





THE CAMALIER BUILDING, SUITE 506 · 10215 FERNWOOD ROAD · BETHESDA, MD 20817 · TEL (301) 530-1010 · FAX (301) 897-8597

# OrthoBethesda Therapy Services Total Knee Replacement Home Exercise Program

### **General Instructions:**

• Initially perform 10 repetitions of each exercise, 3 times per day. Increase to 20 repetitions, 3 times per day as tolerated. Discontinue the exercises and contact your physician or physical therapist if you experience a significant increase in pain after exercise.

#### Lying on Back:

- 1. Ankle Pumps
- 2. Quad Sets
- 3. Glute Sets
- 4. Heel Slides
- 5. Straight Leg Raise
- 6. Short-Arc Quad

## Side-Lying:

- 1. Knee Flexion
- 2. Hip Abduction

## Lying on Stomach (if tolerated):

- 1. Knee Flexion
- 2. Knee Extension ("Knee Push-Up")
- 3. Hip Extension (straight knee)
- 4. Hip Extension (bent knee)

#### <u>Sitting:</u>

- 1. Ankle Pumps
- 2. Hamstring Stretch
- 3. Long-Arc Quads
- 4. Knee Flexion

#### **Standing:**

- 1. Heel Raises
- 2. Hip Flexion
- 3. Hip Extension
- 4. Hip Abduction
- 5. Knee Flexion
- 6. Mini Knee-Lunges

## **Exercise List**

# Lying on Back:

1. Ankle Pumps: Bend your foot up and down.





2. Quad Sets: Tighten the muscles on the front of the thigh by pushing the back of your knee into the bed. Hold for 5 seconds, then relax. You may place a towel under your knee as needed.





3. <u>Glute Sets</u>: Squeeze your buttocks together. Hold for 5 seconds, then relax. If you are able to lie on your stomach, the exercise can also be performed from this posture.



4. <u>Heel Slides</u>: Bend your knee by sliding the heel of your foot toward your hips. Hold for 5-10 seconds, then return to the starting position.



5. <u>Straight Leg Raise</u>: Bend the hip and knee of the non-surgical leg (to reduce stress on the low back) so that the foot is flat on the bed. On the surgical leg, tighten the muscles on the front of the thigh and point the toes up toward the ceiling. Keep this knee straight and raise it to the height of the non-surgical thigh. Hold for 2-5 seconds, then slowly lower.





6. <u>Short-Arc Quad</u>: Place a folded pillow or rolled towel under the knee so that the knee is bent and the heel rests on the bed. Straighten your knee by tightening the muscles on the front of your thigh. Hold for 5 seconds, then slowly lower.





#### Side-Lying:

1. <u>Knee Flexion</u>: Lay on the side of your surgical leg. Bend the knee back by sliding it along the bed. Hold for 5 seconds, then straighten your knee.





2. <u>Hip Abduction</u>: Lay on the side of your non-surgical leg, with your surgical leg straight and in line with your torso. Lift the top leg up toward the ceiling. Hold for 5 seconds, then slowly lower. You may place a pillow between your legs to keep your legs from crossing.





## Lying on Stomach (if tolerated):

1. <u>Knee Flexion</u>: Bend your knee up toward your buttocks. Hold for 5 seconds, then slowly lower.





2. <u>Knee Extension ("Knee Push-Up")</u>: Bend your ankles up so that the bottoms of your toes are pressing into the bed. Tighten your thigh muscles and lift your knees off of the bed. Hold for 5 seconds, then relax.





3. <u>Hip Extension (straight knee)</u>: Keeping your knee straight, lift the leg up off of the bed. Hold for 5 seconds, then slowly lower.





4. <u>Hip Extension (bent knee)</u>: Keeping your knee bent 90°, lift the leg up off of the bed. Hold for 5 seconds, then slowly lower.





### Sitting:

1. Ankle Pumps: Rock the foot from heel to toe.





2. <u>Hamstring Stretch</u>: Keep your surgical leg out in front of you with the heel on the floor and toes pointing up. Keeping your knee straight, slowly bend forward from the hips so that your chest moves toward your knee. Hold for 10 seconds, then raise your trunk back to upright.





3. <u>Long-Arc Quads</u>: Lift your lower leg off of the floor by straightening your knee as much as possible. Hold for 5 seconds, then slowly lower.





4. <u>Knee Flexion</u>: Slide your heel back behind you, then lean your trunk forward from the hips. Hold for 5 seconds, then return to the starting position.





o You may use your non-surgical leg to help push the surgical leg further back.



# Standing (use solid countertop/sink for support):

1. Heel Raises: Raise up onto your toes so that your heels are off the ground. Lower yourself slowly.





2. <u>Hip Flexion</u>: Lift your surgical leg in the air as high as possible by flexing at the hip and knee. Hold for 5 seconds, then lower slowly.



3. <u>Hip Extension</u>: Keeping your knee straight and toes facing forward, push the leg back behind you. Hold for 5 seconds, then slowly return to the starting position.



4. <u>Hip Abduction</u>: Keeping the knee straight, lift the leg out to the side. Hold for 5 seconds, then slowly lower. Keep your hips level throughout the exercise.



5. <u>Knee Flexion</u>: Lift your foot in the air behind you by bending your knee as much as possible. Hold for 5 seconds, then slowly lower.



6. <u>Mini Knee-Lunges</u>: Stand with your surgical leg in front of the non-surgical leg, roughly shoulder-width apart. Lean forward, bringing weight over the surgical knee and allowing it to bend. Hold for 5 seconds then return to an upright position.



