



Orthopedic guide

Hip fracture



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The material in this booklet is not intended for diagnosing or prescribing. Consult your physician before undertaking any form of medical treatment or adopting any exercise program or dietary guidelines.

Introduction

We know you are here under unexpected circumstances, and we want you and your loved ones to know that we will provide you with quality care. At Baylor Scott & White Health, we have a team approach to care. You and your family are important members of our team. A hip fracture is a serious injury, and together we can lower the chance of complications.

Your healthcare team may include:

Orthopedic surgeon – Performs surgery and plans your care, checks on you while you are in the hospital, evaluates you at your follow-up appointment.

Hospital doctor (hospitalist or trauma surgeon) – Prepares you for surgery, cares for your medical needs during your hospital stay, and adjusts your medications as needed.

Advanced practice provider (physician assistant, advanced practice registered nurse) – Assists physicians with getting your medical information, may help during the surgery, and follows up with you during your stay and after you go home.

Anesthesia team – Gives you anesthesia during surgery, monitors your condition, and may help with pain management after surgery.

Care coordinator/social worker – Coordinates plans between you, your family, your doctors, nurses, and therapists when you are ready to leave the hospital. Makes plans for continued care after your hospital stay if needed and works with your insurance provider.

Physical therapist (PT)/occupational therapist (OT) – Teaches you exercises to improve your strength, helps you get out of bed and start walking, and teaches you how to adjust to daily life as you recover.

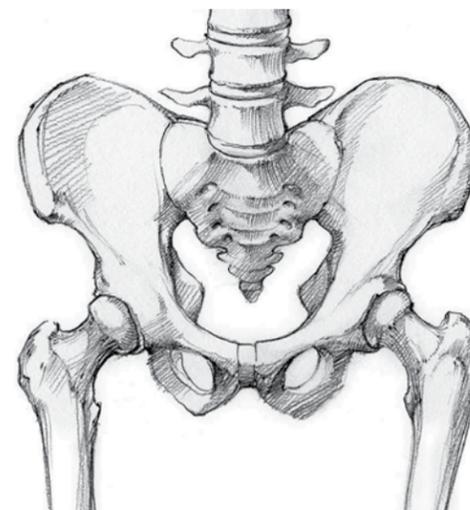
Registered nurse (RN) – Provides your daily care including giving you medicine, checking your vital signs, and talking to your doctors and other team members about your needs.

Patient care technician (PCT) – Assists with your personal care including going to the bathroom, bathing, meal set-up, and checking vital signs.

You may also be seen by lab, nutrition, pharmacy, radiology, and respiratory team members as well as chaplain services.

Many team members will ask you questions and give you information. We would like you to be involved in your care, so please ask questions and speak freely knowing that all information is kept confidential.

Understanding the hip joint and hip fractures



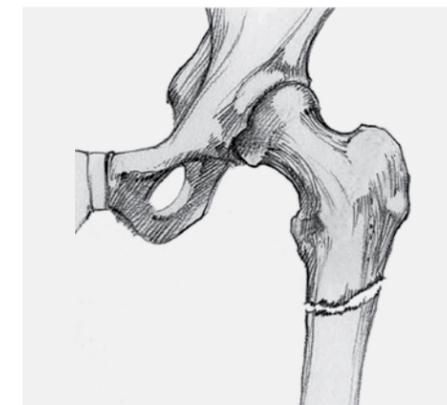
Intertrochanteric fracture



Femoral neck fracture



Subtrochanteric fracture



The hip joint allows the upper leg to bend and rotate at the pelvis. The acetabulum (hip socket) forms a deep cup that surrounds the femoral head (the ball at the top of the thigh bone). The femoral head is attached to the rest of the femur (thigh bone) by a short section of bone called the femoral neck. The bump on the outside of the femur just below the femoral neck is called the greater trochanter. A hip fracture is a break anywhere in the upper part of the femur from the femoral head to just below the greater trochanter. To the right are examples of where a hip fracture can occur.

How hip fractures happen

Most of the time hip fractures are caused by a fall or direct blow to the hip. Osteoporosis is a disease that causes bones to become weak and more likely to break. For someone with osteoporosis, a break can happen during regular activity like standing up from a chair or walking. Some causes of osteoporosis are:

- Aging
- Family history
- Nutrition
- Lifestyle
- Medication
- Illness

Hip fracture treatment options

The treatment for your hip fracture starts by making sure you are medically stable. After this, decisions about how to treat the fracture can be made. Most hip fractures are treated with surgery to repair the broken bones. Sometimes surgery is not recommended because of other health concerns. In this situation, your healthcare team will discuss other treatment options with you.

