



WWW.OPTMTHERAPY.COM

OPTM Sports and Physical Therapy
OPTIMUM PERFORMANCE THROUGH MOVEMENT

291 E. Main Street, Suite E
Los Gatos, CA 95030
Fax: (408) 354-2228
Phone: (408) 354-2223

1530 Meridian Ave., Suite 150
San Jose, CA 95125
Fax: (408) 979-2306
Phone: (408) 979-2300

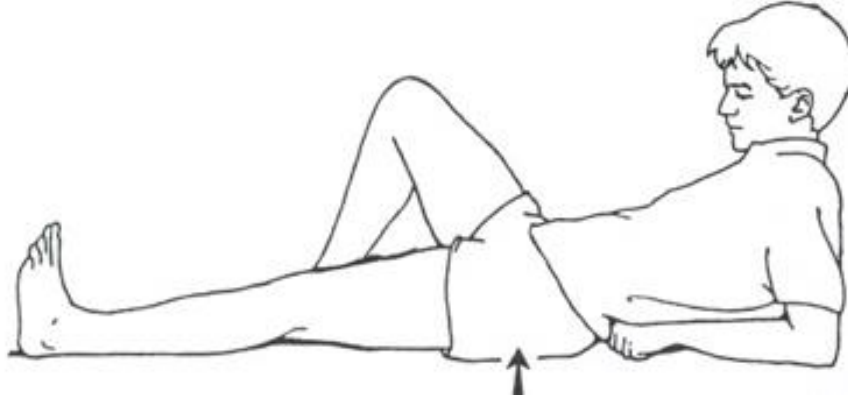
LEVEL I
KNEE PROGRAM

WWW.OPTMTHERAPY.COM
WWW.FIRSTTEPPREP.COM

Exercises Before and After Surgery

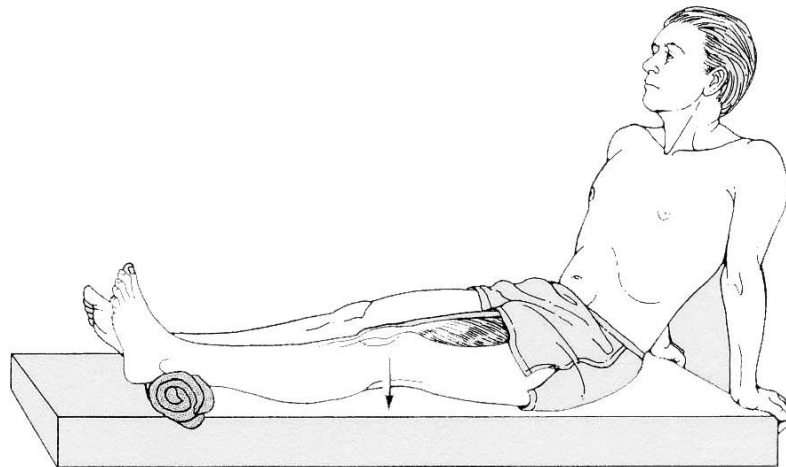
Circulation and Muscle Re-Training

Gluteal Sets



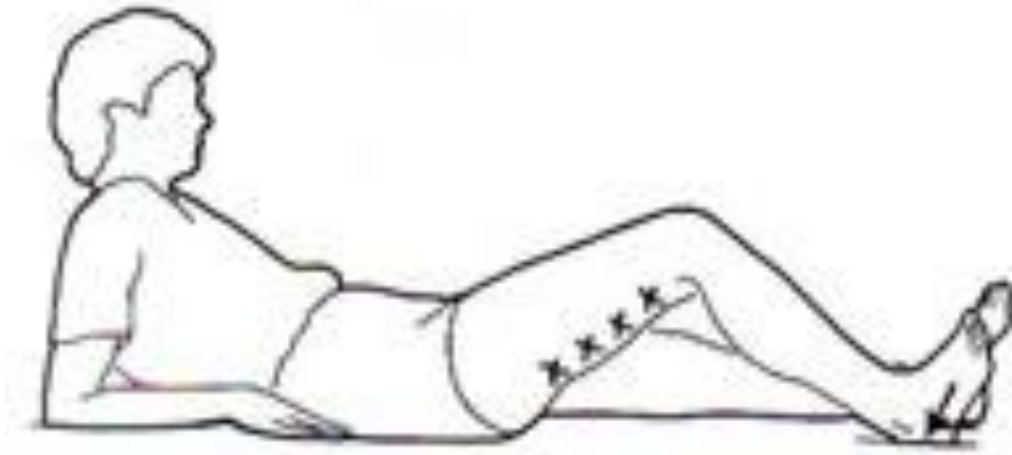
Squeeze your hip muscles together as firmly as possible. You should feel as if you are rotating your legs outward and pressing down onto your bed. You should feel the muscle contraction on both sides of your hips. You may experience a slight stretch in the back of your knees.

