

KNEE REPLACEMENT THERAPY

BEFORE SURGERY

Especially if you have motion or strength deficits, consider a supervised or home-based exercise program (prehab). Our staff can arrange a PT consult for you that you can bring, or is sent, to an outpatient physical therapy center. Alternatively, see the “Knee Replacement Home Exercise Program Before Surgery (Prehab)” information below and start a self-directed home program.

Consider borrowing or purchasing an ice machine. Our DME department has ice machines. They can also be purchased online. A device such as the Polar Active Ice 3.0 or similar is reasonable. Compare options and purchase or borrow one if possible. Ice does help after surgery.

THE DAY OF SURGERY

You will receive a walker if you do not have one and be taught how to use it.

See the “Getting Around Safely with Your Walker” information below to learn more.

You will be walking and going up and down stairs right after surgery.

THE FIRST 2 WEEKS AFTER SURGERY

Early therapy after a knee replacement is focused on mobilization, inflammation control, muscle activation and knee range of motion. Controlling swelling decreases pain and improves motion.

There are many things that can make the recovery and final outcome better after surgery:

 Your Personalized Postoperative Medicines	 Mobilizing	 Ice	 Gentle Muscle Activation	 Knee Range of Motion (ROM)
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Your Personalized Postoperative Medicines

The medicines we give you are all working in concert to help control pain and inflammation. The goal is to limit narcotic pain medicine, keep you comfortable, and limit inflammation. You will learn about your personalized postop medications. These are tailored to your individual circumstances. You will go home with a detailed medicine plan. It is important to adhere to this plan.

Gentle Muscle Activation



Simple exercises detailed in these instructions, performed regularly, will help activate muscles and decrease problems.

Knee Range of Motion (ROM)



The knee is a hinge joint. If you don't move it through appropriate range of motion the soft tissues will get stiff. Early motion is important. In the first 2 weeks, do not force aggressive motion. Do not sit for long times with a pillow behind the knee. Your goal is to get ROM 0-90 by the end of week 1, and 0-110 by the end of week 2.

Mobilizing



Walking frequently for short distances according to these instructions will help get you going and prevent problems.



Ice

Ice helps. Use packs or an ice machine regularly as per the below instructions:

Begin icing when you arrive home. Consider purchasing an ice machine. It does make icing easier. If not possible, ice packs will work as well. Begin icing for about an hour on and an hour off throughout the day, or for about 20-30 minutes every hour. Avoid freezing your skin by ensuring a pad is between the device and your skin (ace wrap will be your early pad). After your icing sessions, perform the THERAPY SET below.



Therapy Set

This therapy set sequence will be your therapy routine over the first 2 weeks after surgery.

See the KNEE REPLACEMENT FIRST 2 WEEK HOME EXERCISE PROGRAM BELOW FOR INSTRUCTIONS

KNEE REPLACEMENT: FIRST 2 WEEKS AFTER SURGERY HOME EXERCISE PROGRAM

GENERAL INSTRUCTIONS

The exercises provided are the foundation of your home program for the first 2 weeks after surgery. Begin them the day after surgery. Plan to complete this sequence hourly while awake after icing, and at least 5 times a day.

In addition to the exercises, ensure you are walking short distances frequently throughout the day. A short walk (30-50 steps) every hour while awake for the first 2 weeks is a good amount.

Ice the knee as directed.

Discontinue the exercises and contact your physician or physical therapist if you experience a significant increase in pain after exercise.

As you perform these exercises, gradually try to bend and straighten your knee a little further with each rep.

THERAPY SET

1. Ankle Pumps : 3 sets of 10 reps per side
2. Quad Sets : 3 sets of 10 reps per side
3. Glute Squeezes : 3 sets of 10 squeezes

