

Exercises: Pre-surgery Hip and Knee Patients

Pre-Operative Exercises: Prior to surgery, initiate upper extremity exercises as tolerated to prepare for surgery. Practicing exercises prior to surgery will prepare you mentally and physically for the exercises to be done post-surgery. Also, maintain an active lifestyle.

SEATED SCAPULAR RETRACTION

Sets: **3** | Reps: **10** | Hold: **5sec**

Daily: **1** | Weekly: **7**

Setup: Begin sitting in an upright position

Movement: Gently squeeze your shoulder blades together, relax, and then repeat.

Tip: Make sure to maintain good posture during this exercise.



SEATED CHAIR PUSH UPS

Sets: **1** | Reps: **10** | Hold: **5sec**

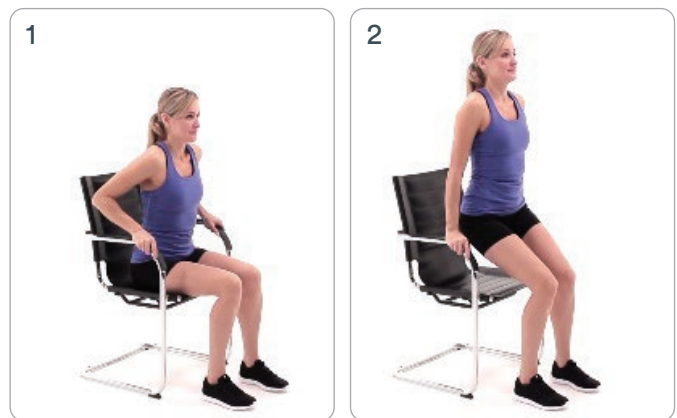
Daily: **1** | Weekly: **7**

Start with one set of 10 reps, increase hold and number of sets as tolerated.

Setup: Begin sitting upright with your hands resting on the armrests of the chair.

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 this exercise.



Exercises: Pre-surgery Hip and Knee Patients continued

WALL PUSH UP

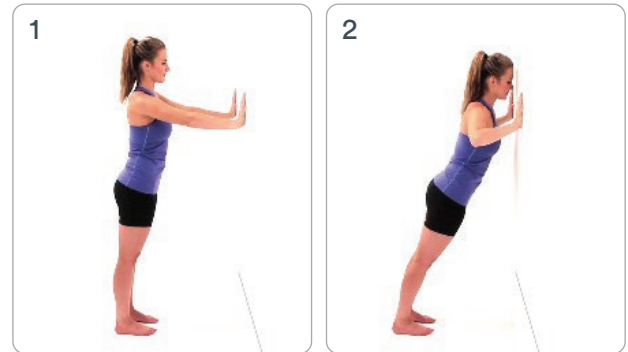
Sets: **1** | Reps: **10** | Daily: **1** | Weekly: **7**

Start with one set of 10 reps, increase number of sets as tolerated.

Setup: Begin in a standing upright position with your arms straight and your hands resting on a wall at shoulder height.

Movement: Bend your elbows, lean your body toward the wall, then push yourself back into the starting position and repeat.

Tip: Make sure to bend only at the elbows and keep the rest of your body straight during the exercise.



SEATED SHOULDER OVERHEAD PRESS WITH DUMBBELLS WITH PURSED LIP BREATHING

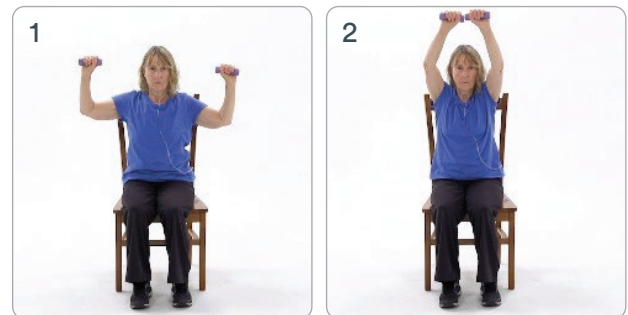
Sets: **1** | Reps: **10** | Daily: **1** | Weekly: **7**

Start with one set of 10 reps, increase hold and number of sets as tolerated.

Setup: Begin sitting upright in a chair with your elbows bent, holding a dumbbell in each hand and your feet resting on the ground. Breathe in through your nose.