Most hip fractures are treated in one of the following ways:



Metal pins

2 or 3 metal pins are used to hold the broken bones together while they heal



Metal plates and screws

A plate on the outside of the bone and a large screw are used to hold the broken pieces of bone in place while they heal



Intramedullary nail (IM nail)

A rod on the inside of the bone and a large screw are used to hold the pieces in place



Artificial replacement

With a hemiarthroplasty (partial replacement), the ball of the femur is replaced with an artificial ball. A stem goes down into the thigh bone to hold the ball in position. The hip socket is left in place.

With a total hip arthroplasty (total hip replacement), both the ball and the socket are replaced with an artificial hip. The artificial hip joint is made of metal and plastic parts.

Having surgery

The goal of surgery is to stabilize the hip joint so you can get up and moving as soon as possible.

Before surgery

You will not be able to eat for many hours before surgery, but you may be able to drink clear liquids, like water, until about 2 hours before surgery.

Both the surgeon and the anesthesiologist will visit with you before surgery. This is a good time to ask questions. After all of your questions are answered, you will sign consent forms. You will then be taken to the operating room.

After surgery

After surgery you will go to the recovery room. The recovery room is also called the Post Anesthesia Care Unit (PACU). Here, a nurse will monitor you closely. Other patients will be around you, and you may hear sounds from monitors and other machines. You may be sleepy and confused at first. Your incision will probably feel uncomfortable and your throat may feel sore. Your nurse may give you medicine to make you more comfortable.

You will go to your regular room when you are ready to leave the PACU. Once you get to your room, your nurse will come see you. The nursing team will check your vital signs and look at your bandage often during the day and night. They will make sure you are comfortable and have what you need.

What to expect after your hip is repaired

Activity and therapy

Getting out of bed and moving soon after surgery can lower the chance of complications. You will be able to get out of bed and move around with help. We will help you get out of your bed to a chair as soon as possible. A physical therapist or an occupational therapist will help you begin walking with a walker, using the bathroom, and practicing getting dressed. You will start doing exercises to strengthen muscles and to prevent blood clots.

Most patients are able to start putting all of their weight on the operated leg right after surgery. Depending on the break and how it is repaired, you may be able to put only some of your weight down on the operated leg while it heals. Your therapist will teach you how much weight you can put on your leg.

Pain management

It is normal to have some pain after surgery. The incision area may burn and you may feel stiff at first. Your healthcare team will work with you to make a pain management plan. A pain management plan uses a combination of medications and other ways to manage your pain. Medication may not completely stop the pain, but it will lessen the pain. There are other ways to manage pain such as changing positions, moving around, and using ice packs. Tell your healthcare team when you are in pain. We will ask you to rate and describe your pain. We will decide with



you how to manage your pain. As your body heals and you are moving around more, you will feel more comfortable.

Nutrition

As soon as you are awake, you can start drinking fluids. When you are ready, you will be able to begin eating. Drink plenty of water and eat healthy foods to help your body heal. Protein helps with healing. Good sources of protein include meats, dairy products, eggs, beans, and soy protein. Include protein with all of your meals and snacks. Talk to your healthcare team about taking a multivitamin to help with healing. A registered dietician can meet with you while you are in the hospital if you have concerns about your nutrition.

How to prevent problems

Pneumonia

After surgery, if you are in pain or not moving around, you may take smaller breaths than normal. This can cause fluid and mucus to collect in your lungs and could cause pneumonia. To lower this chance and to keep your lungs working their best, we will coach you to cough, take deep breaths, and use an incentive spirometer. An incentive spirometer is a small, plastic device that shows you how deep you are breathing. Use it 10 times every hour you are awake to make sure you are breathing deeply enough. Getting out of bed and sitting up in a chair as soon as possible will also help you breathe more deeply.

Constipation

Some people have constipation after surgery. Drink more fluids, like water, and eat more fiber to help with constipation. Good sources of fiber include whole grains, fruits and vegetables. Take stool softeners as told by your healthcare team.

Pressure sores

You may want to stay still in bed if moving around causes pain. However, when you stay in one position for very long without moving, pressure on the skin can cause pressure sores. The best way to prevent pressure sores is to get out of bed with help as soon as possible. Changing positions when you are in bed will also help.

