Hip

Pre-operative and hospital-stay exercises

Exercise pain-management guide

Continue
Pain remains low during and after exercise. Continue mobility.

Caution
Pain remains moderate during and an hour after exercise. Proceed with caution.

Stop
Pain remains at higher levels during and following exercise for more than an hour. Stop.

1. Armchair pushup
Sit on a sturdy chair with arms. Grasp the arms of the chair. Push down on the chair arms, straightening your elbows so that you raise your buttocks off the seat of the chair. Hold for five seconds. Lower yourself slowly back into the chair. If your arms are weak at first, use your legs to help raise your buttocks off the chair.

2. Ankle pumps
Gently point your toes up toward your nose and down toward the surface. Do both ankles at the same time or alternate feet. Perform slowly.

3. Quad sets
Slowly tighten the thigh muscles of your legs, pushing your knees down on to the surface. Do both legs at the same time. A good quad set will result in the knees flattening against the surface and the heels slightly elevating off the surface. Hold for five counts.
Hip

Pre-operative and hospital-stay exercises

4. Gluteal sets
Squeeze your buttocks together as tightly as possible. Hold for five counts. Do not hold your breath.

5. Abduction and adduction
Slowly slide both legs out until they are hip-width apart. Keep your knee caps and toes pointing toward the ceiling. Slowly bring both legs back to the center until they meet.

6. Heel slides
Bend the knee of your surgical leg, keeping your heel on the surface. Hold for five counts.

7. Short arc quads
Place a rolled-up towel comfortably under your surgical knee. Make sure your heel is resting on the surface before beginning exercise. Point your toes toward your nose. Straighten your knee, keeping the back of your knee on the towel while elevating your heel off the surface. Work toward full straightening of your knee. Hold for two to three counts. Have your coach assist with lifting your heel if necessary.
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8. Supine straight leg raise
Lie on your back with your non-surgical knee bent. Raise your surgical leg to the thigh level of your bent leg. Return to your starting position.

9. Long arc quad stretch
Sit on the edge of a chair. Keep both knees bent at 90 degrees. Slowly straighten the knee of your surgical leg as much as possible. Hold for three to five seconds. Keep your toes pointed toward the sky. Slowly bend your knee back 90 degrees.

Hip precautions
1. Do not bend your hip greater than 90 degrees.
2. Do not cross your legs.
3. Do not twist/pivot on your new hip.
4. Do not extend your leg backward if an anterior approach was used during your surgery.

Stair/step training
1. The “good” (non-surgical) leg goes UP first.
2. The “bad” (surgical) leg goes DOWN first.
3. Cane stays on the level of the surgical leg.

Resting positions
To stretch your hip to a neutral position:
1. Lie/sleep flat on your back in bed.
2. Do NOT use pillows under your knees.
At-home exercises

Exercise pain-management guide

1. Clam shells
   Lie on your side with your knees bent, feet together. Lift your top knee upward. Lower and repeat. Repeat the exercise lying on the other side.

2. Side-lying straight leg raise
   Lie on your non-surgical side with your knees straight, a pillow between your legs. Rotate your top leg and lift it upward. Lower your leg and repeat. Repeat the sets with your other leg.
   **COACH’S NOTE** Keep the hips and pelvic area stable. Keep the leg rotated upward.

3. Bridging
   Lie on your back with your knees bent. Lift your buttocks off the floor. Return to your starting position.
   **COACH’S NOTE** Maintain a neutral spine.

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*Continue mobility.*

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*Proceed with caution.*

Stop
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At-home exercises

4. Knee extension long arc quad, while sitting
Sit, with your surgical leg bent to 90 degrees, as shown. Straighten your leg at the knee. Return to your starting position.

5. Standing heel/toe raises
Holding on to an immovable surface, rise up on your toes slowly for five counts. Return your foot to being flat on the floor and lift your toes from the floor.

**COACH’S NOTE** When raising up on your toes, do not lean backward or forward.

6. Standing knee flexion
Holding on to an immovable surface, bend your surgical leg up behind you. Straighten to a full stand, with weight on both legs.