Movement: Lift the dumbbells to your shoulders with your elbows at a 90-degree angle, then slowly press them overhead, while blowing out through pursed lips, as if you are blowing out a candle. Lower your arms to starting position, while breathing in through your nose. Repeat.

Tip: Make sure the exhalation is about twice as long as the inhalation. Make sure to keep your back straight during the exercise.



Exercises: Pre-surgery Hip and Knee Patients continued

SUPINE HIP ABDUCTION

Sets: **1** | Reps: **10** | Daily: **1** | Weekly: **7**

Start with one set of 10 reps, increase hold and number of sets as tolerated.

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 bed and do not move your upper body during this exercise.



SUPINE HEEL SLIDE

Sets: **1** | Reps: **10** | Hold: **5sec**

Daily: **3** | Weekly: **7**

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

Movement: Slowly slide one heel on the bed/ flat surface toward your buttocks until you feel a stretch, then slide it back down and repeat.



SUPINE QUADRICEPS SETS

Sets: **1** | Reps: **10** | Hold: **5sec**

Daily: **3** | Weekly: **7**

Setup: Begin lying on your back on a bed or flat surface with your legs straight.

Movement: Tighten the muscles in the thigh of your surgical leg as you straighten your knee. Hold, then relax and repeat.

Tip: Make sure to keep your toes pointing toward the ceiling during the exercise. Try to flatten the back of your knee towards the bed.



Exercises: Pre-surgery Hip and Knee Patients continued

SUPINE ANKLE PUMPS

Sets: **1** | Reps: **10** | Daily: **3** | Weekly: **7**

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.



SUPINE GLUTEAL SETS

Sets: **1** | Reps: **10** | Hold: **5sec**

Daily: **3** | Weekly: **7**

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.



Post-surgical Precautions

Whether you've had hip or knee replacement surgery, the following precautions may be necessary.

Mobility

- You may need to use a walker, cane or crutches for the first 2-12 weeks following surgery.
- For three months after your surgery, be careful about leg movements and how you position your leg. Your physician or therapist will give you guidance about what you can and cannot do.
- When going up stairs, raise the unaffected leg, then the affected leg, and then your crutches/cane. (Remember: UP WITH THE GOOD!)
- When going down the stairs, lower the device (crutches/cane) first, then the affected leg, and then the unaffected leg. (Remember: DOWN WITH THE BAD!)
- When traveling by car, have the car seat pushed back before getting in. Use a firm cushion to raise the seat height. Follow the instructions given by your therapist when entering and exiting a car.
- We recommend that you consult with your physician before driving yourself.

Sitting and Lying Down

- Do not sit on low chairs, low stools or low toilet seats. Use a firm cushion as necessary to raise the height of the chair seat.
- Only sit in chairs that have arms. When you get up from a chair, move to the edge and use the chair arms to help you stand up. Place your affected leg in front. Then push up from behind with the good leg, still keeping the affected leg in front as you stand.

In the Bathroom

- **A high-rise toilet is suggested for your use.**
- A walk-in shower with a rubber non-slip mat and safety-grab bar is highly suggested. Do NOT sit in the tub.
- Use a long-handled sponge and a handheld shower hose to wash and rinse those hard-to-reach places!
- To dry off your feet, use a towel wrapped around a reacher or long handled shoe horn.

Other

- You may participate in sports activities ONLY after your physician has given approval to do so. Avoid any activity that involves start-stop, twisting or impact stress, excessive bending, lifting or pushing heavy objects.

Exercises: Post-surgery and Early Stage of Rehab for Hip and Knee Replacements

SUPINE ANKLE PUMPS (START DAY OF SURGERY)

Sets: **1** | Reps: **10** | Daily: **3** | Weekly: **7**

Setup: Begin lying on a bed or flat surface 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.



SUPINE GLUTEAL SETS (START DAY OF SURGERY)

Sets: **1** | Reps: **10** | Hold: **5sec**
Daily: **3** | Weekly: **7**

Setup: Begin lying on a bed or flat surface 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.