Urinary tract infection (UTI)

A UTI is an infection in your bladder or your kidneys. This may make it painful to urinate and may cause you to feel sick. To lower your chance of getting a UTI, we will try to avoid putting a catheter in your bladder. If you do have a catheter, we will take it out as soon as possible. Drinking plenty of fluids and asking for help to go to the bathroom as soon as you have the urge will also help lower your chance of a UTI.

Blood clots

After any surgery, a blood clot, also called a deep vein thrombosis (DVT), may happen. If a blood clot happens, it usually happens in the thigh or calf. Ways to lower your chance of a blood clot are:

- Getting up with help as soon as possible.
- Wearing foot pumps or calf pumps to help keep blood moving when you are in bed or reclined.
- Taking blood thinner medicine if prescribed.

Mental confusion

The stress of a hip fracture, unfamiliar surroundings, pain medicine, and other medical conditions can cause confusion and changes in behavior. This is sometimes called delirium. Delirium usually goes away within a few days or weeks. The best treatment for delirium is for you to get moving and out of the hospital. Familiar surroundings, familiar faces, and regular day and night activity schedules are very helpful.

Falls

There is a greater chance of falling after a hip fracture. To lower the chance of a fall in the hospital, your healthcare team will work with you to develop a fall prevention plan. We will talk about what makes you more likely to fall and things we can do to lower your chance of falling. Following the fall prevention plan will keep your recovery on track. Talk to your therapists and doctors if you have a fear of falling. It is normal to have a fear of falling, but this fear can actually cause another fall. You need to talk about your fear so we can help. Falling is not a normal part of aging.

How to prevent problems

Infection

To lower the chance of an infection while you are in the hospital, everyone who comes in your room should clean their hands with soap and water or hand sanitizer. Clean your own hands often, also. Before changing the dressing (bandage) on your incision, you and anyone helping should wash hands well. Good hand washing should continue when you go home since hand contact is the number 1 way germs are spread.

Therapy

Activity

Walking and exercising are keys to healing after surgery. The sooner you get up and move around with help, the faster you will feel better. It is very important to do your exercises in the hospital and keep doing them after you leave the hospital. Do ankle pumps and quad sets often (see page 15). Your therapists will help you with exercising, walking, learning to do things on your own, and deciding which equipment you may need.

Physical therapy goals

Your physical therapists will work with you so you can:

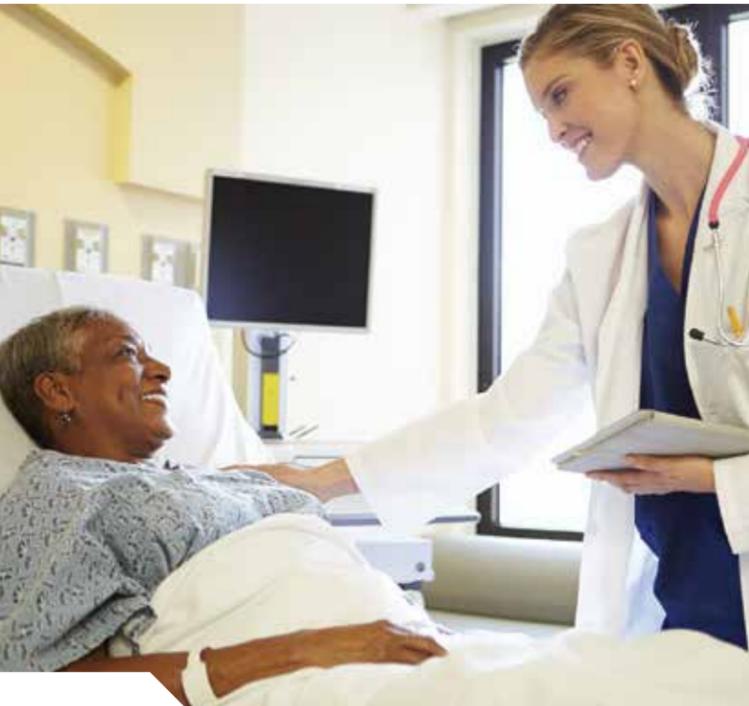
- Get in and out of bed on your own.
- Stand up from and sit down on a bed or chair using a walker on your own.
- Walk safely with a walker on your own.
- Walk up and down a curb or steps using a walker with some help from another person.
- Do your home exercises with only a little help from another person.



Occupational therapy goals

Your occupational therapists will work with you so you can:

- Get dressed using tools with a little help from another person.
- Safely sit down on and stand up from the toilet using a walker on your own.
- Get into and out of the tub or shower with a little help from another person.



