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What Is Sciatica? [Table of Contents](#) | [Top of page](#)

Sciatica is a very broad term indicating pain along all or some of the fibers of the sciatic nerve. This nerve consists of fibers emerging from the lower vertebrae in your back (lumbar and sacral area), bundled together in a sheath that then travels through your pelvis and down the back of your thigh and leg. Not every leg or low back pain is sciatica.

How do you get sciatica? Any disturbance along your spine can be responsible, even a neck problem. Your spine is one organ, and any disturbance along the pathway from the sciatic nerve to the brain can bring about sciatica. Bad posture will exacerbate the pain.

This being said, sciatica will occur most often when either the lumbar spine or the pelvis is misaligned or moving incorrectly (subluxation). Subluxation can involve two or more lumbar vertebrae. It can also involve pelvic joints such as the sacroiliac joints, or the joint between the two pubic bones. When subluxation is complicated by bulging or herniated lumbar discs, tensions or imbalances in the pelvic muscles, or long periods of sitting or standing, the sciatic pain can become much worse.

If you have pain down the back of the thigh or leg, try to relax, take a warm shower or bath, and move around a little. If you're familiar with the proper way to do the knee clasp exercise, this would be a good time to do it. If, after a day or two, your sciatic nerve is still singing to you, give us a call. It's time.

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'Tis the season. You may find that you fare better physically if you break the gardening chores into chunks. Other than mulching, most garden tasks can be redirected into a more merciful time frame.

Take a section at a time. Aerate, weed, transplant and water a small area during one session. This will let you change positions often, and has the added benefit of giving you a sense of completion (an experience not often realized anymore), if only on a small basis. As long as you don't go too "micro" in your project definition, everything will get done in a reasonable time frame, and you'll feel a lot more relaxed.

Fender Bender? More? [Table of Contents](#) | [Top of page](#)

If you have had an auto collision between adjustments, let us know when you schedule your next visit, so we can allow enough time for you.

Even if you feel that you have suffered little or no injury, and do not plan to place an insurance claim, there are a few things we'll want to check to make sure that there's nothing needing special attention or care. It will usually just take a few minutes, so please help us make sure we have those minutes. Thanks!

Research Review: Single Leg Balance [Table of Contents](#) | [Top of page](#)

All sorts of strengthening exercises have been devised to improve the stability of the spine. While these exercises have value, they mainly reach the large superficial muscles. Underneath these is a deep layer of muscles so small that some of them only connect two neighboring vertebrae. You have little conscious control over these small "intrinsic" muscles of the spine; most people cannot will one vertebra to move while keeping the rest of the spine still. Yet, these intrinsic muscles of the spine provide fine-tuning of spinal movement and position, and are essential for normal posture and balance.

Restriction or misalignment of spinal joints (spinal subluxation) can disrupt the nerve pathways which control these intrinsic muscles. The result can be loss of spinal stability and balance. Studies of patients with low back pain – a common subluxation-related complaint – indicate that balance is significantly worse in such patients than in the general population.^{1,2} This loss of balance in patients with low back pain implies poor control of the intrinsic muscles of the spine due to subluxation.

The subluxation-balance connection is a two-way street. Just as subluxation can adversely affect balance, poor balance can lead to accidents, which can generate new subluxations or aggravate old ones. In a study of adults over the age of 50, people who were unable to stand on one leg for 30 seconds or more were at significantly greater risk of falls compared to those whose single leg balance time was at least 30 seconds on each leg.³

By working with individual vertebral motions, chiropractic adjustments help to maintain the function of the intrinsic spinal muscles, thereby improving balance and stability. In terms of exercise, the most effective

way to wake up the neurological pathways controlling the intrinsic muscles of the spine is to work with balance.

Practice standing on one foot. (Note: When you practice this for the first time, face a corner of the room, so that you can easily catch yourself if you begin to fall. Once you feel more steady, you can get out of the corner for your daily balance practice.) When you can comfortably stand on each foot for 30 seconds, you might want to make your practice more challenging by closing your eyes. If you fail to improve your balance despite practice, ask your doctor of chiropractic to check for subluxations.

In terms of recreational activities, dance, yoga, martial arts, skating and bicycling are all excellent ways to tune up your balance and get your intrinsic spinal muscles into condition.

Reference

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2. Radebold, et al. "Impaired Postural Control of the Lumbar Spine is Associated with Delayed Muscle Response Times in Patients with Chronic Low Back Pain." *Spine*, 2001; 26: 724-730.
3. Hurvitz, et al. "Unipedal Stance Testing as an Indicator of Fall Risk Among Older Patients." *Archives of Physical Medicine and Rehabilitation*, 2000; 81: 587-591.

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The portion of your nervous system which controls the internal organs is called the "autonomic" nervous system. Most of the time, you do not consciously control this portion of the nervous system. In fact, it used to be common practice to call it the "involuntary" nervous system.

However, the nervous system is not so neatly fragmented into voluntary and involuntary sections. To a large extent, your autonomic nervous system is at the service of your most voluntary functions – the actions of your skeletal muscles.

For example, when you move from a lying down to a sitting position, your heart rate and blood pressure have to immediately adapt in order to keep enough oxygen flowing to your brain. If this does not happen you will get dizzy. The dizziness may be even worse when you move from a sitting to a standing position. Other musculoskeletal activities – walking, speaking, singing, running, bicycling, etc. – all generate signals that are detected by the autonomic nervous system. The autonomic nervous system responds by fine-tuning the function of your heart, blood vessels, lungs, digestive tract, glands, and all of your other internal organs to fit the needs of your musculoskeletal activity. In other words, when your muscles and joints "go to work", the autonomic nervous system makes sure that all necessary "fuel and supplies" (oxygen, blood sugar, etc.) are provided.

This work-supporting activity of the autonomic nervous system is called “ergotropic” function (from the same root as “ergonomics” – the study of work). Accurate ergotropic function depends on accurate information from the sensors in the joints and muscles. These sensors keep the nervous system informed of the position, motion and tension of every muscle and joint in the body.

When vertebrae become misaligned or stuck – a situation called “subluxation” – there is interference with the spinal nerves. This interference often distorts the incoming signals from the muscles and joints. When this happens, the ergotropic response can be distorted as well. This is one way that subluxation can adversely affect internal organ function.

By helping the body correct subluxations, the chiropractic adjustment aims at more than simply giving you a better pain-free range of motion. The greater aim is to help your nervous system maintain clear, low-static signals.

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