

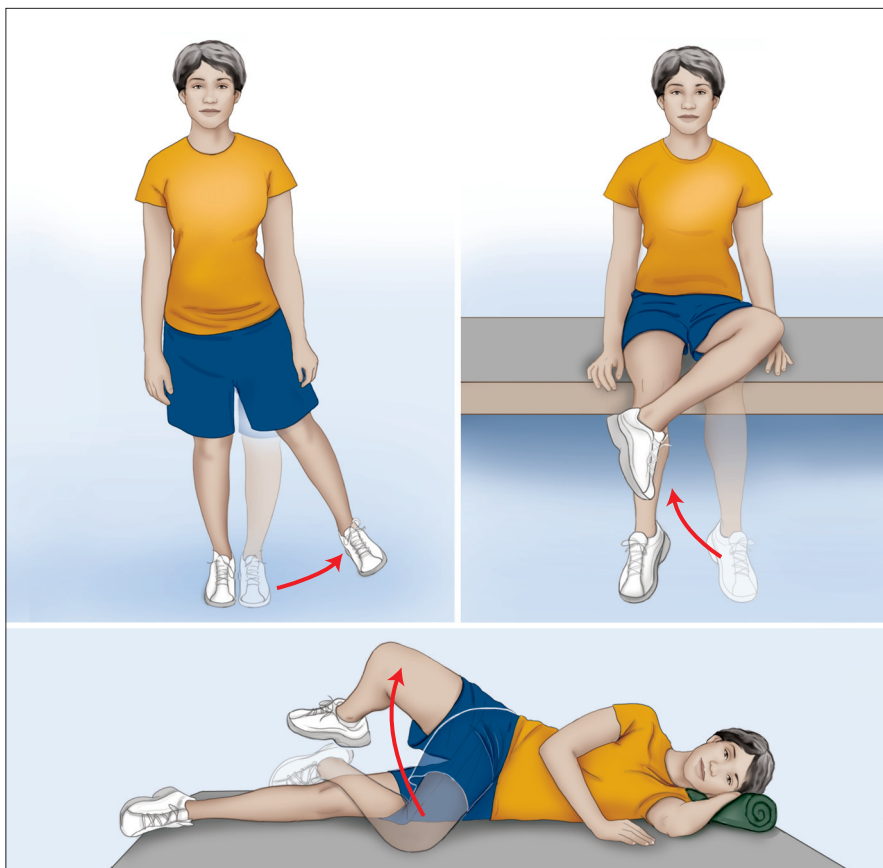
# Knee Pain

## *Strengthen My Hips? But It's My Knees That Hurt!*

*J Orthop Sports Phys Ther 2011;41(8):571. doi:10.2519/jospt.2011.0505*

**H**ealthcare providers usually call pain at the front of your knee or under your kneecap patellofemoral pain syndrome. Most often, this pain occurs after exercise, but you may also feel it if you sit too long. Over time, your knee may begin to hurt during exercise or throughout the day. You may feel a nagging ache or an occasional sharp pain. This pain may cause you to limp and may limit your activities. This

can be very frustrating, but there is good news: exercises can reduce knee pain and allow you to return to normal activities without needing surgery. Although we have known the benefits of exercise for some time, we were not sure which exercises were best at quickly reducing your pain. A study published in the August 2011 issue of *JOSPT* provides new insight and evidence-based exercises to help answer this question.



**HIP EXERCISES.** The 3 pictures above show the hip exercises used in this study. These exercises were performed in different positions. In each exercise, the transparent image is the starting position and the solid image is the ending position.

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### NEW INSIGHTS

Since this type of knee pain is more common in females, the researchers tested 33 females with patellofemoral pain syndrome. During the first 4 weeks of physical therapy, about half of the patients did exercises that focused on the thigh or quadriceps muscles, while the other half did exercises that focused on the hip muscles. All of these patients then did the same exercises for 4 weeks to improve the strength of the entire leg. The patients' responses on pain questionnaires and strength tests were used to determine which approach was better. By 4 weeks, the patients in the hip strengthening group had 43% less pain, while the knee strengthening group only had 3% less pain. Pain relief and function were similar for both groups by 8 weeks. However, only patients in the hip strengthening group had better hip strength on 1 of the hip strength tests.

### PRACTICAL ADVICE

Patients with knee pain may benefit from starting with hip strengthening exercises. Potential benefits include faster pain relief and better hip strength. You may be curious why the patients in the hip group got better quicker. This may be because the knee strengthening exercises actually irritated the knee, or perhaps because the exercises that focused on hip strengthening helped improve the mechanics of the entire leg and so reduced stress on the knee. Although starting off with hip strengthening exercises may decrease the pain sooner, it is important to follow hip exercises with specific functional exercises that target the muscles of the entire leg. You also need to consider the physical activities you perform and your response to this exercise approach to ensure your best outcome. Your physical therapist can help customize this approach for you.

This *JOSPT* Perspectives for Patients is based on an article by Dolak KL et al, titled "Hip Strengthening Prior to Functional Exercises Reduces Pain Sooner Than Quadriceps Strengthening in Females With Patellofemoral Pain Syndrome: A Randomized Clinical Trial" (*J Orthop Sports Phys Ther 2011;41(8):560-570. doi:10.2519/jospt.2011.3499*).

This Perspectives article was written by a team of *JOSPT's* editorial board and staff, with Deydre S. Teyhen, PT, PhD, Editor, and Jeanne Robertson, Illustrator.