**COACH’S NOTE** The tendency is for the hip to come forward as the knee is bent. Maintain a straight line from the shoulder to knee.

7. Standing and rocking
Holding on to an immovable surface, step your non-surgical leg forward. Rock your weight back and forth over your surgical leg, keeping your knee straight.

**COACH’S NOTE** The tendency is for the affected knee to bend. Maintain a straight knee on the surgical leg and equal weight bearing through both legs.

8. Standing partial squats
Holding on to an immovable surface, slowly bend your knees. Keep both feet flat on the floor.

**COACH’S NOTE** When standing up, do not lean backward.
Knee

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1. Armchair pushup
Sit on a sturdy chair with arms. Grasp the arms of the chair. Push down on the chair arms, straightening your elbows so that you raise your buttocks off the seat of the chair. Hold for five seconds. Lower yourself slowly back into the chair. If your arms are weak at first, use your legs to help raise your buttocks off the chair.

2. Ankle pumps
Gently point your toes toward your nose and down toward the surface. Do both ankles at the same time or alternate feet. Perform slowly.

3. Quad sets
Slowly tighten the thigh muscles of your legs, pushing your knees down on the surface. Do both legs at the same time. A good squat set will result in your knees flattening against the surface and your heels slightly elevating off the surface. Hold for five counts.
Knee

Pre-operative and hospital-stay exercises

4. Gluteal sets
Squeeze your buttocks together as tightly as possible. Hold for five counts. Do not hold your breath.

5. Abduction and adduction
Slowly slide both legs out until they are hip width apart. Keep your kneecaps and toes pointing toward the ceiling. Slowly bring both legs back to the center until they meet.

6. Heel slides
Bend the knee of your surgical leg, keeping your heel on the surface. Hold for five counts.

7. Short arc quads
Place a rolled-up towel comfortably under your surgical knee. Make sure your heel rests on the surface before beginning the exercise. Point your toes toward your nose. Straighten your knee, keeping the back of your knee on the towel while elevating your heel off the surface. Work toward full straightening of your knee. Hold for two to three counts. Have your coach assist with lifting your heel, if necessary.
8. **Extension stretch**

Place a rolled-up towel under your ankle (surgical leg). Apply an ice pack to your surgical knee. Sit back, and try to relax for 10 minutes. A 5-pound weight may be added to your knee as you progress with this exercise.

**Stair/step training**

1. The “good” (non-surgical) leg goes UP first.
2. The “bad” (surgical) leg goes DOWN first.
3. The cane stays on the level of the surgical leg.

**Resting positions**

1. Place a pillow lengthwise to mid-thigh under your leg for elevation.
2. Lie flat on your back in bed.
3. Do not sit with your knee bent for prolonged periods of time.
Knee

At-home exercises

1. Side lying straight leg raise
   Lie on your side with your knees straight. Rotate your top leg and lift it upward. Lower your leg and repeat. Repeat the sets with your other leg.
   COACH’S NOTE Keep hips and pelvic area stable. Keep leg rotated upward.

2. Prone straight leg raise
   Lie face down, your knee straight on your surgical leg. Lift your surgical leg upward. Return to your starting position.

3. Supine straight leg raise
   Lie on your back with your non-surgical knee bent. Raise your surgical leg to the thigh level of your bent leg. Return to your starting position.

4. Knee extension long arc quad
   Sit, with your surgical leg bent to 90 degrees, as shown. Straighten your leg at the knee. Return to your starting position.

Knee

Continue
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10–20 Repetitions
Perform each exercise twice a day

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Knee

At-home exercises

5. Bridges
Lie on your back with your knees bent. Lift your buttocks off the floor. Return to your starting position.

**COACH’S NOTE** Maintain a neutral spine.

6. Standing heel raise
Stand with both feet shoulder-distance apart. Raise up on your heels. Lower and repeat.

7. Standing toe raise
Stand with both feet shoulder-distance apart. Raise your toes. Lower and repeat.

8. Mini-squat
Stand with feet shoulder-distance apart. Hold on to a chair or counter. Slowly bend your knees to 90 degrees. Hold for five seconds, and return to a standing position. Repeat.

**COACH’S NOTE** Maintain proper lower back alignment.