Quadriceps Sets



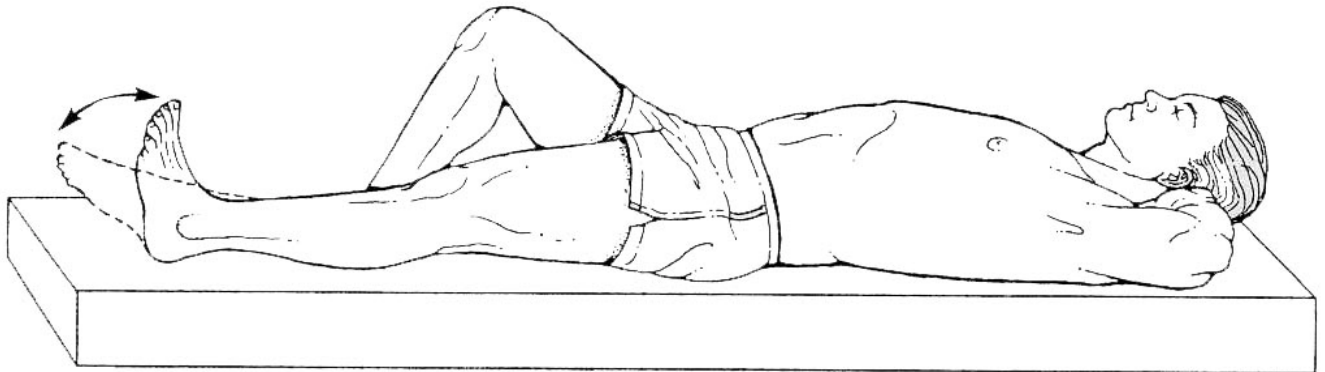
Tighten the front of your thigh firmly to straighten your knee. The most common error seen is contracting the hamstring or hip muscles, which will bend the knee. When doing the exercise correctly, you should feel your knee straighten and the knee cap being pulled up the front of your thigh. It is ok to feel a little bit of a stretch behind the knee and discomfort on the front of the knee.

Hamstrings Sets



Press your heels into the bed while bending your knees, creating a muscle contraction on the back of your thighs. Your focus should be on tightening the hamstrings without lifting your hips off of the bed.

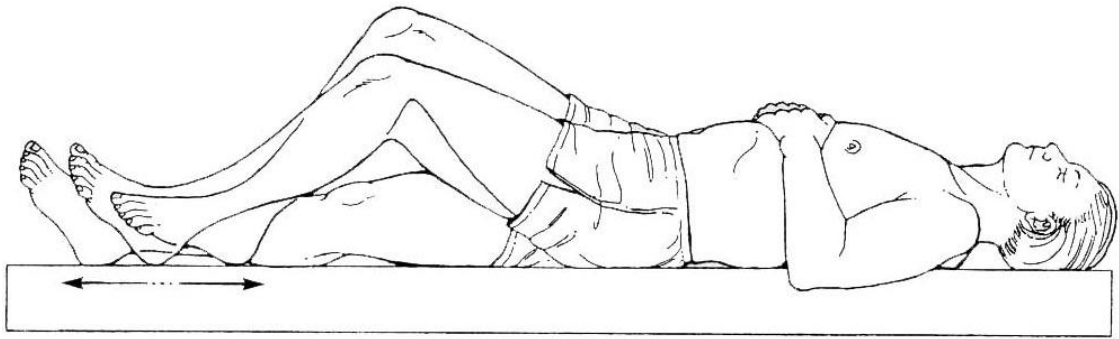
Ankle Pumping



Pull your feet back for 2 seconds, and then point your toes away from you for 2 seconds 20 repetitions every hour. You may want to vary this by writing the alphabet with your feet. You should feel muscle contractions alternating in the front and back of your shins.