Walk 30 – 50 steps

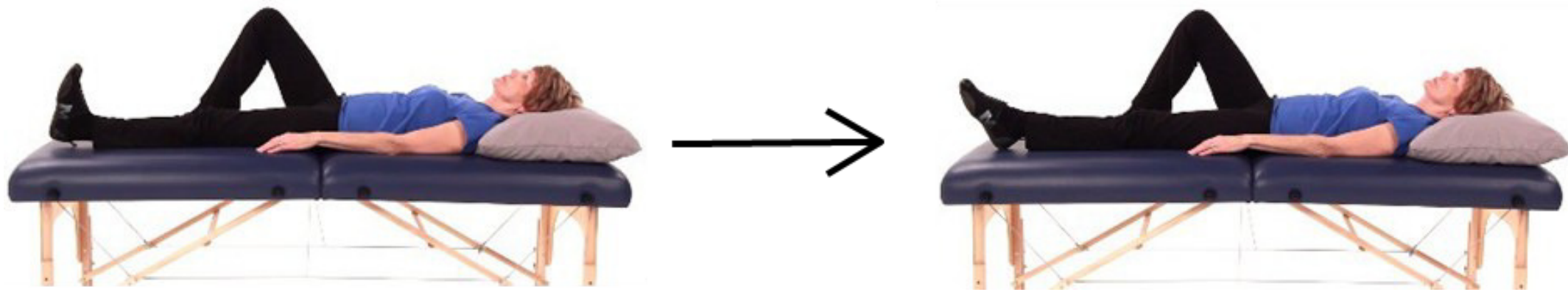
4. Heel Slides : 10 reps, 10 second hold (flexion stretch)
5. Knee Extension Stretch (Heel Hang) : 3 minutes

ANKLE PUMPS

Ankle pumps are a simple, effective exercise to prevent blood clots, reduce swelling, and maintain joint mobility

HOW TO PERFORM THE EXERCISE

1. Lie on your back
2. Flex your ankle up and down
3. Complete 3 sets of 10 reps per side



QUAD SETS

HOW TO PERFORM THE EXERCISE

1. Lie on your back with your leg straight and a towel roll placed behind your knee
2. Press your knee down into the towel, tightening your thigh muscle
3. Hold for 5 seconds then relax.
4. Complete 3 sets of 10 reps per side



GLUTE SQUEEZE

HOW TO PERFORM THE EXERCISE

1. Lie on your back with your legs straight
2. Squeeze your buttocks
3. Hold for 5 seconds
4. Complete 3 sets of 10 squeezes



WALK 30 – 50 STEPS !!!!!!!!!!!!!!!

HEEL SLIDES

HOW TO PERFORM THE EXERCISE

1. Lie on your back with your surgical leg straight
2. Loop a belt, towel, or bed sheet around your involved foot
3. Using strap to assist, bend your surgical knee by sliding your heel towards your buttocks.
4. Once you feel a gentle stretch, pump your ankle back and forth for a count of 10
5. Relax and return your knee to the original position
6. Complete 10 reps with a 10 second hold per side



KNEE EXTENSION STRETCH

HOW TO PERFORM THE EXERCISE

1. Lie on your back with a rolled-up towel under your ankle
2. Attempt to fully relax your surgical leg, allowing gravity to stretch your knee into a more straightened position.
3. Complete holding for 3 minutes per side



AFTER THE FIRST 2 WEEKS AFTER SURGERY

If you are progressing well, you have had your inflammation decrease such that you can begin a more aggressive therapy regimen with your therapist. The therapist will help you add exercises and increase ROM goals. Ice will still help and should continue regularly.

TOTAL KNEE REPLACEMENT PREHAB HOME EXERCISE PROGRAM

GENERAL INSTRUCTIONS

This exercise program addresses common strength and mobility deficits prior to total knee replacement.

Discontinue the exercises and contact your physician or physical therapist if you experience a significant increase in pain after exercise.

As you perform these exercises, gradually try to bend and straighten your knee a little further with each rep. The goal is to enter surgery with as much knee motion as possible, which will help support your recovery after surgery.

EXERCISE LIST

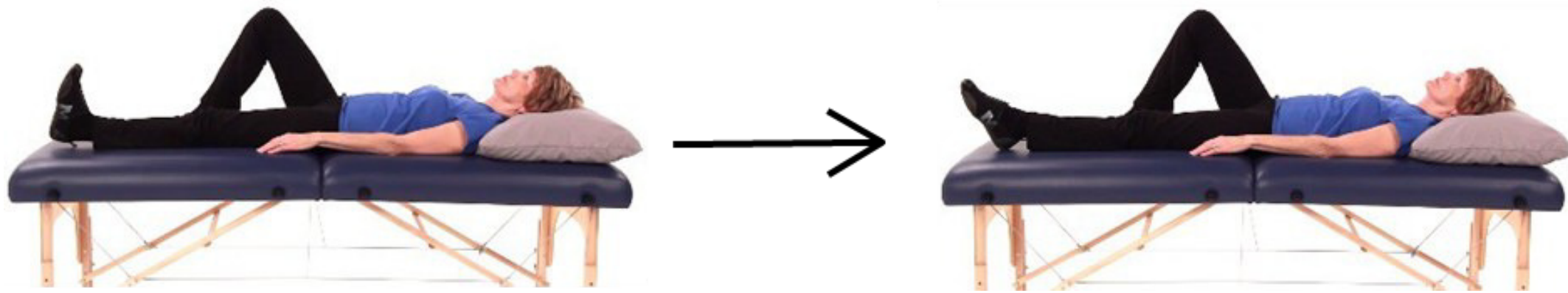
1. Ankle Pumps
2. Hamstring Stretch
3. Calf Stretch
4. Glute Squeeze
5. Knee Extension Stretch
6. Quad Sets
7. Short Arc Quad
8. Straight leg raises
9. Heel Slides

