



Physical Therapy Before and After Your ACL Surgery

To strengthen your knee and help your recovery

This handout describes 12 exercises you need to do before and after your ACL (anterior cruciate ligament) surgery at UW Medicine Sports Medicine Center. It includes step-by-step instructions and photos.



The entrance to the Sports Medicine Center.

What to Do Before Surgery

- Share any concerns you have with your provider, nurse, or physical therapist (PT). Make sure all your questions are answered.
- Get your affected leg as straight as you can before surgery (see page 2). Use your other leg as an example of how it looks when the leg is straight.
- When you walk, try not to limp.
- To lessen swelling, ice your knee and wear a compression sleeve.
- Use the exercises in this handout to improve your leg strength, especially your *quadriceps* (front of the thigh), *hamstrings* (back of the thigh), and *gluteal* (buttock) muscles.

Goals 0 to 2 Weeks After Surgery

- If you do not already have PT visits scheduled, make sure to do so.
- Your first goals after surgery are to:
 - Control pain and swelling
 - Exercise your quadriceps muscles (quads)
- Starting 7 days after your surgery, start to gently *flex* (bend) and *extend* (straighten) your knee until this movement feels comfortable.
- Your leg should be able to lie flat by 2 weeks after surgery. **To help get your leg straight:**
 - Stretch your calf and hamstring muscles
 - Do quad sets and *patellar mobilizations* (see page 4)

- To bend your knee safely, do heel slides (see below).
- Do quad sets, ball squeezes, and straight leg raises (SLRs) to help your quad re-learn how to contract.
- It is OK to stand and walk with crutches and your brace. Follow the guidelines your PT gave you. Slowly increase the amount of weight you place on your affected leg. Ease off if pain gets worse as you do this.

Exercises

When an exercise says to sit or lie “on a solid surface,” you may use the floor, a therapy table, a firm mattress, or a wide bench.

Calf Stretch

Sit on a solid surface. Place a long strap or rope around the ball of your foot on your affected leg. Pull your toes toward your face. You should feel a stretch in the back of your lower leg. Keep your knee as straight as you can.

Hold for 15 to 20 seconds, then relax. Repeat 4 times. Do 1 set of 4 at least 4 times a day.



Heel Slides

Sit on a solid surface. Place a long strap or rope around the ball of your foot on your affected leg. Pull on the strap to bend your affected knee, sliding your heel toward your bottom. Try to get your heel as close as you can to your bottom but do not lift your hips. At this time, you do not need to bend your knee more than 90 degrees (a right angle, like the corner of a sheet of paper).

Hold for 3 to 5 seconds. Then, straighten your leg by sliding your heel out. Repeat 10 times. Do 1 set of 10 at least 4 times a day.



Hamstring Stretch

Lie on your back on a solid surface. Place a long strap or rope around the ball of your foot on your affected leg. Pull your leg back toward your face. You should feel a stretch in the back of your leg. Keep your knee as straight as you can.

Hold for 15 to 20 seconds, then relax. Repeat 4 times. Do 1 set of 4 at least 4 times a day.



Heel Prop

Lie on your back on a solid surface. Place a rolled-up towel or yoga block under your heel on your affected leg. Allow your thigh muscles to relax. Hold for 20 to 30 seconds. Repeat 4 times. Do 1 set of 4 at least 4 times a day.



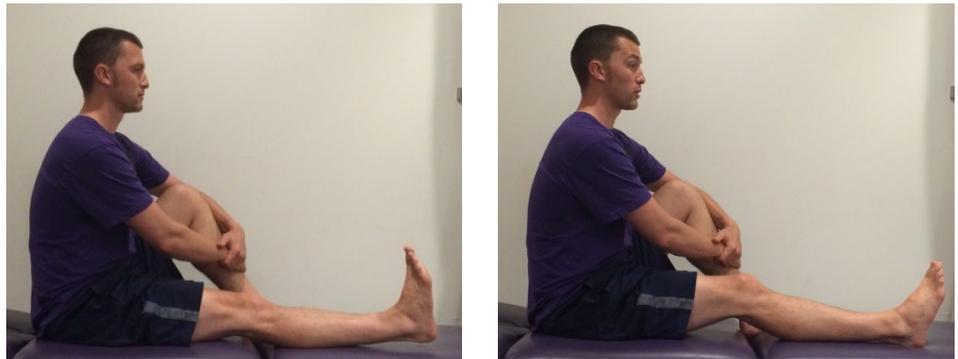
Patellar Mobilizations

Sit on a solid surface with your legs straight out in front of you. Place your fingers on the top and bottom of your kneecap on your affected knee. Gently push your kneecap toward your face and then back toward your toes. Stop if it causes pain. If needed, ask a friend or family member to help you. Move your kneecap back and forth about 10 times. Repeat at least 3 times a day.