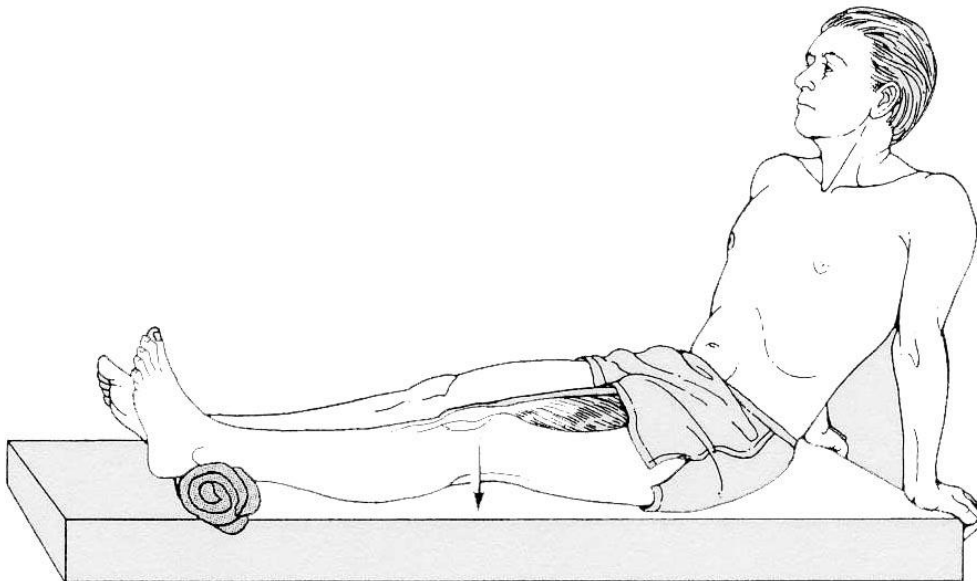
Range of Motion

Knee Flexion



Attempt to pull your foot back as far as possible using your hamstring muscles to bend your knee. Do not put pressure down into your foot, but allow it to slide freely on the floor. When your knee is bent as far as possible, use your other foot to assist with holding that position for up to 2 minutes.

Knee extension



Rest your heel on a stool and allow your knee to fully straighten. It's ok to feel discomfort behind your knee. You may even put a light weight just above your knee cap to stretch into extension. Hold this for up to 2 minutes frequently throughout the day. The same exercise may be performed in bed. Support your heel on a pillow and allow your knee to fully straighten.

Strengthening

Marching



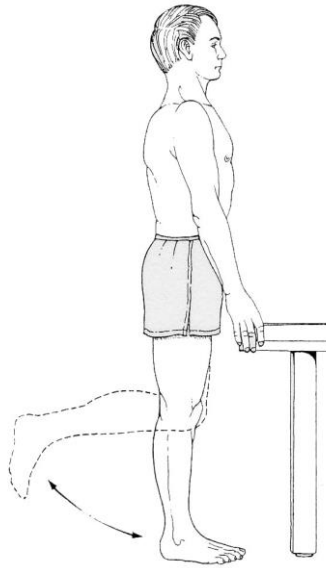
Alternate lifting one leg until your knee is approximately waist level as if you were marching. Try to keep your body straight and avoid shifting from side to side. Attempt to perform 10 lifts on each side. Do not push the ROM through pain and if you are unable to complete 10, that's ok, do as many as you can up to 10.

Heel Raises



Lift your heels up as far as possible, and then slowly return to the floor. Attempt to go up over your big toe and avoid rolling your ankles to the outward. Keep your body straight, avoiding swaying back and forth or allow your hips to move or knees to bend when with this exercise.

Hamstring Curls



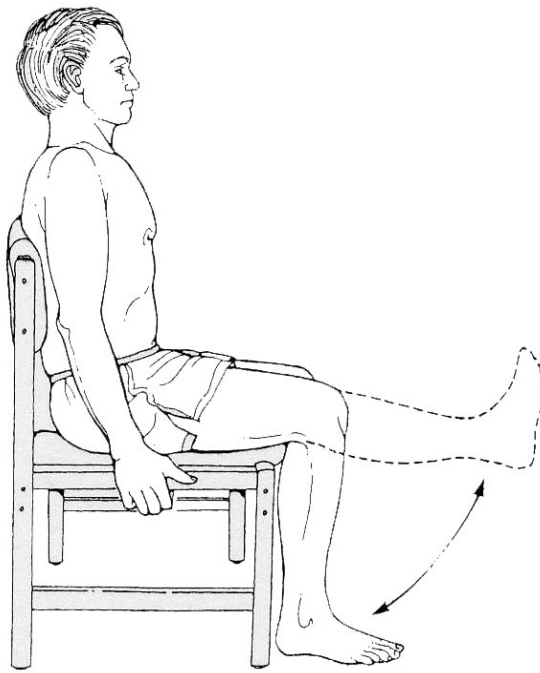
Lift your foot by bending your knee as far as possible without moving your hip. Keep your body straight, avoiding swaying from side to side or letting your pelvis drop to the side you are lifting while performing this exercise. Alternate side to side.