Checklist to stay on track in the hospital

Use this checklist to guide your care in the hospital.

- Do you have an incentive spirometer? Are you using it? Ask your nurse if you do not have one or do not know how to use it.
- Are you working with your healthcare team to manage your pain?
- Are you doing ankle pumps and quad sets often?
- Are you doing all of your exercises as told by your therapist?
- Do you have foot pumps or calf pumps on when you are in bed or reclined?
- Do you know what equipment you will need when you leave the hospital?
- Do you know your plans for care when you leave the hospital?

After your hospital stay

You may need more therapy to help you get stronger and able to move well after you leave the hospital. Because every patient is different, your care and therapy will be arranged to meet your individual needs. While you are in the hospital, your healthcare team can answer questions and concerns you have about plans for leaving the hospital. Use this checklist to keep track of things you need to know or do before going home.

- Make your follow-up appointments with your healthcare team.
Where: _____
Date: _____
Time: _____
 - Learn how to do your dressing changes.
 - Learn about new medications.
 - Know what foods are good for you to eat.
 - Ask your therapists questions you have about getting around your home.
 - Practice exercises 3 times each day. Do slow, steady repetitions. Breathe as you exercise.
 - Put ice packs on your operated hip for up to 20 minutes after exercises.
 - Understand how important activity, rest, and exercise are for you to get better.
 - Know when you can drive.
 - Know when you can go back to work.
- Notes: _____

- Set up your first therapy appointment.
Where: _____
Date: _____
Time: _____

At Home

Managing pain

Keep doing the things that helped you manage your pain in the hospital. Balance rest and activity. Make your home a place to help you get better. Keep it free of clutter, open blinds and shades for natural light, keep noise at a comfortable level, and listen to music you like. Take medication as told by your healthcare team. Before you leave the hospital, talk to your healthcare team about what to do if your pain is not getting better or is getting worse when you are home.

Preventing pneumonia

Continue to take deep breaths and cough regularly. Take your incentive spirometer home and use it 10 times every hour you are awake to help you take deep breaths. Get up and move around every hour during the day. Activity makes you breathe more deeply without realizing it. Doing these things will keep your lungs working their best and lower your chance of getting pneumonia.

Preventing blood clots

Get up and move around every hour during the day to lower the chance of blood clots forming. Do ankle pumps when you are sitting. If your healthcare team told you to take blood thinners, take them as told.

Changing the dressing (bandage) on your incision

Follow the instructions given to you by the healthcare team for changing the dressing and caring for your incision. Wash your hands before changing the dressing. Look at the



incision each time you change the dressing. Call your healthcare team if you notice more redness, more drainage (fluid that comes out the incision), or the drainage looks different than before. Put a clean dressing on and cover all parts of the incision.

Preventing infection

Wash your hands with soap and water often. Ask family members, friends, and caregivers to wash their hands often. Before changing the dressing on your incision, you and anyone helping should wash hands well. Ask visitors who are not feeling well to visit after they are well.

Preventing constipation and urinary tract infections

Drink at least 8 glasses of fluids every day. Water is the best fluid to help prevent constipation and urinary tract infections. Go to the bathroom as soon as you feel the urge. Some medication may cause constipation. Ask your healthcare team about over the counter medication you can take to help with constipation. Getting up and moving around during the day will also help.

At home

Preventing falls

Follow these tips to prevent falls at home.

About you

- Wear glasses if needed
- Talk to your healthcare team about all your medicines and side effects that make you more likely to fall
- Take your time doing things—do not rush
- Wear well-fitting, low-heeled shoes with nonskid soles
- Do not wear socks without shoes on smooth floors
- Limit drinks with alcohol
- Use a walker, crutches, or cane if told by your healthcare team—clean and replace rubber tips when needed

Flooring

- Use nonskid floor wax
- Avoid rugs on floors. If you use rugs, make sure they have a nonslip backing and edges are secured down
- Repair loose carpet
- Clean up spills immediately

Bathrooms

- Use non-slip mats near sinks and showers to absorb water
- Have handrails installed
- Have a gripped surface on the bottom of tubs and showers
- Sit on a tub bench or shower chair for safe bathing

Around the house

- Remove items that may cause you to trip
- Be careful around pets especially small animals
- Move furniture and electrical cords out of walking paths
- Keep your home well lit—use night lights especially on stairs, and turn lights on when getting up during the night
- Sit in chairs that are easy to stand up from—low surfaces are hard to stand up from
- Keep items in easy to reach places—use a long-handled reacher if something is out of reach

