

EXERCISE RX

Relieving the Pain of Sciatica

Some patients who present with lower back aches are actually suffering from sciatica, which has become something of a catchall term for upper hip/lower back pain. However, in patients with true sciatica, a pinched nerve is causing the pain.

The sciatic nerves come in two pairs—a pair for each leg. Each pair travels together down the leg to the back of the knee, where the pair divides and the nerves travel separately, one to the calf and the other to the foot.

There is a small opening in the spinal column where the nerves exit, and if the muscles push on one of the nerves in an awkward way, the pressure

causes pain in the lower back or upper hip. The pain can be sharp or dull, and can involve one or both legs. It may radiate slightly down the leg, but radiating leg pain may signal osteoarthritis rather than sciatica and may need further evaluation. Sciatic pain due to nerve pressure has three possible sources: bony spurs on the surface of the vertebrae pressing on the nerve, pressure from a damaged spinal disk, and muscle spasms—particularly in the piriformis muscle, which may tighten enough to press on the nerves and cause pain.

MRIs and other scans in patients aged 45 and older will likely show some disk ab-

normality, but this is usually a function of age, and physicians should look for muscle tightness in a patient with pain in the piriformis region before presuming that a disk is causing the problem. An absence of pain above the buttock muscles can signal a tight piriformis, rather than bone spurs or disk pressure. Most patients request scans, but I don't put too much stock in them as a diagnostic tool for this type of pain.

A specific exercise program can help ease the pain of sciatica by strengthening weak muscles and loosening tight muscles.

In this month's column, we'll look at some exercises to relieve sciatica pain. (See illustrations and instructions below, which you can photocopy for your patients.)

The piriformis muscle is often the culprit in sciatica. Unfortunately, treatment of piriformis muscle tightness is not easy. Pain

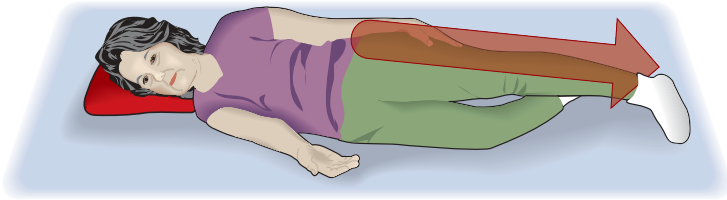
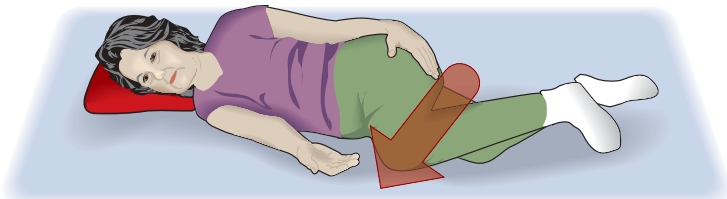
relief takes longer because the piriformis is a large muscle surrounded by the sciatic nerve, so the exercises to loosen the muscle will be painful at the first. However, once the muscle loosens, it will start to feel better as the nerve pressure recedes, and the pain should subside. Loosening tight hip flexors may also relieve sciatica pain.

This series of exercises should be done five or six times daily, 6 days per week. Evidence is strong that small amounts of stretching and strengthening exercises throughout the day are more effective in relieving pain than a longer bout of exercises once a day.

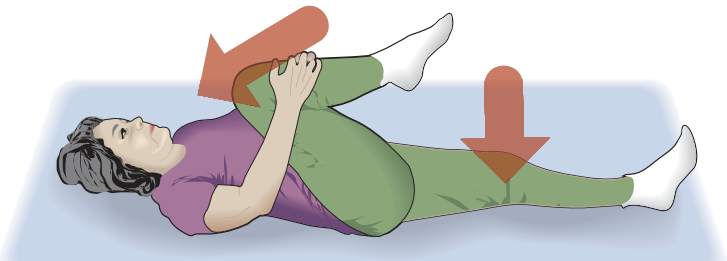
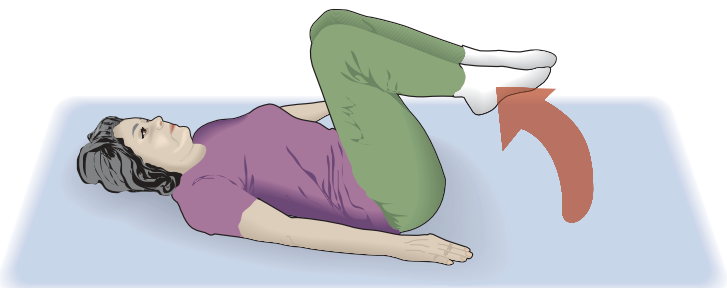
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Exercises for Sciatica

