to the hospital with you so they can become a part of your Medical Record. Advance Directives are not a requirement for hospital admission.

Appendix

Anesthesia

Who are the anesthesiologists?

The Operating Room, Post Anesthesia Care Unit (PACU) and Intensive Care Units at the hospital are staffed by Board Certified and Board Eligible physician anesthesiologists. Each member of the service is an individual practitioner with privileges to practice at this hospital.

What types of anesthesia are available?

Decisions regarding your anesthesia are tailored to your personal needs. *The types available for you are:*

- General Anesthesia provides loss of consciousness.
- Regional Anesthesia involves the injection of a local anesthetic to provide numbness, loss of pain, or loss of sensation to a large region of the body. Regional anesthetic techniques include spinal blocks, epidural blocks, and arm and leg blocks. Medications can be given to make you drowsy and blur your memory.

Will I have any side effects?

Your anesthesiologist will discuss the risks and benefits associated with the different anesthetic options as well as any complications or side effects that can occur with each type of anesthetic. Nausea or vomiting may be related to anesthesia or the type of surgical procedure. Although less of a problem today because of improved anesthetic agents and techniques, these side effects continue to occur for some patients. Medications to treat nausea and vomiting will be given if needed. The amount of discomfort you experience will depend on several factors, especially the type of surgery. Your doctors and nurses can relieve pain with medications. Your discomfort should be minimal, but do not expect to be totally pain-free. The staff will teach you the pain scale (0-10) to assess your pain level.

What will happen before my surgery?

You will meet your anesthesiologist immediately before your surgery. Your anesthesiologist will review all information needed to evaluate your general health. This will include your medical history, laboratory test results, allergies, and current medications. With this information, the anesthesiologist will determine the type of anesthesia best suited for you. He or she will also answer any further questions you may have.

You will also meet your surgical nurses. Intravenous (IV) fluids will be started and preoperative medications may be given, if needed. Once in the operating room, monitoring devices will be attached such as a blood pressure cuff, EKG, and other devices for your safety. At this point, you will be ready for anesthesia. If you would like to speak to your anesthesiologist before you are admitted to the hospital, this can be arranged through The Joint Connection Coordinator.

During surgery, what does my anesthesiologist do?

Your anesthesiologist is responsible for your comfort and well-being before, during, and immediately after your surgical procedure. In the operating room, the anesthesiologist will manage vital functions, including heart rate and rhythm, blood pressure, body temperature, and breathing. The anesthesiologist is also responsible for fluid and blood replacement when necessary.

What can I expect after the operation?

After surgery, you will be taken to the Post Anesthesia care Unit (PACU) where specially trained nurses will watch you closely. During this period, you may be given extra oxygen and your breathing and heart functions will be observed closely.

May I choose an anesthesiologist?

Although most patients are assigned an anesthesiologist, you may choose one based on personal preference or insurance considerations. If you have questions about your insurance coverage or medical plan participation by the anesthesiologist, please contact your insurance company for guidance. Requests for specific anesthesiologists should be submitted in advance through your surgeon's office for coordination with the surgeon's availability.

The Importance of Lifetime Follow-Up Visits

Over the past several years, orthopedic surgeons have discovered that many people are not following up with their surgeons on a regular basis. The reason for this may be that they do not realize they are supposed to or they do not understand why it is important.

So, when should you follow up with your surgeon? These are some general rules:

- Every year, unless instructed differently by your physician.
- Anytime you have mild pain for more than a week.
- Anytime you have moderate or severe pain.

There are two good reasons for routine follow-up visits with your orthopedic surgeon:

1. If you have a cemented knee, we need to evaluate the integrity of the cement. With time and stress, cement may crack. You probably would be unaware of this happening because it usually happens slowly over time. Seeing a crack in cement does not necessarily mean you need another surgery, but it does mean we need to follow things more closely.