Who and when to call for problems

Call 911 for:

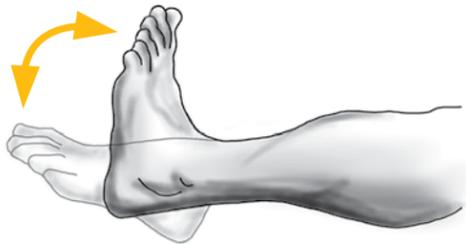
- Passing out
- Sudden chest pain
- Shortness of breath that is getting worse

Call your surgeon for:

- Pain that is not getting better or gets worse
- Fever over 101.5° F
- Sudden calf pain and swelling
- Incision opening up or bleeding
- Incision becoming redder, hard, or has pus
- Urine (pee) that is cloudy or smells very bad
- Constipation that does not get better after taking a stool softener
- Nausea, vomiting, or diarrhea
- Chest pain with breathing or coughing
- A change in mental condition
- Confusion that is new
- Not getting better as expected

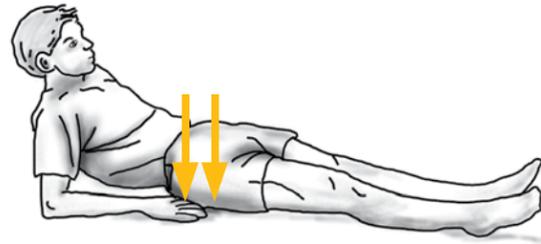
Exercise

Exercises help you get well faster and bring back your strength. Do your exercises at least 2 to 3 times each day. Below are exercises you will be doing after surgery. Start by repeating each exercise 10 times. Gradually increase to repeating each exercise 20 times. Take slow, steady breaths as you exercise. Do NOT hold your breath.



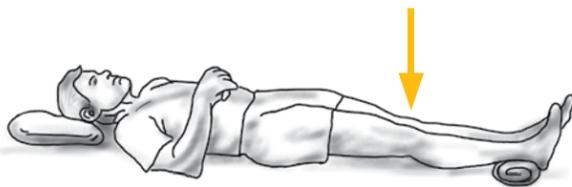
Ankle pumps

1. Lie on your back or sit in a chair.
2. Gently point and flex your ankles.
3. Repeat.



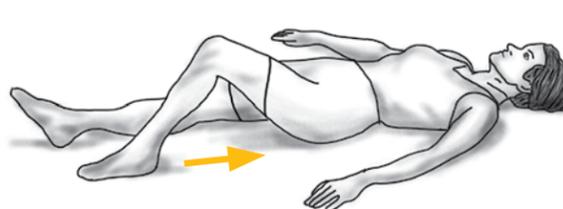
Gluteal sets (buttocks squeezes)

1. Lie on your back.
2. Squeeze the muscles in your buttocks together.
3. Hold 5 seconds.
4. Relax.
5. Repeat.



Quad sets (thigh squeezes)

1. Tighten the muscles on top of both thighs, and push the backs of your knees into the bed.
2. Hold 5 seconds.
3. Relax.
4. Repeat.



Heel slides

1. Lie on your back with your legs straight.
2. Bend your operated leg and slide your foot toward your body.
3. Straighten your leg slowly.
4. Repeat.

Everyday living

You may not need to change the way you do some of the following activities depending on your surgery. Talk to your therapist before leaving the hospital about what you need to do.

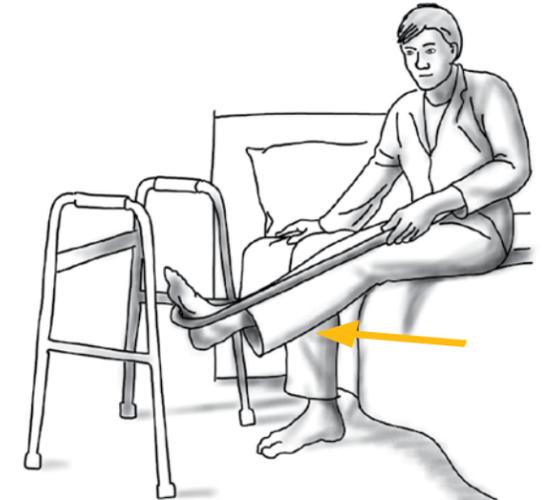
Getting into bed

1. Stand at the side of the bed halfway between the head and foot of the bed.
2. Back up to the bed until you feel the edge of the bed touch the backs of your legs.
3. Reach back, put your hands on the bed, and slowly sit down on the bed.
4. Scoot your hips back toward the middle of the bed.
5. Once you are stable on the bed, move the walker out of the way, but keep it in reach.
6. First lift one leg and turn so your leg is on the bed. Then lift your other leg onto the bed. You can use a cane, rolled bed sheet, or belt to help lift your operated leg.
7. Move your hips toward the middle of the bed.
8. Lie back.



