

Anterior Cruciate Ligament (ACL) Injury Rehabilitation Exercises

You may begin with the first 3 exercises right away. When swelling in your knee has gone down and you are able to stand with equal weight on both legs, you may do the remaining exercises.

- **Heel slide:** Sit on a firm surface with your legs straight in front of you. Slowly slide the heel of your injured leg toward your buttock by pulling your knee to your chest as you slide. Return to the starting position. Do 3 sets of 10.
- **Quad sets:** Sitting on the floor with your injured leg straight and your other leg bent, press the back of the knee of your injured leg against the floor by tightening the muscles on the top of your thigh. Hold this position 10 seconds. Relax. Do 3 sets of 10.
- **Passive knee extension:** Do this exercise if you are unable to fully extend your knee. While lying on your back, place a rolled-up towel underneath the heel of your injured leg so the heel is about 6 inches off the ground. Relax your leg muscles and let gravity slowly straighten your knee. You may feel some discomfort while doing this exercise. Try to hold this position for 2 minutes. Repeat 3 times. Do this exercise several times per day. This exercise can also be done while sitting in a chair with your heel on another chair or stool.
- **Wall squat with a ball:** Stand with your back, shoulders, and head against a wall and look straight ahead. Keep your shoulders relaxed and your feet 2 feet away from the wall and a shoulder's width apart. Place a soccer or basketball-sized ball behind your back. Keeping your back upright, slowly squat down to a 45-degree angle. Your thighs will not yet be parallel to the floor. Hold this position for 10 seconds and then slowly slide back up the wall. Repeat 10 times. Build up to 3 sets of 10.
- **Balance and reach exercises**

Stand upright next to a chair with your injured leg farthest from the chair. This will provide you with support if you need it. Stand just on the foot of your injured leg. Try to raise the arch of this foot while keeping your toes on the floor.



1. Keep your foot in this position and reach forward in front of you with the hand farthest away from the chair, allowing your knee to bend. Repeat this 10 times while maintaining the arch height. This exercise can be made more difficult by reaching farther in front of you. Do 2 sets.

2. Stand in the same position as above. While maintaining your arch height, reach the hand farthest away from the chair across your body toward the chair. The farther you reach, the more challenging the exercise. Do 2 sets of 10.

- **Knee stabilization:** Wrap a piece of elastic tubing around the ankle of the uninjured leg. Tie a knot in the other end of the tubing and close it in a door.
 1. Stand facing the door on the leg without tubing and bend your knee slightly, keeping your thigh muscles tight. While maintaining this position, move the leg with the tubing straight back behind you. Do 3 sets of 10.
 2. Turn 90 degrees so the leg without tubing is closest to the door. Move the leg with tubing away from your body. Do 3 sets of 10.
 3. Turn 90 degrees again so your back is to the door. Move the leg with tubing straight out in front of you. Do 3 sets of 10.
 4. Turn your body 90 degrees again so the leg with tubing is closest to the door. Move the leg with tubing across your body. Do 3 sets of 10.

Hold onto a chair if you need help balancing. This exercise can be made even more challenging by standing on a pillow while you move the leg with tubing.

- **Resisted terminal knee extension:** Make a loop from a piece of elastic tubing by tying a knot in both ends. Close both knots in a door. Step into the loop so the tubing is around the back of your injured leg. Lift the other foot off the ground. Hold onto a chair for balance, if needed. Bend the knee on the leg with tubing about 45 degrees. Slowly straighten your leg, keeping your thigh muscle tight as you do this. Do this 10 times. Do 3 sets. An easier way to do this is to stand on both legs for better support while you do the exercise.



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Anterior Cruciate Ligament (ACL) Injury Rehabilitation Exercises



Heel slide



Quad Sets



Passive knee extension



Wall squat with a ball



Balance and reach exercise A



Balance and reach exercise B



Knee stabilization: A



Knee stabilization: B



Knee stabilization: C



Knee stabilization: D



Resisted terminal knee extension