Exercises for Knee Pain

This handout explains exercises to help with knee pain.

Do these exercises to help reduce knee pain and strain. These exercises will also re-train the muscles in your hips to help protect your knee.

Your Home Exercise Program

While doing your home exercise program, please know that:

- None of these exercises should cause pain. If you have sharp pain when you do an exercise, stop doing it. Wait until the next day and try again.
- If you have more soreness or swelling a few hours after your exercises or the next morning, it may mean that you overdid it. If this happens, you can:
  - Do that exercise fewer times a day.
  - Do fewer repetitions (reps) of that exercise. For instance, if it says to do the exercise 20 times, do 10 reps instead and see how you feel.
- If your knee is sore or swollen, apply ice 2 times a day, for 10 minutes at a time. Do not put ice right on your skin. Place a clean towel between the ice and your knee.

For more exercises, please see the handout, “Isometric Exercises for Patellar Tendinopathy.”

Piriformis Stretch

The piriformis muscle is in your buttock area.

- Lie on your back on the floor or a sturdy table. Keep your hips flat on the floor or table.
- Lift 1 leg, keeping it bent at the knee. With the opposite hand, hold that leg at the shin. Pull the leg across your body, toward your other side.
  
  If pulling on your shin causes pain, hold both hands behind your knee, as shown at right.
• Hold for 20 seconds, then relax. Repeat 4 times.
• Repeat with other leg.

**Hip Flexor Stretch**

You may do this exercise up to 4 times a day.

• Kneel on one knee, with that knee resting on a cushion or pillow, as shown at left.
• Tilt your pelvis backward by pulling your belly button toward your spine.
• With the hip that is above your resting knee, gently push forward until you feel a stretch on the front of the hip joint.
• Keep your pelvis tilted backward while you stretch.
• Hold for 20 seconds and release. Repeat 4 times.
• Repeat with other leg resting on the pillow.

**Bridges**

This exercise trains the *gluteal* (buttock) muscles.

• Lie on your back on the floor or a sturdy table. Place your feet hips-width apart.
• Draw your belly button down to your spine. At the same time, squeeze both sets of gluteal muscles.
• Pushing through your heels, push your hips up to make a straight line of your torso. Do not push so high that your lower back arches. Keep your knees in line with your hips and ankles.
• Let your hips come back to the floor or table. Do this up-and-down motion 15 times.
• Repeat 2 to 3 sets of 15 reps. Stop if you get tired before doing all of the reps.
Clamshells

- Lie on one side on the floor or a study table. Stack your knees and feet on top of each other, as shown in the photo at left, below.

- Squeeze your gluteal (buttock) muscle of the top leg and lift only the top knee up a few inches. Do not let your top hip roll backward. Do not arch your lower back.

- Lower your knee. Repeat this up-and-down motion 15 times, then rest. Do 2 sets of 15 reps.

- Repeat with the other leg.