

EXERCISE RX

Exercises for Chronic Conditions: Lumbar Stenosis

Lumbar spinal stenosis occurs in the lower back, where most back movement takes place. The condition develops when osteoarthritis causes a narrowing of the opening in the vertebrae through which the spinal nerves pass. In some advanced cases, bones press on the spinal nerves when the body is in a certain position or positions, which causes a sharp pain.

Symptoms of this condition are similar to those of disk disease; patients may complain of numbness in the legs and pain in the lower spine. Older patients may report shooting pains in the legs when they first wake up in the morning.

Patients with lumbar stenosis may report that walking seems more difficult although they have no apparent pain in their knees. They also may find that their calves hurt after walking but that the calf pain goes away when they sit down. These symptoms are due to a combination of body position and tight muscles that further close off the already narrowed vertebral openings. When the patient sits down, the openings become slightly enlarged, which may reduce the pain temporarily.

Lumbar spinal stenosis is often mistakenly diagnosed as sciatica, peripheral vascular disease, or simply the aches and

pains of old age. It tends to develop with age and is more common among people who have worked in a physically demanding job, such as construction, for most of their adult lives. The condition will become more common among the population in general as people live longer.

One way to diagnose lumbar stenosis is a treadmill test, but not the kind you would use for a heart examination. Have the patient walk on a level surface, and then change it to an incline. While walking uphill, patients with spinal stenosis can experience pain relief, but patients with peripheral vascular disease tend to have more severe pain.

In this month's column, we'll look at some exercises to help relieve the discomfort of lumbar spinal stenosis. (See illus-

trations and instructions for patients below.)

Surgery, although feasible, is difficult and not always successful. Loose hips are important protectors against pain. In addition, strong oblique stomach muscles and strong legs can make patients more comfortable.

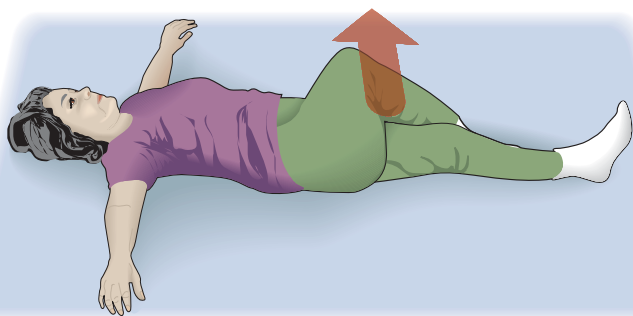
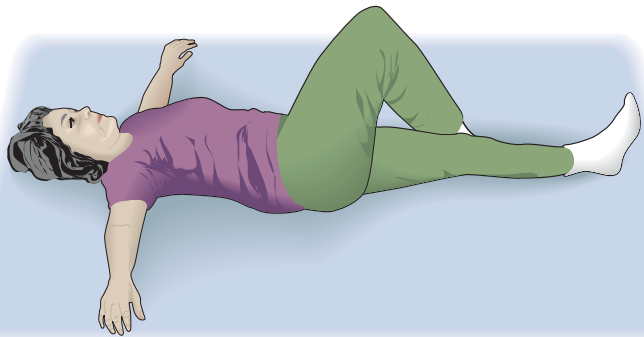
Discourage patients with lumbar spinal stenosis from running or walking downhill; this angles the spine in a way that aggravates their pain. Walking on a treadmill on a slight upward incline is a safe activity, however.

Next month: Exercises for patients with type 2 diabetes. ■

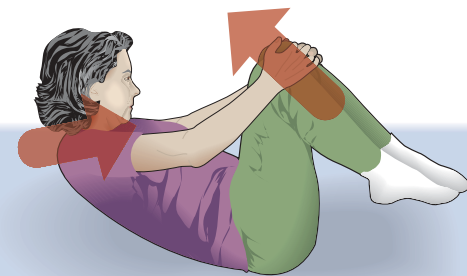
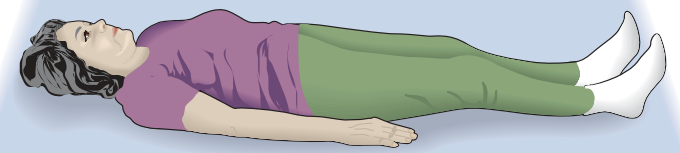
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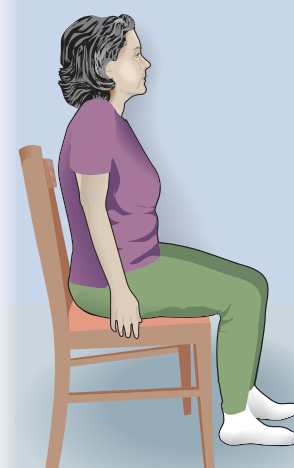
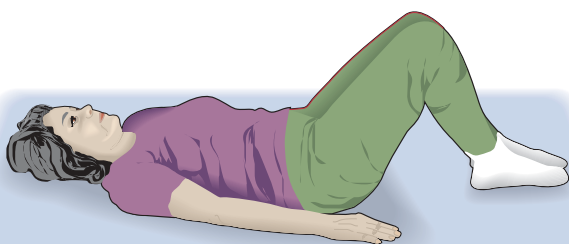
Lumbar Stenosis



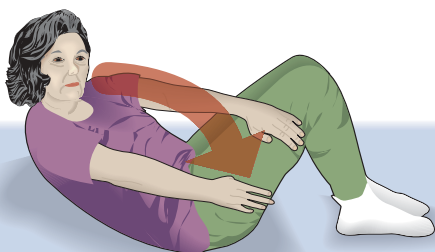
Supine paraspinal stretch. Lie on your back on a carpeted floor with legs extended in front of you. Exhale slowly as you lift your head and shoulders and grasp your knees while gently bringing your knees to your chest. Relax. Repeat 6-8 times.



▲ Piriformis muscle stretch. The piriformis is a muscle in the hip that often tightens in patients with spinal stenosis. To stretch it, lie on your back with both arms extended at shoulder height. Bring your right foot over your left leg, turning the right knee to the left. Try to keep your trunk and shoulders flat on the floor. Hold for 6 seconds, then return to starting position. Repeat 6-8 times on each side.



▲ Abdominal strengthening. Lie on your back on a carpeted floor with knees bent and feet flat on the floor. Tuck your chin to your chest, extend your arms, and reach each arm and shoulder across the opposite knee, creating a slight twist. Hold for 6 seconds, then relax. Repeat 6-8 times each side.



▲ Low back extensor. Sit in a chair, with feet flat on the floor and knees shoulder-width apart. Bend forward, and roll the left shoulder toward the right knee, reaching your arms toward your right foot and bringing your head toward the outside of the right knee. Hold for 6 seconds. Contract your abdominal and gluteal muscles as you rise to a seated position. Repeat 4-6 times. Perform on the other side, reaching toward the left knee with the right shoulder. Breathe out as you bend forward.