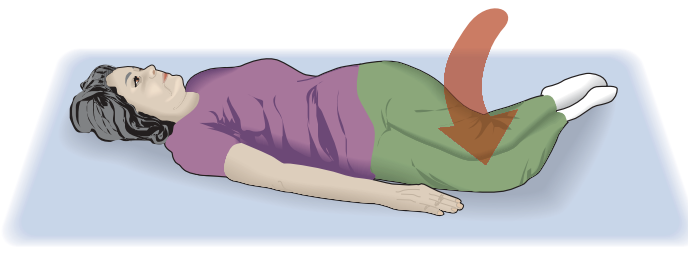
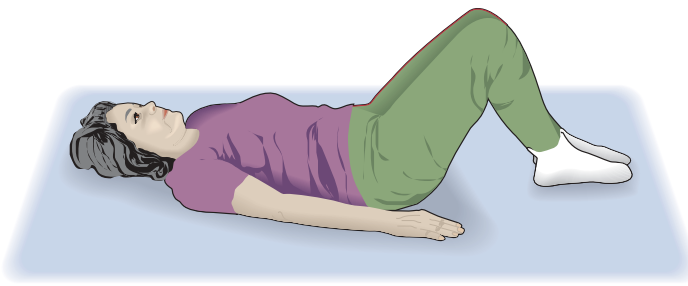
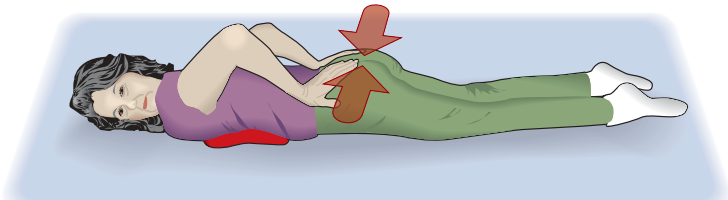
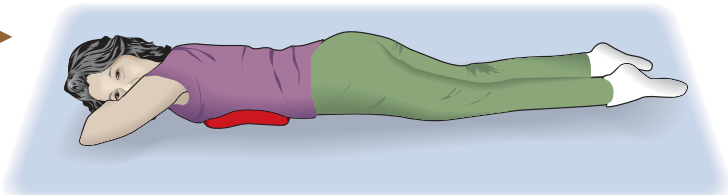


▲ **Side-lying hip stretch.** Lie on a carpeted floor on your right side with knees bent to about 45 degrees. Place a pillow under your head. Slowly slide your top (left) leg toward your chest and lower that knee to the floor. Gently straighten the leg so the hip and knee are in line with your body, just above the bottom leg and lower your (left) foot to the floor. Repeat three times. Switch sides, and repeat with the right leg on top.



▲ **Back-lying hip flexor stretch.** Lie on your back with knees bent and feet flat on the floor. Raise both knees toward your chest. Bring the right knee close to your chest, clasp your arms around it. Slide your left leg down onto the floor, straightening it as much as possible. Try to touch the floor with the back of the knee of the extended leg. Hold the position for 5 seconds. Slowly return to the starting position. Relax for 4 seconds. Repeat with the opposite leg. Start with three repetitions, alternating your legs, and work up to six.

▶ **Buttocks pinch.** Lie on your stomach with a pillow under your abdomen. Squeeze your buttocks together tightly, and hold for 5 seconds. Relax. Start with three repetitions, and work up to six repetitions. If this exercise is too difficult, use your hands to squeeze the buttock muscles together.



◀ **Back-lying hip rotation.** Lie on your back with legs together, knees bent, and feet flat on the floor. Gently lower both knees towards the floor on your right side. Do not strain, and do not use any muscular effort to hold your knees on the floor. Also, do not allow your shoulders to lift from the floor. Hold for 15 seconds. Return to the starting position and relax. Repeat on the left side. Start with three repetitions, alternating sides, and work up to six.