Exercises: Post-surgery and Early Stage of Rehab for Hip and Knee Replacements continued

SUPINE HEEL SLIDE (START DAY OF SURGERY)

Sets: **1** | Reps: **10** | Hold: **5sec**
Daily: **3** | Weekly: **7**

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

Movement: Slowly slide one heel on the bed/ flat surface toward your buttocks until you feel a stretch, then slide it back down and repeat. (For the 1st two weeks after total knee replacement, try not to bend the knee past 90 degrees to allow for wound/ incisional healing.)

Tip: Make sure not to arch your low back or twist your body as you move your leg.

1



2



SUPINE QUADRICEPS SETS (START DAY OF SURGERY)

Sets: **1** | Reps: **10** | Hold: **5sec**
Daily: **3** | Weekly: **7**

Setup: Begin lying on your back on a bed or flat surface with your legs straight.

Movement: Tighten the muscles in the thigh of your surgical leg as you straighten your knee. Hold, then relax and repeat.

Tip: Make sure to keep your toes pointing toward the ceiling during the exercise. Try to flatten the back of your knee towards the bed.

1



2



Exercises: Additional Progression for Total Knee Replacement

Goal: to increase range of motion and improve muscle control through the entire range of the joint.

A home exercise program is beneficial after total knee replacement when pain is managed and activities do not cause prolonged increased pain or swelling from baseline (i.e., use pain and swelling as your guide).

SEATED LONG ARC QUAD

Sets: **1** | Reps: **10** | Daily: **3** | Weekly: **7**

Start after Day 3 or when Home Health PT instructs you to perform this exercise.

Setup: Begin sitting upright.

Movement: Slowly straighten one knee so that your leg is straight out in front of you. Hold, then lower it back to the starting position and repeat.

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



SEATED KNEE FLEXION AAROM

Sets: **1** | Reps: **10** | Hold: **5sec**

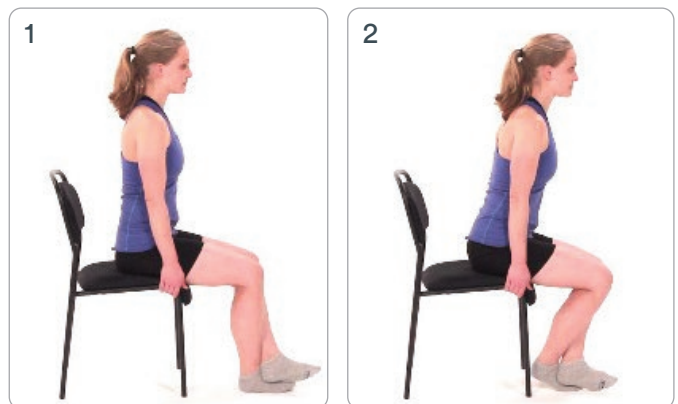
Daily: **3** | Weekly: **7**

Start after Day 3 or when Home Health PT instructs you to begin this exercise.

Setup: Begin sitting upright with both feet flat on the floor.

Movement: Cross one foot over the other then use it to slowly slide your foot backward under the chair until you feel a stretch. Hold this position. Return to the starting position and repeat.

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



Exercises: Additional Progression for Total Knee Replacement continued

SEATED PASSIVE KNEE EXTENSION

Sets: **1** | Reps: **10** | Hold: **10-30sec**

Daily: **3** | Weekly: **7**

Start after Day 3 or when Home Health PT instructs you to begin this exercise.

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: Make sure to keep your toes pointing toward the ceiling and keep your leg as relaxed as possible during the stretch.



STANDING MARCH WITH COUNTER SUPPORT

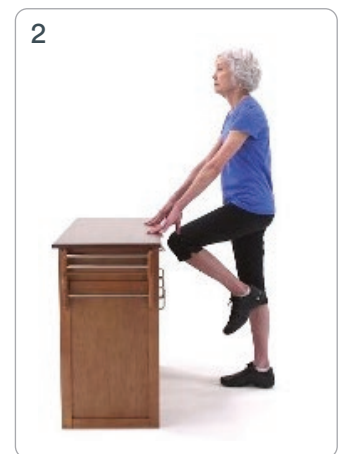
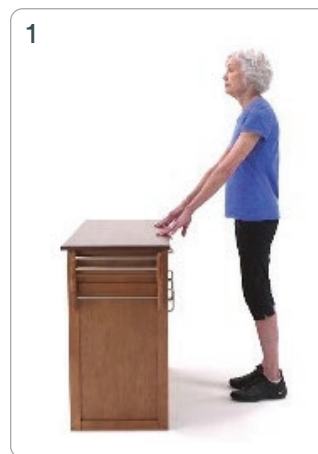
Sets: **1** | Reps: **10** | Daily: **3** | Weekly: **7**

Start after Day 3 or when Home Health PT instructs you to begin this exercise.