Why? Two things could happen. Your knee could become loose and this might lead to pain. Or, the cracked cement could cause a reaction in the bone called osteolysis, which may cause the bone to thin out and cause loosening. In both cases you might not know this for years. Orthopedists are continually learning more about how to deal with both of these problems. The sooner we know about potential problems, the better chance we have of avoiding more serious problems.

2. The second reason for follow-up is that the plastic liner in your knee may wear. Little wear particles combine with white blood cells and may get in the bone and cause osteolysis, similar to what can happen with cement. Replacing a worn liner early and grafting the bone can keep this from worsening.

X-rays taken at your follow-up visits can detect these problems. Your new X-rays can be compared with previous films to make these determinations. This should be done in your doctor's office.

We are happy that most patients do so well that they do not think of us often. However, we enjoy seeing you and want to continue to provide you with the best care and advice. If you are unsure how long it has been or when your next visit should be scheduled, call your doctor. We will be delighted to hear from you.

Appendix

Hibiclens Guide to General Skin Cleansing at Home

PLEASE NOTE: Failure to complete your Hibiclens bathing may result in your surgeon making the decision to cancel your surgery.

Good hygiene, such as frequent hand washing and daily skin cleansing promotes good health. Daily skin cleansing helps to remove microbes and pathogens that may cause diseases.

General Skin Cleansing Instructions for Bathing or Showers

Before you bathe or shower: Read the instructions given to you by your healthcare practitioner, and begin your general skin cleansing protocol as directed.

- Carefully read all directions on the product label.
- Hibiclens is not to be used on the head or face, keep out of eyes, ears and mouth.
- Hibiclens is not to be used in the genital area.
- Hibiclens should not be used if you are allergic to chlorhexidine gluconate or any other ingredients in this preparation.

**See Hibiclens label for full product information and precautions.*

When you bathe or shower:

- If you plan to wash your hair, do so with your regular shampoo. Then rinse hair and body thoroughly to remove any shampoo residue.
- Wash your face with your regular soap or water only.
- Thoroughly rinse your body with warm water from the neck down.
- Apply the minimum amount of Hibiclens necessary to cover the skin. *Use Hibiclens as you would any other liquid soap. You can apply Hibiclens directly to the skin and wash gently.*
- Rinse thoroughly with warm water.
- Do not use your regular soap after applying and rinsing Hibiclens

When using Hibiclens for a second day in a row:

- Shower/bathe again using Hibiclens in the same method as described above.
- Do not apply any lotions, deodorants, powders or perfumes to the body areas that have been cleaned with Hibiclens.

HIBICLENS® Antiseptic, Antimicrobial Skin Cleanser

Warnings: For external use only. Do not use if you are allergic to chlorhexidine gluconate or any other ingredients in this preparation. Do not use in direct contact with the genital area. Do not use as a patient preoperative skin preparation of the head or face. Do not use on wounds that involve more than the superficial layers of the skin.



Appendix

Urine Specimen Collection

You will be asked during your pre-admission testing to provide a clean catch urine specimen. It is important to follow the directions for collecting your specimen. Incorrect specimen collection may affect your results and could result in surgery cancellation. In some circumstances your surgeon may require a catheterized urine specimen.

Urine Specimen Collection Process

1. Wash hands with soap and water.



2. Unscrew cap on the urine specimen cup and place cap on the counter with inside of cup facing upward.
TO AVOID CONTAMINATION, DO NOT TOUCH INSIDE OF CUP OR CAP.

Cleansing Process

Females:

Separate the labia. Wipe inner folds front and back in a single motion with towelette. Keep the labia separated and urinate a small amount into the toilet. Proceed to #4.

Males:

Cleans the glans (tip) of penis in a single motion with first towelette. Repeat with second and third towelette. If not circumcised, hold foreskin back before and during cleansing.

4. Place cup under continuous stream and urinate into the cup.

DO NOT TOUCH THE SPECIMEN CUP ON THE INSIDE OR TOUCH YOUR BODY OR CLOTHING TO IT.

5. Place the cap on the cup. Tighten the cap securely to prevent leakage.



6. Give the urine specimen to laboratory personnel.