ANKLE PUMPS

Ankle pumps are a simple, effective exercise to prevent blood clots, reduce swelling, and maintain joint mobility

HOW TO PERFORM THE EXERCISE

- 1.Lie on your back
- 2.Flex your ankle up and down 20 times per side



HAMSTRING STRETCH

HOW TO PERFORM THE EXERCISE

- 1.Begin in a seated position with surgical leg supported on bed/table and opposite foot resting on floor
- 2.Keep back straight and slowly lean forward until you feel stretch behind leg
- 3.Keep knee as straight as possible

Repetition: 3 | Hold for 30 seconds each



CALF STRETCH

HOW TO PERFORM THE EXERCISE

- 1.Begin in a seated position with surgical leg supported on bed/table and opposite foot resting on floor
- 2.Place a towel/sheet around the ball of your foot and pull your ankle back until a stretch is felt in your calf area
- 3.Keep your knee in a straightened position during the stretch

Repetition: 3 | Hold for 30 seconds each



GLUTE SQUEEZE

HOW TO PERFORM THE EXERCISE

1. Lie on your back with your legs straight
- 2.Squeeze your buttocks
- 3.Hold for 5 seconds

Repetitions: 10 | Sets 3 | Hold for 5 seconds each



KNEE EXTENSION STRETCH

HOW TO PERFORM THE EXERCISE

1. Lie on your back with a rolled-up towel under your ankle
2. Attempt to fully relax your surgical leg, allowing gravity to stretch your knee into a more straightened position.

Repetition: 3 | Hold for 3-5 minutes



QUAD SETS

HOW TO PERFORM THE EXERCISE

1. Lie on your back with your leg straight and a towel roll placed behind your knee
2. Press your knee down into the towel, tightening your thigh muscle
3. Hold for 5 seconds then relax.

Repetitions: 10 | Sets 3 | Hold for 5 seconds each



SHORT ARC QUAD

HOW TO PERFORM THE EXERCISE

1. Lie on your back with a rolled-up towel behind your knee
2. Slowly straighten your surgical knee by lifting your foot while keeping your knee on the rolled towel
3. Relax and return your knee back to the original position

Repetition: 10 | Sets: 3 | Hold for 5 second each



STRAIGHT LEG RAISES (SLR)

HOW TO PERFORM THE EXERCISE

1. Lie on your back with your surgical leg straight
2. Keep the opposite knee bent with the foot planted on the surface
3. Tighten your thigh muscle and raise your leg with a straight knee
4. Relax and return your leg back to the original position

Repetitions: 10 | Sets 3 | Hold for 5 seconds each



HEEL SLIDES

HOW TO PERFORM THE EXERCISE

- 1.Lie on your back with your surgical leg straight
- 2.Loop a belt, towel, or bed sheet around your involved foot
- 3.Using strap to assist, bend your surgical knee by sliding your heel towards your buttocks.
- 4.Once you feel a gentle stretch, pump your ankle back and forth for a count of 10
- 5.Relax and return you knee to the original position