Setup: Begin in a standing upright position with your hands resting on a counter.

Movement: Slowly lift one knee to waist height, then lower it back down and repeat.

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



Exercises: Additional Progression for Total Knee Replacement continued

STANDING PARTIAL SQUAT

Sets: **1** | Reps: **10** | Daily: **3** | Weekly: **7**

Start after Day 3 or when Home Health PT instructs you to begin this exercise.

Setup: Begin in a standing upright position with your feet slightly wider than shoulder width apart. Hold onto counter or stable object for support if needed.

Movement: Bend your knees and hips into a mini squat position, then straighten your legs and repeat. Do not bend too far down.

Tip: Make sure to keep your back straight and do not let your knees bend forward past your toes.



STANDING HIP ABDUCTION WITH COUNTER SUPPORT

Sets: **1** | Reps: **10** | Daily: **3** | Weekly: **7**

Start after Day 3 or when Home Health PT instructs you to begin this exercise.

Setup: Begin in a standing upright position with your hands resting on a counter.

Movement: Lift your leg out to your side, then return to the starting position and repeat.

Tip: Make sure to keep your moving leg straight and do not bend or rotate your trunk during the exercise. Use the counter to help you balance as needed.



Exercises: Additional Progression for Total Knee Replacement continued

HEEL TOE RAISES WITH COUNTER SUPPORT

Sets: **3** | Reps: **10** | Daily: **1** | Weekly: **7**

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 on heels and lift toes.

Tip: Make sure to keep your upper body upright and your weight over your big toes during the exercise.



STANDING KNEE FLEXION STRENGTHENING AT CHAIR

Sets: **1** | Reps: **10** | Daily: **3** | Weekly: **7**

Start after Day 3 or when Home Health PT instructs you to begin this exercise.

Setup: Begin in a standing upright position, holding onto a stable surface in front of you for support.

Movement: Slowly bend your knee, lifting your foot as far as possible, then lower it back to the floor and repeat.

Tip: Make sure to maintain your balance, keep your hips level, and back straight during the exercise.



Exercises: Additional Progression for Total Hip Replacement

Goal: to increase range of motion and improve muscle control through the entire range of the joint.

A home exercise program is beneficial after total hip replacement when pain is managed and activities do not cause prolonged increased pain or swelling from baseline (i.e., use pain and swelling as your guide).

SUPINE HIP ABDUCTION AROM

Start after Day 3 as tolerated.

Sets: **1** | Reps: **10** | Daily: **3** | Weekly: **7**

Setup: Begin lying on your back on a bed or flat surface with your feet slightly apart.

Movement: Slowly slide your surgical leg out to your side as tolerated, then return to the starting position and repeat.

Tip: Make sure to keep your toes pointing straight toward the ceiling and do not bring your feet together during the exercise.



STANDING HIP ABDUCTION WITH COUNTER SUPPORT

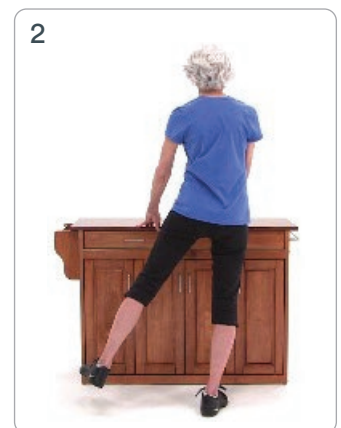
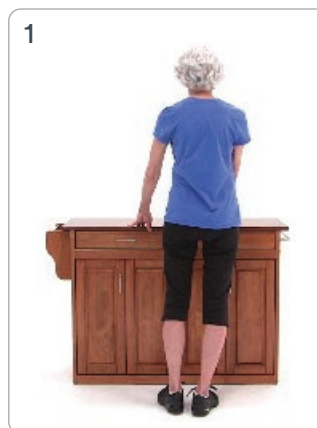
Start after Day 3 as tolerated.