Quadriceps Set

Sit on a solid surface with your affected leg straight out in front of you. Tighten your quads (thigh muscles) as much as you can, pushing the back of your knee down to the floor. Hold for 5 seconds and then relax. Repeat 10 times. Do 1 set of 10 at least 4 times a day.



Quadriceps Set with Ball Squeeze

Sit on a solid surface with your legs straight out in front of you. Place a soccer-sized ball or pillow between your knees. Tighten your quads as much as you can. Squeeze the ball by bringing your knees together. Point your toes toward your head. Hold for 5 seconds and then relax. Repeat 10 times each set. Do 1 set of 10 at least 4 times a day.



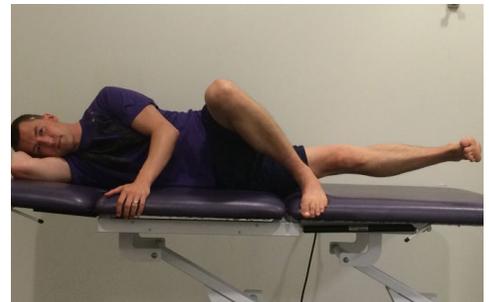
Straight Leg Raises

Lie on your back on a solid surface. Bend one knee and keep your affected leg straight. Slowly lift your straight leg until it is parallel with the other thigh. Then lower it back to the floor without arching your back. Repeat 5 times. Do this 3 times a day **only** if you can keep your knee straight and do not have any pain when you raise your leg.



Hip Adduction

Lie on your affected side on a solid surface, making sure your hips are stacked on top of each other. Keep your top leg bent and your affected leg straight. Place the foot of your bent leg flat on the floor. Slowly lift your affected leg toward the ceiling, then slowly lower it to the floor. Make sure to keep your leg straight. Do not let your hips roll backward or forward. Repeat 10 times. Do 1 set of 10 at least 3 times a day.



Hip Abduction

Lie on your unaffected side on a solid surface. Make sure your hips are stacked on top of each other. Slowly lift your affected leg up 6 inches or more off the floor. Hold for 1 second, then slowly lower it back to the floor. Repeat 10 times. Do 1 set of 10 at least 2 times a day.



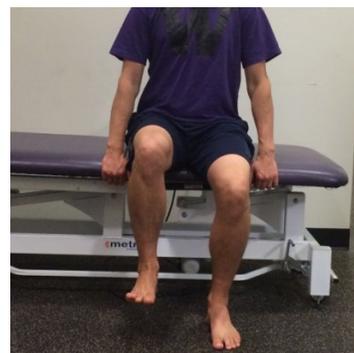
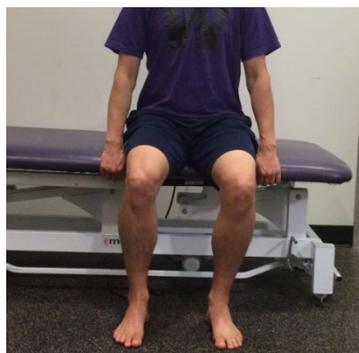
Hip Extension

Lie on your stomach on a solid surface with your legs straight behind you. Squeezing your *glutes* (butt muscles), slowly lift your affected leg until it is about 3 to 4 inches off the floor. Hold for 1 second and slowly lower your leg back to the floor. Repeat 10 times. Do 1 set of 10 at least 2 times a day.



Seated Hip Flexion

Sit on a chair or on the edge of a table. The height of the chair or table should allow you to bend your unaffected knee at a 90-degree (right) angle, while keeping that foot flat on the floor. Tighten the thigh muscles of your affected leg and slowly lift that foot off the ground about 6 inches. Hold for 1 second, then slowly lower your foot back to the floor. Repeat 10 times. Do 1 set of 10 at least 3 times a day.



Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

UW Medicine Sports Medicine Center: Call 206.598.DAWG (3294) and press 8.