Getting out of bed

1. Sit up in the bed by pushing up with both arms.
2. Move your legs toward the side of the bed and turn your body to face the same direction.
3. Scoot your hips to the edge of the bed.
4. Lower your feet to the floor. You can use a cane, a rolled bed sheet, or a belt to help you lower your operated leg.
5. Use both hands to push yourself up off the bed. If your bed is low, put one hand on the walker as you push yourself up off the bed with your other hand.
6. Stand at the side of the bed with both hands on the walker before you start walking to make sure you are stable.



Getting in and out of a chair

Use a chair that has arm rests for 12 weeks after surgery.

Getting into a chair

1. Take small steps and turn until your back is toward the chair.
2. Slowly back up to the chair until you feel the chair against the backs of your legs.
3. Slide your operated leg forward.
4. Hold the arm of the chair with one hand and hold the walker with the other hand. Slowly lower your body into the chair.
5. Move the walker out of the way, but keep it within reach.



Getting out of a chair

1. Scoot your hips toward the front edge of the chair.
2. Hold the arm of the chair with one hand and hold the walker with the other hand. **DO NOT** put both hands on the walker while getting out of the chair.
3. Lift yourself off the chair.
4. Balance yourself before trying to walk.

Using the toilet

When sitting down on the toilet

1. Take small steps and turn until your back is toward the toilet.
2. Back up to the toilet until you feel it touch the back of your legs.
3. Slide your operated leg out in front as you sit down.
4. If using a toilet with arm rests, reach back for both arm rests and lower yourself onto the toilet.
5. If using a raised toilet seat without arm rests, keep one hand on the walker as you reach back for the toilet seat with your other hand.



When getting up from the toilet

1. Slide your operated leg out in front of you before you stand up.
2. If you are using a toilet with arm rests, put your hands on the arm rests and push yourself up, then move your hands to the walker.
3. If you are using a toilet without arm rests, put one hand on the walker and push off the toilet seat with your other hand.
4. Balance yourself before you start to walk.

Getting in and out of a walk-in shower

Always use nonslip mats both inside and outside of the shower for safety.

Getting into the shower using a shower chair

1. Back up to the shower lip. Feel the lip behind both heels.
2. Place the walker or crutches against the lip.
3. Push through your arms and step slowly over the lip with your good leg.
4. Step over the lip with your operated leg.
5. Turn, without twisting so you face the faucet with a shower chair behind you.
6. Sit on the shower chair. Leave the walker or crutches outside of the shower.

Getting out of the shower using a shower chair

1. Use both hands to push yourself up from the shower chair to get to a standing position.
2. Turn toward the shower door so you are facing the walker. Use either a grab bar or place your hand flat against the shower wall for balance.
3. Place both hands on the walker.
4. Step up over the lip with your operated leg.
5. Step up and over the lip with your good leg. Balance yourself using the walker before trying to walk.

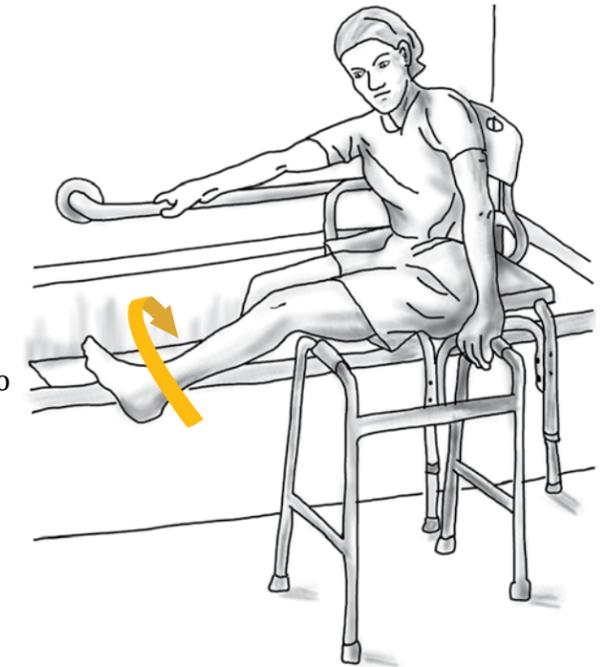


Getting in and out of the bathtub

Always use a rubber mat in the tub. If you do not have one, put nonskid strips in the bottom of the bathtub.