Sets: **1** | Reps: **10** | Daily: **3** | Weekly: **7**

Setup: Begin in a standing upright position with your hands resting on a counter.

Movement: Lift your leg out to your side as tolerated, then return to the starting position and repeat.

Tip: Make sure to keep your moving leg straight and do not bend or rotate your trunk during the exercise. Use the counter to help you balance as needed.



Exercises: Additional Progression for Total Hip Replacement continued

HEEL TOE RAISES WITH COUNTER SUPPORT

Sets: **3** | Reps: **10** | Daily: **1** | Weekly: **7**

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 on heels and lift toes.

Tip: Make sure to keep your upper body upright and your weight over your big toes during the exercise.



MINI SQUAT WITH COUNTER SUPPORT

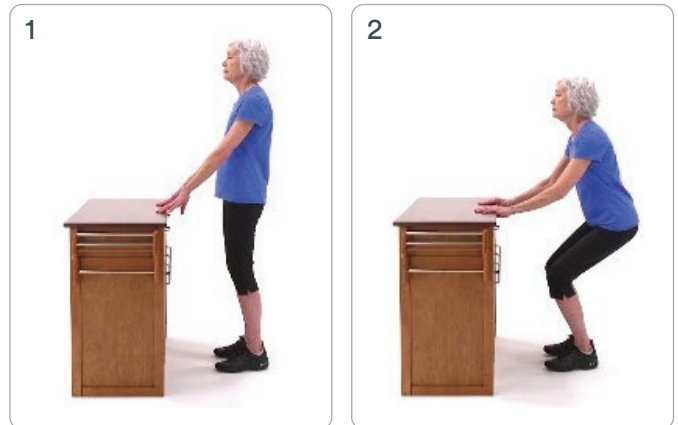
Start after Day 3 as tolerated. Do not go too deeply to squat.

Sets: **1** | Reps: **10** | Daily: **3** | Weekly: **7**

Setup: Begin in a standing upright position with your feet shoulder width apart and your hands resting on a counter.

Movement: Slowly bend your knees to lower into a mini squat position (Do not bend down too low). Hold briefly, then press into your feet to return to a standing upright position and repeat.

Tip: Make sure to keep your heels on the ground and use the counter to help you balance as needed. Do not let your knees bend forward past your toes or collapse inward.



STANDING MARCH WITH COUNTER SUPPORT

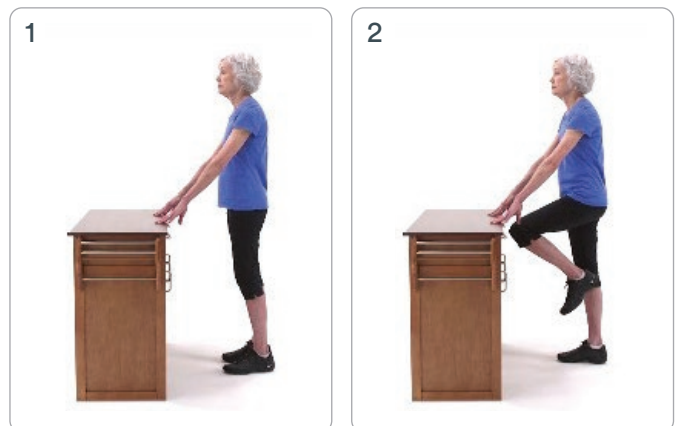
Start after 2 weeks as tolerated.

Sets: **1** | Reps: **10** | Daily: **3** | Weekly: **7**

Setup: Begin in a standing upright position with your hands resting on a counter.

Movement: Slowly lift one knee up (keeping it below waist height as tolerated), then lower it back down and repeat.

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



Exercises: Additional Progression for Total Hip Replacement continued

WALKING WITH A FRONT WHEEL WALKER – WEIGHT BEARING AS TOLERATED

If your doctor has instructed you to be **Weight Bearing as Tolerated**: When you stand or walk, place as much weight on your affected leg as is comfortable. Use pain as a guide for how much weight to put. If it feels painful, place less weight on your affected leg.

