

Broken Kneecap (Patellar Fracture) Rehabilitation Exercises



Standing hamstring stretch



Quadriceps stretch



Side-lying leg lift



Quad sets



Straight leg raise



Step-up



Wall squat with a ball

Broken Kneecap (Patellar Fracture) Rehabilitation Exercises



Knee stabilization: A



Knee stabilization: B



Knee stabilization: C



Knee stabilization: D



Resisted terminal knee extension



Standing calf stretch



Clam exercise



Iliotibial band stretch
(side-bending)



Patella self mobilization

KNEECAP FRACTURE EXERCISES

You can do the hamstring stretch right away. When your knee is less painful, you can do the quadriceps stretch and start strengthening the thigh muscles with the rest of the exercises.



[View image](#)



[View image](#)

- **Standing hamstring stretch:** Put the heel of the leg on your injured side on a stool about 15 inches high. Keep your leg straight. Lean forward, bending at the hips, until you feel a mild stretch in the back of your thigh. Make sure you don't roll your shoulders or bend at the waist when doing this or you will stretch your lower back instead of your leg. Hold the stretch for 15 to 30 seconds. Repeat 3 times.
- **Quadriceps stretch:** Stand at an arm's length away from the wall with your injured side farthest from the wall. Facing straight ahead, brace yourself by keeping one hand against the wall. With your other hand, grasp the ankle on your injured side and pull your heel toward your buttocks. Don't arch or twist your back. Keep your knees together. Hold this stretch for 15 to 30 seconds.
- **Side-lying leg lift:** Lie on your uninjured side. Tighten the front thigh muscles on your injured leg and lift that leg 8 to 10 inches (20 to 25 centimeters) away from the other leg. Keep the leg straight and lower it slowly. Do 2 sets of 15.
- **Quad sets:** Sit 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 2 sets of 15.

- **Straight leg raise:** Lie on your back with your legs straight out in front of you. Bend the knee on your uninjured side and place the foot flat on the floor. Tighten the thigh muscle on your injured side and lift your leg about 8 inches off the floor. Keep your leg straight and your thigh muscle tight. Slowly lower your leg back down to the floor. Do 2 sets of 15.
- **Step-up:** Stand with the foot of your injured leg on a support 3 to 5 inches (8 to 13 centimeters) high --like a small step or block of wood. Keep your other foot flat on the floor. Shift your weight onto the injured leg on the support. Straighten your injured leg as the other leg comes off the floor. Return to the starting position by bending your injured leg and slowly lowering your uninjured leg back to the floor. Do 2 sets of 15.
- **Wall squat with a ball:** Stand with your back, shoulders, and head against a wall. Look straight ahead. Keep your shoulders relaxed and your feet 3 feet (90 centimeters) from the wall and shoulder's width apart. Place a soccer or basketball-sized ball behind your back. Keeping your back against the wall, 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 2 sets of 15.
- **Knee stabilization:** Wrap a piece of elastic tubing around the ankle of your uninjured leg. Tie a knot in the other end of the tubing and close it in a door at about ankle height.
- Stand facing the door on the leg without tubing (your injured leg) and bend your knee slightly, keeping your thigh muscles tight. Stay in this position while you move the leg with the tubing (the uninjured leg) straight back behind you. Do 2 sets of 15.
- Turn 90 degrees so the leg without tubing is closest to the door. Move the leg with tubing away from your body. Do 2 sets of 15.
- Turn 90 degrees again so your back is to the door. Move the leg with tubing straight out in front of you. Do 2 sets of 15.
- 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 2 sets of 15.

- 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 2 sets of 15.
Hold onto a chair if you need help balancing. This exercise can be made more challenging by standing on a firm pillow or foam mat while you move the leg with tubing.
- **Resisted terminal knee extension:** Make a loop with a piece of elastic tubing by tying a knot in both ends. Close the knot in a door at knee height. Step into the loop with your injured leg so the tubing is around the back of your knee. Lift the other foot off the ground and hold onto a chair for balance, if needed. Bend the knee with tubing about 45 degrees. Slowly straighten your leg, keeping your thigh muscle tight as you do this. Repeat 15 times. Do 2 sets of 15. If you need an easier way to do this, stand on both legs for better support while you do the exercise.
- **Standing calf stretch:** Stand facing a wall with your hands on the wall at about eye level. Keep your injured leg back with your heel on the floor. Keep the other leg forward with the knee bent. Turn your back foot slightly inward (as if you were pigeon-toed). Slowly lean into the wall until you feel a stretch in the back of your calf. Hold the stretch for 15 to 30 seconds. Return to the starting position. Repeat 3 times. Do this exercise several times each day.
- **Clam exercise:** Lie on your uninjured side with your hips and knees bent and feet together. Slowly raise your top leg toward the ceiling while keeping your heels touching each other. Hold for 2 seconds and lower slowly. Do 2 sets of 15 repetitions.
- **Iliotibial band stretch, side-bending:** Cross one leg in front of the other leg and lean in the opposite direction from the front leg. Reach the arm on the side of the back leg over your head while you do this. Hold this position for 15 to 30 seconds. Return to the starting position. Repeat 3 times and then switch legs and repeat the exercise.

Developed by RelayHealth.



@Box Hill Complete Health 5/25 Prospect Street Box Hill 3128 VIC	@Inspire Chiropractic 96 Canterbury Road Canterbury 3126 VIC	@Woodhouse Medical Centre 951 Station Street Box Hill North 3129 VIC
Email: evelyn@eferrer.net Web: www.muscledynamics-clinic.com.au Phone: 0433154428		