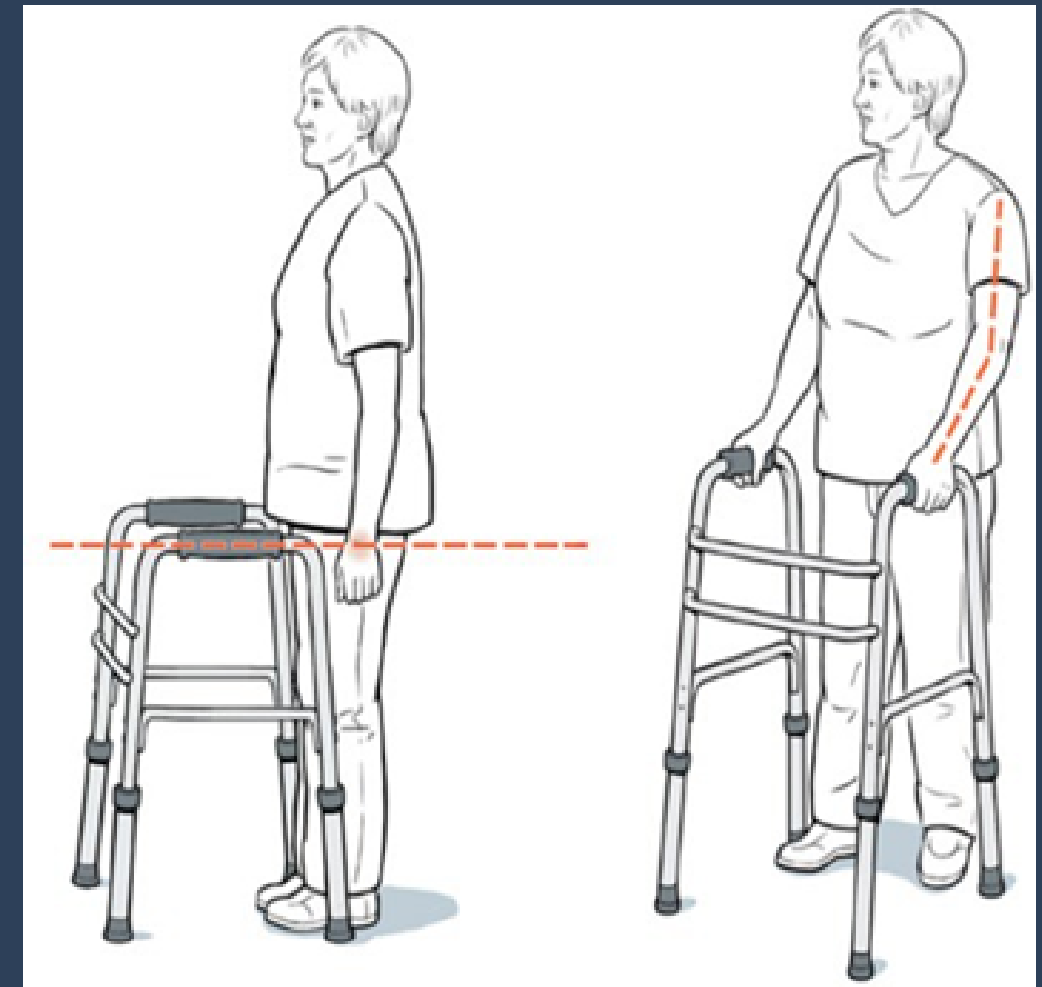
Repetition: 10 | Hold for 10 second each



GETTING AROUND SAFELY WITH YOUR WALKER

GENERAL TIPS AND INSTRUCTIONS

- You should be standing comfortably inside of the walker, guided by both hands on either side. If the walker has wheels, keep them on the ground at all times and push it like a shopping cart
- Wear appropriately fitted, low-heeled shoes. Do not wear slippers or high heels
- Be aware of your surroundings while walking- this includes uneven surfaces, rugs, wet floors, etc.
- It is NOT recommended to use a walker for ascending or descending stairs due to safety concerns.



FIRST SET UP AND FITTING

Standing up straight with your arms at your side, the walker handles should align with the bend of your wrist. When your hands are on the grips, there should be a slight bend in your elbows.

STANDING UP

1. Scoot forward in the chair to make it easier to stand
2. Place the walker out in front of the chair
3. Place both feet flat on the ground and both hands on the armrest (or seat) of the chair
4. Lean forward at your hips, ("Nose over toes") and then push down through both hands and both legs in order to stand
5. Once up, reach for the walker with one hand followed by the second hand



SITTING DOWN

1. Position yourself so that the backs of your legs are touching the chair
2. Hold the walker in your hands, one hand on each handle
3. Slightly lean forward with your trunk, reach back with one hand until you feel the armrest (or seat) of the chair. Repeat with your second hand
4. Slowly lower yourself into the chair using your arms and legs



WALKING

1. Start with the walker directly in front of you in a comfortable position. Do not stand too close to the front of the walker
2. Advance the walker and either leg forward 6-12 inches at the same time
3. If the walker has wheels, push the walker forward while keeping it on the ground
4. Be sure to step into the walker, keeping it close to you
5. Repeat the process with each leg

