

Orthopedic Sports Medicine Corner: Guidelines for the 1st Week after ACL Reconstruction

Rehabilitation of an ACL reconstructed knee begins the day of surgery. Most patients are fitted with a continuous passive motion (CPM) machine immediately after surgery. Additionally, patients are fitted with a full leg/knee brace & crutches, and are given exercises immediately post op.

CPM (continuous passive motion) Machine

You should use this machine 2-3 hours at home twice daily for a total of 4-6 hours per day. The company will explain how to operate the CPM. Your goal with this machine is to achieve 95 degrees of flexion (bending) comfortably. Every time you use the CPM you should try to increase the flexion by 5 degrees. You will experience some discomfort while trying to increase your flexion. Once 95 degrees is obtained you may call the company to pick up the machine. Also, remember to take off your brace while using it.

Brace

The knee brace given to you immediately after surgery must be worn in locked extension (straight leg) while walking and sleeping. You may take the brace off when doing exercises and/or the CPM machine. Brace hinges must be at the level of the knee cap. You may loosen or tighten the brace straps as necessary. It is important to keep the top straps tight in order to prevent the brace from moving up and down on the leg. You will need to wear the brace for about 4-6 weeks. While putting your brace on, it is easier to keep your leg straight and your thigh muscle tight.



Showering

You may shower 48 hours after surgery, however you must place a plastic bag over the brace while showering or you have the option to take off the brace to shower. Whatever you decide to do please use CAUTION!! Be careful not to slip, twist, or fall. A stool placed in the shower so you can sit is a great idea so you can stabilize your knee. Do not soak in a bath tub, hot tub, or pool until the doctor tells you it is O.K. to do so. Once you are done showering pat the wound dry.

Dressing

Remove all cotton and yellow gauze 48 hours after your surgery. Please leave steri-strips (white paper strips) on your wound until you see the doctor. Reapply ACE bandage. You do not need to place a new dressing on your knee.

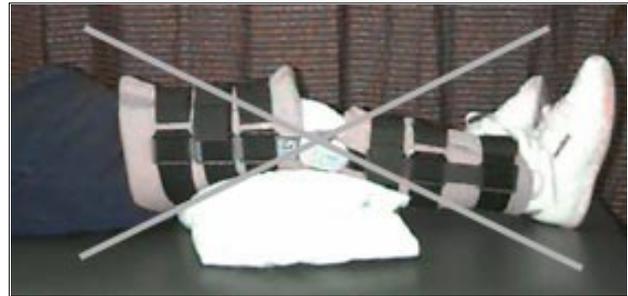
Elevation

When you are not walking, your leg should be straight with a pillow under your foot or ankle (not behind your knee). Try to elevate knee as much as possible to reduce swelling. This means that the level of the knee must be above the heart.



Never Put Anything Behind Your Knee!

Physical therapy & CPM will help your regain knee flexion (bending). However, being able to fully extend (straighten) your knee soon after surgery is vital! If full extension is not achieved within the first eight weeks, a second surgery may be necessary. With this in mind, you must **never Never NEVER** put anything under your knee when you are resting, sleeping, or propping your leg up. The pillow must go under the heel.



Ice

You should ice the knee as often as possible (especially after exercising) to reduce swelling and discomfort. Do not ice the knee more than 20 minutes at a time. Let the knee warm up before reapplication. Avoid getting your wound wet.

Crutches

Use the crutches when walking as the physical therapist taught you in the hospital. Put as much weight on your leg as you can tolerate. When you feel comfortable walking without your crutches you may do so. This usually takes about 1-2 weeks.

Follow-up Visit

You need to see the doctor about one week following surgery for your first post-op visit. At that time your sutures (stitches) will be removed. You will be given a prescription to begin physical therapy.

Common Concerns

1. Numbness around the incision site on the



outside part of the knee is a result of a disruption of a superficial nerve during the operative procedure. Most of this will resolve over time but a small area the size of a quarter usually remains numb. This is unavoidable because of the proximity of the nerve to the incision.



2. A sudden rush or feeling of fullness with pain when going from a sitting to a standing position in the knee is common after surgery.
3. Bruising and/or swelling of the shin and ankle is common after surgery. This is caused by bleeding from the bone (which is cut during surgery) into the area just below the skin. To relieve this discomfort it is best to ice the leg. If at any time you have discomfort, swelling, or redness in the calf (behind the leg between the knee and the ankle) please call the doctor immediately.

Exercises



Straight Leg Raise (SLR)

Lie on your back with your knee brace locked. Bend your other knee so that you can put your foot flat on the bed. Contract your quad tightly before you raise your leg (see quad set). Slowly raise your braced knee until the ankle is approximately 12 inches off the bed. Slowly lower the leg back to the starting position.

Please note: This patient is in a later stage of rehab and is lifting his ankle more than 12 inches.





Quad Sets

While sitting on a flat surface with your legs straight, tighten your thigh muscle while pushing the back of your knee into the bed. You cannot do enough of these. This exercise will help get your leg straight. Also, the sooner you regain your quad strength the earlier you will get permission to unlock the brace.



Heel Slides

Lie on your back with your knee brace removed. Slowly bend your knee, sliding your foot along the surface of the floor. Once you have bent your knee as much as possible, slide your foot back down until your knee is straight, you may use your other leg to help in either direction.



Patella Mobilizations

Sit on your bed or floor with your leg straight and quad relaxed. Hold your knee cap with one hand on each side. Gently, move your kneecap side to side.





Hip Abduction

Lie on your uninjured side and bend your noninvolved knee. With your surgically repaired knee held straight, slowly raise your leg toward the ceiling (12 inches), then slowly lower it again. This exercise can be performed with or without the knee brace.

Please note: This patient is in a later stage of rehab and is lifting his ankle more than 12 inches.



Hip Adduction

Lie on your side (surgically repaired side). Keep your lower leg (injured) straight. Bend your upper knee and place your foot in front of the bottom leg. Slowly raise the lower leg toward the ceiling (approximately 8 inches). Then slowly lower your bottom leg to the starting position.





Seated passive knee motion

While sitting on the edge of your bed or chair, let your knees bend and legs dangle over the edge. Place your noninvolved foot behind your other ankle and lift that leg until your knee is straight. Next, use your noninvolved leg to slowly lower your involved leg. You will feel some discomfort as your surgically repaired knee bends. Repeat this exercise 10 times.

Prone Hangs

Lie on your stomach with both legs straight. Slowly push yourself toward the foot on your bed until your legs are hanging over the edge (up to the top of your knees). Allow your legs to hang there as tolerated. This exercise will help straighten your knee.



You should call your doctor immediately if:

1. You experience oozing or redness of the wound, fevers (>101 degrees F), or chills.
2. You experience difficulty breathing or heaviness in the chest.
3. You have any questions or concerns that require further explanation.