Getting into the bathtub using a tub bench

1. Place the tub bench in the bathtub with the seat facing the faucets.
2. Stand in front of the tub bench and back up to the bathtub until you feel the edge of the tub bench behind your legs.
3. Reach back for the tub bench with one hand. Keep your other hand on the walker.
4. Slowly lower yourself to sit on the tub bench.
5. Move the walker out of the way, but keep it within reach.
6. Lift your legs one at a time over the side of the bathtub as shown in the picture.
7. Scoot your hips to the middle of the tub bench.



Getting out of the bathtub using a tub bench

1. Scoot your hips to the edge of the tub bench.
2. Lift each leg over the side of the tub – you may need to scoot your hips closer to the edge of the tub bench as you lift your legs over.
3. Turn your body so you are facing the walker.
4. Hold onto the walker with one hand. Use your other hand to push up on the back of the tub bench.
5. Stand up from the tub bench.
6. Balance yourself before trying to walk.

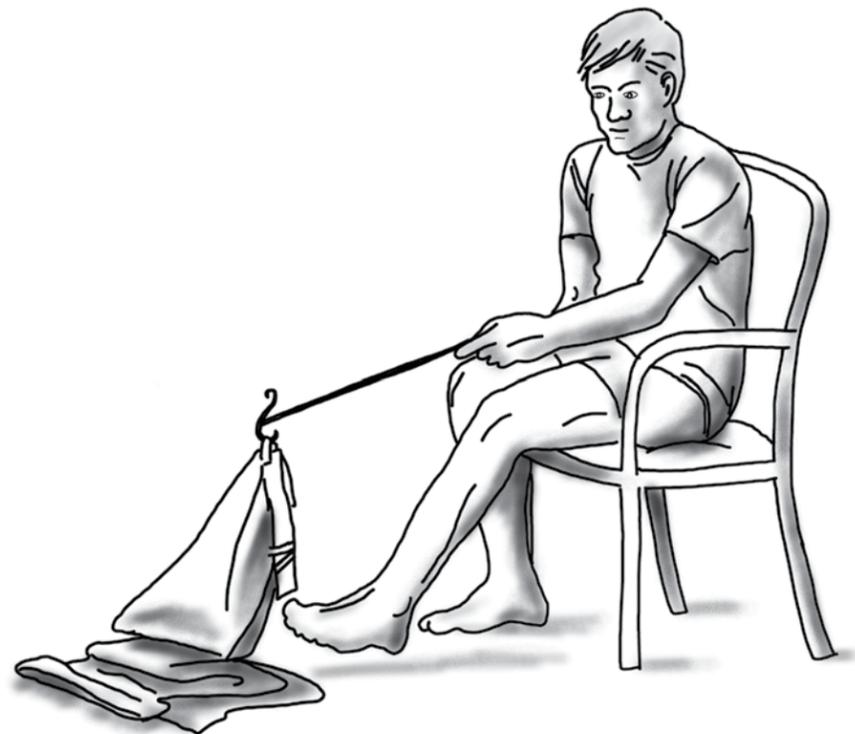
Putting on pants

Use a “reacher” or “dressing stick” to pull on pants and underwear.

1. Sit down. Have your walker within reach.
2. Grab the underwear or pants with the reacher.
3. Move the reacher so your clothing is by your feet.
4. First put your foot from your operated leg into the clothing, then put your other foot in.
5. Use the reacher to pull your pants up over your knees where you can reach them.
6. Stand up with your walker, then pull your pants up the rest of the way.

Taking off pants and underwear

1. Back up to the chair or bed where you will be undressing.
2. Undo your pants and let them drop to the floor.
3. Push your underwear down to your knees.
4. Keep your operated leg straight and lower yourself to sit on the chair or bed.
5. Use the reacher to help get your good leg and foot out of the pants and underwear. Next take your operated leg out of the clothing.
6. Use the reacher to move the pants and underwear off the floor so you do not trip over the clothes.



Putting on socks

Use a sock aid to put on socks.

1. Sit on a chair or bed. Slide the sock all the way onto the sock aid.
2. Hold the cords and drop the sock aid in front of your foot. It is easiest to do this if your knee is bent.
3. Slip your foot into the sock aid.
4. Straighten your knee, point your toe, and pull the sock on.
5. Keep pulling until the sock is on your foot and the sock aid hangs free.