Using a walker can help you stay balanced and keep weight off of your affected leg. Be sure to follow any specific instructions from your healthcare provider.

- Begin standing with your walker in front of you, holding onto the handles of the walker.
- Push your walker forward at arms length, so the back legs of the walker are even with your toes.
- Step forward with your affected leg. Your foot should land in the frame of the walker. Only put as much weight as is comfortable on your affected leg and use your arms to support the rest of your body weight.
- Lastly, step through with your unaffected leg.
- Repeat this pattern as you walk, stepping one foot in front of the other.

Tips:

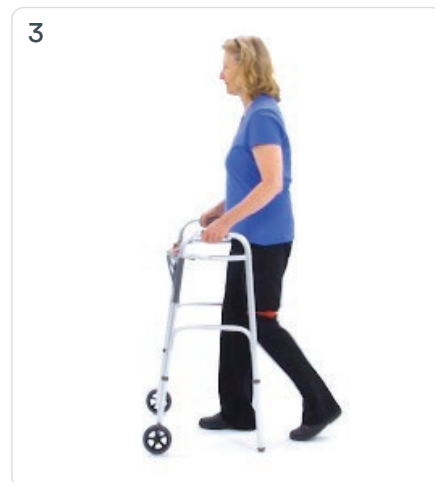
- Make sure all four legs of the walker are level on the ground before you take a step.
- Look forward as you walk. Do not look down at your feet.

Step 1: Move your walker forward.

Step 2: Step forward with your affected leg.

Only put a comfortable amount of weight on your affected leg.

Step 3: Step through with your unaffected leg.



Home Activities

The following information helps you understand how to change your clothing and get in and out of chairs, showers and commodes safely while your hip or knee is painful or less able to bend.



Pants and Underwear

Keep clothing loose and comfortable. It may be easier to use slip on shoes. Dress the surgical leg first. If you can't reach – a reacher may make it easier. Stand with walker and pull pants over the foot with the reacher and up to the hip.

When undressing, stand with the walker in front of you and pull down the pants and underwear. Sit in a chair and use a reacher to remove pants from legs if needed. Remove non-surgical leg first.

For Posterior Hip Precautions Only: Keep legs apart and do not bend past 90 degrees.



Socks

To help you reach your feet to put on socks, you may use a sock aid. Most patients use this for up to 4 weeks. Slide the sock on the sock aid. Make sure the heel is at the bottom of the device and the toe is tight up against the end. The top of the sock should not come over the top of the plastic piece. Holding onto the cords, swing the sock aid out in front of the foot of the operative leg. Slip your foot into the sock aid, pull up on the cord, sliding sock onto foot. You may put the sock on your non-surgical leg in your usual manner. To take the socks off, use the pin at the end of the reacher to hook the back of the heel and push the sock off you.

Home Activities continued



Shoes

Wear closed-toed slip-on shoes or use elastic shoelaces so you won't have to bend over to put the shoes on or tie the laces. Use a long-handled shoehorn to put on your shoes if needed.

Sitting on Chair/Toilet

When sitting down, slowly back up to the chair or toilet until you feel the back of your legs against it. Slide your surgical leg forward, then reach back for the chair one hand at a time. Slowly lower yourself onto the chair while looking in front of you and keeping the surgical leg outstretched in front of you. Do not hold onto the walker while lowering yourself.

For Posterior Hip Precautions Only: Keep legs apart and do not bend past 90 degrees.



Home/Work Management

Slide objects along the countertop rather than carrying them. Use a reacher to grasp objects on the floor. If you cannot use adaptive aids (long reachers, long-handled mop, long-handled dustpan, etc.) have someone else complete the chores for you. Consider using a walker bag/tray attached to the handle to carry items with a front wheel walker safely.

For patients with posterior hip precautions: You must always maintain the 90-degree forward bend precaution. Do not bend down to pick up objects.

Shower Transfer

If you cannot safely stand in a shower or have to climb into a tub in order to shower, please consult your therapist. Sidestep into shower, holding onto wall for support. Be sure you are stepping onto a non-slip surface (i.e., bathmat, non-slip strips, etc.). Reach back with one hand for the back of the shower chair. Sit down on the shower chair. Use a long-handled sponge and a shower hose to wash. You may bathe or shower as soon as your physician gives you permission.