Patellofemoral Pain Syndrome (Runner's Knee): Exercises

How to do the exercises

Quad sets

1. Sit with your affected leg straight and supported on the floor or a firm bed. Place a small, rolled-up towel under your affected knee. Your other leg should be bent, with that foot flat on the floor.

2. Tighten the thigh muscles of your affected leg by pressing the back of your knee down into the towel.

3. Hold for about 6 seconds, then rest for up to 10 seconds.
Patellofemoral Pain Syndrome (Runner's Knee): Exercises (page 2)

4. Repeat 8 to 12 times.

**Straight-leg raises to the front**

1. Lie on your back with your good knee bent so that your foot rests flat on the floor. Your affected leg should be straight. Make sure that your low back has a normal curve. You should be able to slip your hand in between the floor and the small of your back, with your palm touching the floor and your back touching the back of your hand.

2. Tighten the thigh muscles in your affected leg by pressing the back of your knee flat down to the floor. Hold your knee straight.

3. Keeping the thigh muscles tight and your leg straight, lift your affected leg up so that your heel is about 12 inches off the floor.

4. Hold for about 6 seconds, then lower your leg slowly. Rest for up to 10 seconds between repetitions.

5. Repeat 8 to 12 times.

**Wall slide with ball squeeze**

12 inches (1 foot) © Healthwise, Incorporated
Patellofemoral Pain Syndrome (Runner's Knee): Exercises (page 3)

1. Stand with your back against a wall and with your feet about shoulder-width apart. Your feet should be about 12 inches away from the wall.
2. Put a ball about the size of a soccer ball between your knees. Then slowly slide down the wall until your knees are bent about 20 to 30 degrees.
3. Tighten your thigh muscles by squeezing the ball between your knees. Hold that position for about 10 seconds, then stop squeezing. Rest for up to 10 seconds between repetitions.
4. Repeat 8 to 12 times.

Calf wall stretch

1. Stand facing a wall with your hands on the wall at about eye level. Put your affected leg about a step behind your other leg.
2. Keeping your back leg straight and your back heel on the floor, bend your front knee and gently bring your hip and chest toward the wall until you feel a stretch in the calf of your back leg.
3. Hold the stretch for at least 15 to 30 seconds.
4. Repeat 2 to 4 times.
5. Repeat steps 1 through 4, but this time keep your back knee bent.
Quadriceps stretch

1. If you are not steady on your feet, hold on to a chair, counter, or wall.
2. Bend your affected leg, and reach behind you to grab the front of your foot or ankle with the hand on the same side. For example, if you are stretching your right leg, use your right hand.
3. Keeping your knees next to each other, pull your foot toward your buttocks until you feel a gentle stretch across the front of your hip and down the front of your thigh. Your knee should be pointed directly to the ground, and not out to the side.
4. Hold the stretch for at least 15 to 30 seconds.
5. Repeat 2 to 4 times.

Hamstring wall stretch

1. Lie on your back in a doorway, with your good leg through the open door.
2. Slide your affected leg up the wall to straighten your knee. You should feel a gentle stretch down the back of your leg.
   - Do not arch your back.
Patellofemoral Pain Syndrome (Runner's Knee): Exercises (page 5)

- Do not bend either knee.
- Keep one heel touching the floor and the other heel touching the wall. Do not point your toes.

3. Hold the stretch for at least 1 minute. Then over time, try to lengthen the time you hold the stretch to as long as 6 minutes.
4. Repeat 2 to 4 times.

If you do not have a place to do this exercise in a doorway, there is another way to do it:

1. Lie on your back, and bend your affected leg.
2. Loop a towel under the ball and toes of that foot, and hold the ends of the towel in your hands.
3. Straighten your knee, and slowly pull back on the towel. You should feel a gentle stretch down the back of your leg.
4. Hold the stretch for at least 15 to 30 seconds. Or even better, hold the stretch for 1 minute if you can.
5. Repeat 2 to 4 times.

Follow-up care is a key part of your treatment and safety. Be sure to make and go to all appointments, and call your doctor if you are having problems. It's also a good idea to know your test results and keep a list of the medicines you take.

Where can you learn more?

Go to http://www.kp.org

Enter A404 in the search box to learn more about "Patellofemoral Pain Syndrome (Runner's Knee): Exercises".

© 2006-2010 Healthwise, Incorporated. Care instructions adapted under license by Kaiser Permanente. This care instruction is for use with your licensed healthcare professional. If you have questions about a medical condition or this instruction, always ask your healthcare professional. Healthwise disclaims any warranty or liability for your use of this information.