

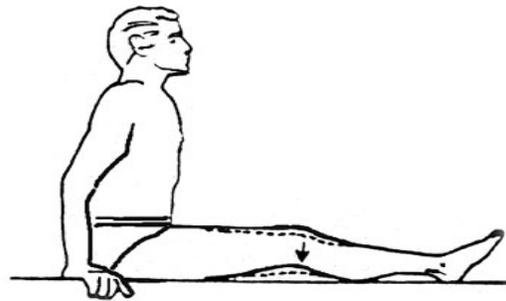
Exercises for Knee Rehabilitation

General Instructions: How fast and how well you regain knee motion is directly related to your motivation and perseverance. Strong determination and tolerance for temporary discomfort will hasten your return to normal activities. Follow the exercise routine prescribed by Dr. Millett. Gradually increase the frequency of the exercise as your knee becomes stronger. Initially you may require assistance, but you should soon be able to perform these exercises and stretching maneuvers on your own. Swimming is a good form of exercise once the incisions are well healed. Many of the following exercises can be more effectively performed with the aid of the water buoyancy. You may wish to establish the exercise pattern with your good knee then switch to your injured one.

Additional Instructions:

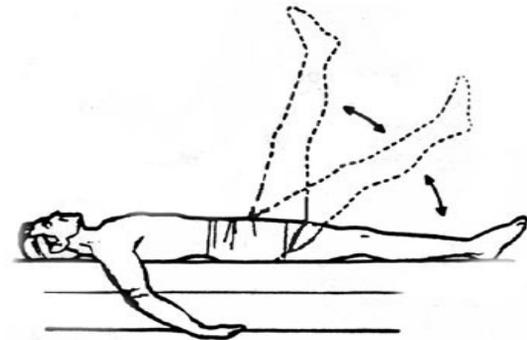
1. Quadriceps Isometrics Strengthening

Sit on a flat surface with legs out straight. Tighten the knee without moving the leg out of position. To get the idea of this exercise have someone their hand behind your knee (push against the hand attempting to flatten your knee). Relax and repeat slowly, holding the knee in the tightened position approximately two seconds each time. Repeat this exercise at least 25 times every hour that you are awake. This can also be preformed at odd moments also such as in your car while you're a passenger or, as you're a driver and stopped at a stoplight or while your sitting in a chair, etc.



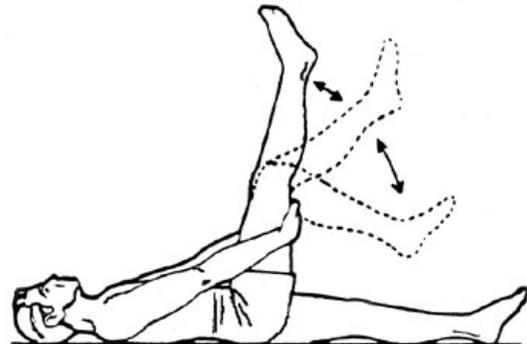
2. Straight Leg Raises

Lie on Your back with your legs out straight, knees unbent holding onto a solid object (bed frame or couch, etc...) lift your heel slowly off the bed. Raise the leg as high as possible. Slowly lower the leg to the bed keeping the knee straight. Repeat ten times; perform three times a day.



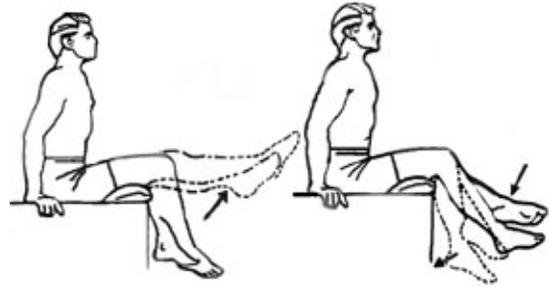
3. Knee Flexion Exercise

Raise the leg straight upward as in exercise # 2. Support the lower thigh just above the knee with hands clasped in back of the knee. Relax the knee muscles and let the weight of the leg bend the knee; then, with no additional aid straighten the knee to its previous position. Repeat, each time permitting the leg to bend further.



4. Sitting Knee Flexion Exercise

Sit on side of bed with pillow under knees and legs dangling. Straighten injured leg, using foot of good leg for support, let it drop by gravity, then force it to bend, using other foot to exert pressure on top of the ankle to limits of pain tolerance; repeat.



5. Movement with assistance from healthy leg

Sitting high on table or bed, let injured leg dangle with minimal or no support, and tighten hamstring muscles. Use opposite foot to gradually bend the injured leg by exerting pressure on the **TOP** of the ankle.



6. Imaginary Bicycling

Perform bicycling-type exercises, lying on your back with your feet extended into the air. Imitate the movement as if you were on a bicycle and pedaling. Stretch your leg as far as you can straight into the air while at the same time bending the opposite leg as close to your chest as possible, letting gravity pull it toward your body.



7. Bicycling

Use a stationary bicycle or a regular bicycle placed on jacks, with the seat placed in highest position. When you are able to make a full revolution comfortably, lower the seat. Increase the tension as you are able to lower the seat even more and have achieved 110 degrees of bend in your leg. Gradually increase the duration of time on the bike. When you can cycle comfortably for 20 minutes you may increase resistance.



8. Hamstring and Knee Stretches in Prone Position

Lie on your stomach and bend the injured knee by lifting foot from table. You may force the knee to bend by pulling a strap or towel looped over your foot. Gently pull on the strap until you feel pressure in your knee and hold for 2-5 seconds. Then, gently allow the leg to move back toward the ground with the assistance of gravity and the use of the strap (preventing it from falling to quickly).

