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Strengthening Your Hip Muscles

Some Exercises May Be Better Than Others

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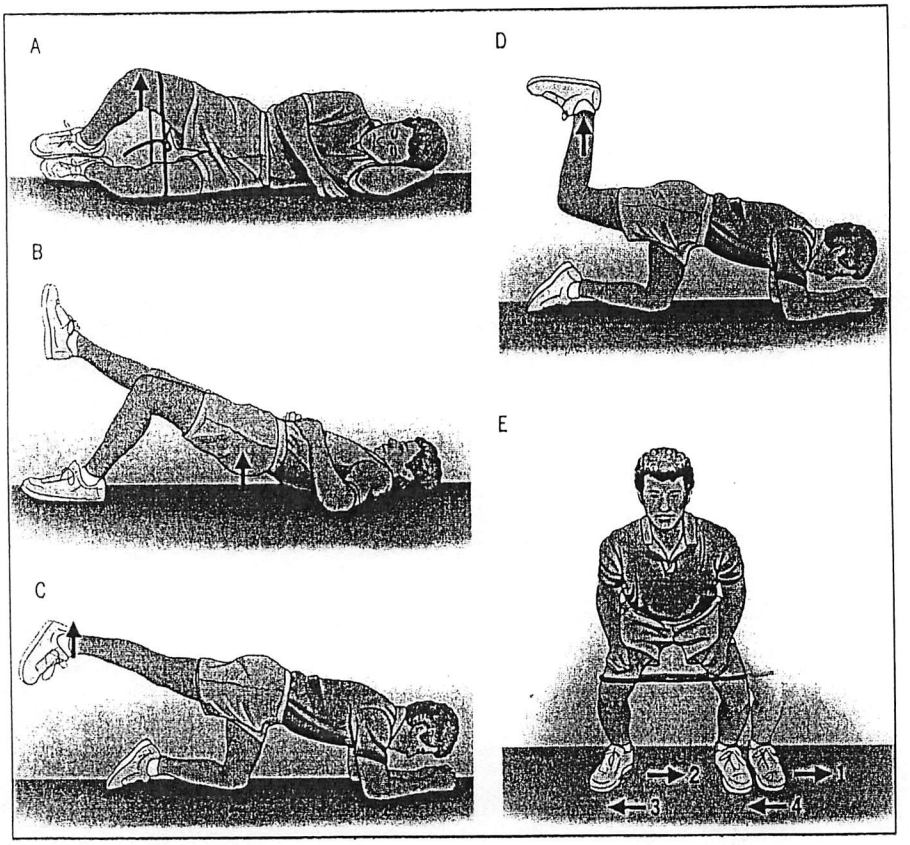
Weak hip muscles lead to poor hip motion, and poor hip motion can cause knee, hip, and back pain. By exercising to strengthen the hip muscles that control how your hip moves, you can reduce your pain in these parts of your body. The 2 key muscles to include in your exercise program are the gluteus maximus (the chief muscle on the back of your hip—your buttocks) and the gluteus medius (the main muscle on the side of your hip). However, it is often difficult to strengthen these muscles without also strengthening a muscle called the tensor fascia lata, which is located toward the front of the hip. Too much activation of that muscle may create unwanted hip motion that may worsen knee, hip, or back pain. A study published in the February 2013 issue of *JOSPT* provides information intended to help physical therapists and their patients select exercises that target the buttock muscles without causing other unwanted muscle actions.



HIP EXERCISES. (A) Clam exercise: while lying on your side with knees bent, rotate the top leg upward; (B) single-leg bridge exercise: while lying on your back with one knee bent and the other leg straight, lift your buttocks off the floor or table using the knee that is bent, while keeping the other leg straight; (C and D) hip extension exercises on all fours: while on hands and knees, extend one leg upward—this exercise can be done with the leg straight (harder) or with the knee bent (easier); (E) sidestep exercise: while in a slight squat position, take small steps sideways while keeping your toes pointed forward.

NEW INSIGHTS

In this study, the researchers had 20 healthy people perform 11 different hip exercises commonly used for both fitness and rehabilitation. While the participants performed the exercises, fine wires were used to record the amount of electrical activity within the 3 muscles. This indicated how much each muscle was working. The researchers' goal was to discover which exercises used the gluteus maximus and gluteus medius muscles the most, while minimizing the action of the tensor fascia lata. They found that 5 specific exercises worked best: the clam, the single-leg bridge, hip extension while on both hands and knees (with the knee bent or straight), and the sidestep.

PRACTICAL ADVICE

Patients with certain types of knee, hip, or back pain may benefit from focusing on the 5 exercises recommended by these researchers. Your physical therapist can help determine which of these exercises are best for you and customize a treatment program based on your diagnosis, your level of pain, and your current and desired hip function. Even if you do not have any pathology or pain, you may want to incorporate these 5 exercises in your general fitness or strength program.

For this and more topics, visit *JOSPT* Perspectives for Patients online at **www.jospt.org**.

This *JOSPT* Perspectives for Patients is based on an article by Selkowitz et al, titled "Which Exercises Target the Gluteal Muscles While Minimizing Activation of the Tensor Fascia Lata? Electromyographic Assessment Using Fine-Wire Electrodes," *J Orthop Sports Phys Ther 2013;43(2):54-64. doi:10.2519/jospt.2013.4116.*

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.