Putting on shoes

Use a long-handled shoehorn to put on shoes.

1. Sit on a chair or bed.
2. Wear sturdy shoes or shoes with Velcro® closures or elastic shoelaces. **DO NOT** wear high heeled shoes or shoes without backs.
3. Use the long-handled shoehorn to slide your shoes in front of your feet.
4. Put the shoehorn inside the shoe against the back of the heel. Line up the curve of the shoehorn with the inside curve of the shoe heel.
5. Lean back if you need to, lift your leg, and put your toes in your shoe.
6. Step down into your shoe and slide your heel down the shoehorn.



Getting in and out of the car

1. Have someone move the front passenger seat all the way back to allow more legroom.
2. Lean the seat back if needed.
3. If you have cloth seat covers, put a plastic trash bag on the seat cushion to help you slide once you are seated.
4. Using your walker, back up to the front passenger seat.
5. Steady yourself with one hand on the walker.
6. With your other hand, reach back for the seat and lower yourself down, keeping your operated leg straight out in front of you as shown in **Figure 1**, below. Be careful not to hit your head when getting in.
7. Turn frontward and lift your operated leg into the car as shown in **Figure 2** below.
8. Put the seat back up in a sitting position if you leaned it back.
9. To get out of the car, reverse these steps.

Figure 1

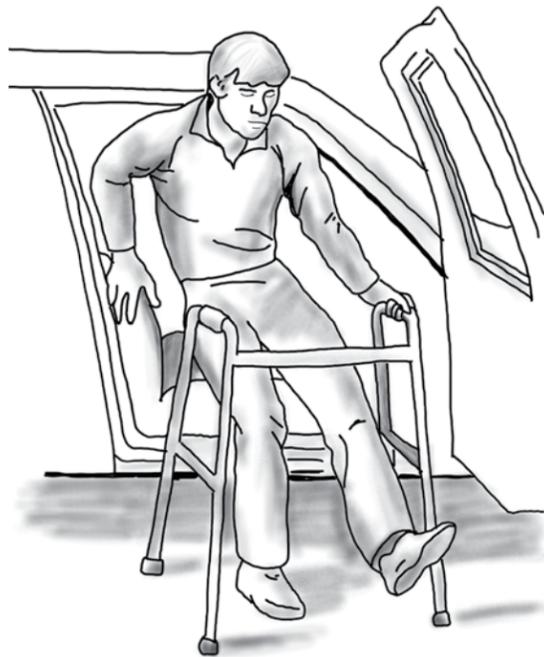
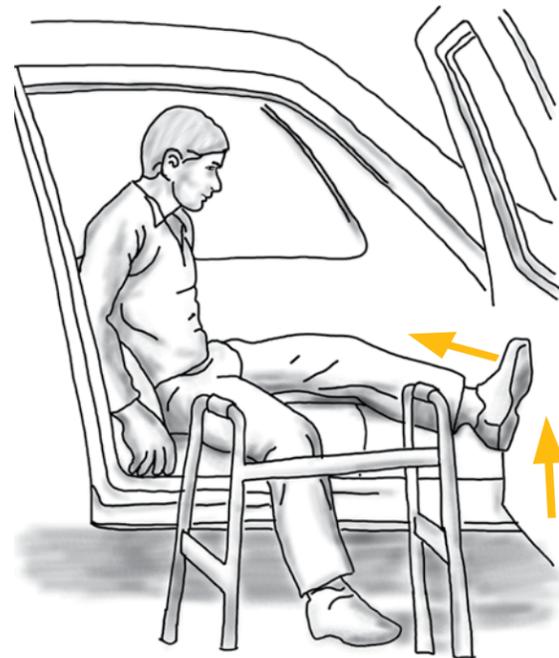


Figure 2



Going up and down stairs

Do not go up and down stairs until your doctor or therapist says it is okay.

An easy way to remember which leg goes first is: up with the good, down with the bad.

Going up stairs

1. Using the handrail for support, start by placing your good leg up on the first step.
2. Bring the operated leg (bad leg) up to the same step.
3. Repeat until you reach the top.
4. **DO NOT** climb the stairs in the normal foot over foot way until your surgeon or therapist tells you it is safe.

Going down stairs

1. Using the handrail for support, place your operated leg (bad leg) down on the first step.
2. Bring your good leg down to the same step.
3. **DO NOT** go down the stairs in the foot over foot way until your surgeon or therapist tells you that it is safe.