Mini Squats



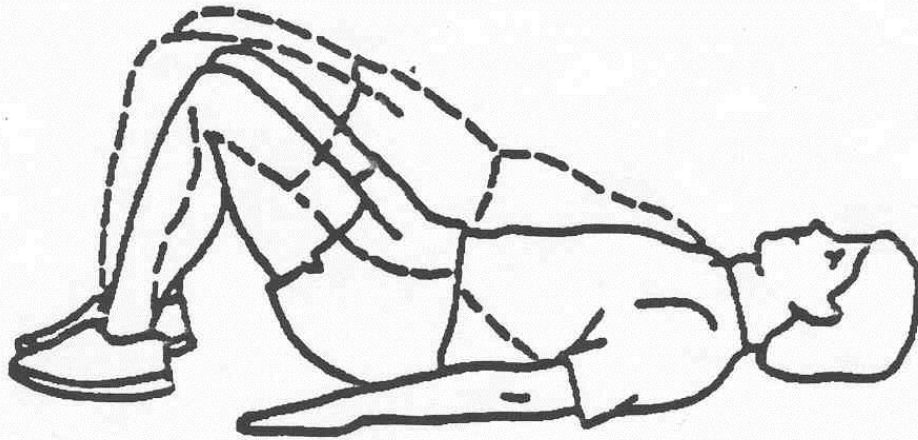
Keep your weight symmetrically balanced on each foot, avoid shifting your weight over to one side. Squat part way down, staying within your comfort limit, and then stand back up. Attempt to move your hips forward as you come up. Try to keep your heels on the floor when squatting down.

Knee Extensions



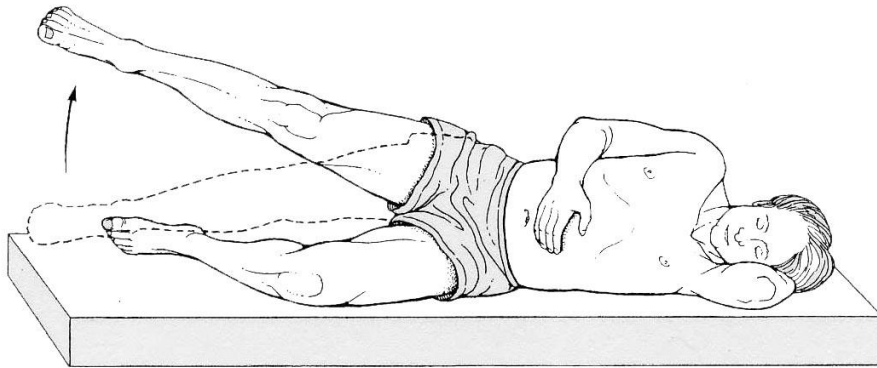
Lift your foot until your knee is as straight as possible, in this position, tightening the front of your thigh as strongly as you can, locking your knee straight. Hold this position for 5 seconds then slowly lower your foot. Alternate side to side.

Bridging



Squeeze your hip muscles, as you did in the gluteal set, and then lift your hips as high as possible. Try to hold your hips up for 10 seconds. If you have low back pain, you may find that tilting your pelvis slightly prior to lifting may feel better. Do not push through back pain. If your back pain is increasing, stop performing this exercise.

Abductions



As your strength improves, progress this exercise by straightening the top knee and pick up your leg while turning your foot towards the ceiling. Avoid rolling your pelvis backward or forward and try to isolate the movement from your hip. You should feel this on the side of you hip.

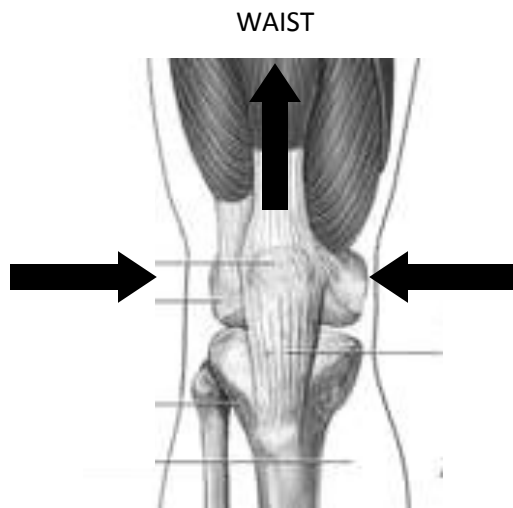
Another technique is to stand on one leg and lift the opposite leg away from your body. Keep your body straight. Squeeze your gluteals first to keep your pelvis stable.

Walking

Practice walking by landing on your heel then rolling off your toe to bend your knee.

Walking side ways, avoiding shifting your body from side to side also helps to strengthen the muscles on the side of your hips. Take 10 steps in one direction and then 10 steps in the other direction.

Patellar Mobilization



Push and hold your knee cap in the direction of the arrows for:

_____ minutes daily

_____ hold