

Sciatica

What is sciatica?

Sciatica (pronounced sigh-AT-ih-ka) is low back pain combined with a pain through the buttock and down one leg. The pain usually goes past the knee and may go farther to the foot. Sometimes, weakness in the leg muscles occurs with sciatica.

The sciatic nerves are the largest nerves in the body and are about the size of your little finger. They come out of the spinal column low in the back, then go behind the hip joint, down the buttock, and down the back of the leg to the foot.

Sciatica is different from other forms of low back pain because there are 2 sciatic nerves, and the pain is usually on one side.

The pain is usually a shooting pain, like electricity. It can also burn like fire or tingle much like the feeling when your leg "goes to sleep." The pain can range from slightly annoying to totally unbearable. Some people have pain in one part of the leg and numbness in another part of the same leg.

What causes sciatica?

Sciatica is caused by irritation of the sciatic nerve. Most of the time, you will not remember doing anything to hurt yourself. Occasionally, you will suddenly get the pains after lifting something heavy or moving quickly. The sciatic nerve can be pinched or stretched.

- A herniated disc (sometimes called a slipped disc) is the most common cause of sciatica. Discs are the cushions between the bones in the back. They act like "shock absorbers" when we move, bend, and lift. They look like checkers in size and shape.
- There is a tough ring around the outside and a thick jellylike center inside (called a nucleus propulsis). If the outer edge of the disc ruptures, the center can push through and put pressure on the sciatic nerve, leading to the pain of sciatica (referred to as a herniated nucleus propulsis as the syndrome).

- Spinal stenosis is a narrowing of the canal that contains the spinal cord. As we age, the bone can overgrow and put pressure on the sciatic nerve. Many people with spinal stenosis have sciatica on both sides of the back.
- Spondylolisthesis is a condition where one backbone has slipped forward over another backbone resulting in pressure on the sciatic nerve.
- The piriformis syndrome causes the sciatic nerve to get trapped deep in the buttock by the piriformis muscle. The symptoms are the same as sciatica.
- Sciatica can also be caused by other effects of aging, such as osteoarthritis and osteoporosis.
- Rarely, sciatica is a symptom of a far more serious problem, such as tumor, blood clot, or abscess (boil). Other causes of sciatic pain include Lyme disease, fibromyalgia, pelvic infections, Reiter syndrome, and various infectious causes of arthritis (which could be caused by bacteria, a virus, or a fungus).

What are the signs and symptoms?

- The most common symptom from sciatica is pain. Most people describe a deep, severe pain that starts low on one side of the back, then shoots down the buttock and the leg with certain movements.
- The pain is usually worse with both prolonged sitting and standing. Some people describe the worst pain when trying to stand from a low sitting position, such as standing up after sitting on a toilet seat.
- In most people, the pain is made worse by sneezing, coughing, laughing or a hard bowel movement. Bending backwards can also make the pain worse.

- You may also notice a weakness in your leg or foot, along with the pain. The weakness may become so bad you can't move your foot.

What can I do for home care?

Pain will probably limit your activities. Here are some ways to ease the pain at home:

- Do not bend, lift, or sit in a soft, low chair-your pain will get worse.
- Unless you are allergic or should not take them for other reasons (if you take Coumadin, for example), over-the-counter pain medicines such as acetaminophen (Tylenol is one brand name), aspirin (such as Bufferin or Excedrin), or ibuprofen (Advil, Motrin IB) will probably help ease the pain.
- Try a cold pack to see if it helps the pain. You may have one in your freezer: Use a large bag of frozen vegetables. It makes a good first-aid cold pack. Or have someone close to you perform an ice-cube massage in a triangular pattern over the sore areas, moving areas as your skin gets too cold (this may melt several ice cubes)
- After the cold massages, try alternating with heat from an electric heating pad to see if it helps the pain. (Do not sleep with a heating pad on your back. It could cause a bad burn.)
- If you don't have an electric heating pad, put a hand-towel under hot water, wring it out, and place it on your back. Some physical therapy experts believe that moist heat penetrates more deeply and gives better relief of pain. (Do not use wet packs with your electric heating pad because electrical shock may result.)
- You may feel better lying on your back on a firm surface with a pillow under your knees. Another option is lying on your side with a pillow between your knees to keep your back straight. Also, you might find that a recliner chair is helpful.

- Take it easy, but do not lie in bed for longer than 2 days because this has been shown to actually worsen the condition. Do activities you are able to tolerate, and do not expect to feel better overnight.

When should I call the doctor?

- Call your doctor if any of the following occur.
- The pain is not improving after several days or seems to be getting worse.
- You are younger than 20 or older than 55 years and are having sciatica for the first time
- You presently have cancer or have a history of cancer.
- You have lost a large amount of weight recently or unexplained chills and fever with back pain.
- You are HIV positive, or you use intravenous drugs.
- You continue to have trouble bending forward after more than a week or two.
- You notice weakness is getting more pronounced over time.

When should I go to the hospital?

You should go to an Emergency Department if any of the following occur along with sciatica:

- The pain is unbearable, despite trying first aid methods as described in the Home Care section.
- The pain follows a violent injury, such as a fall from a ladder or an automobile crash.
- The pain is in the back of your chest.

- You are unable to move or feel your legs or feet.
- You lose control of your bowels or bladder or have numbness in your genitals.
- You have a high fever (over 101°F).

How is sciatica diagnosed?

- Sciatica is a clinical diagnosis. In other words, the doctor will be able to make the diagnosis based on your medical history, a physical examination, and your description of your symptoms. If you have had sciatica for only a brief time and you have no sign of any other diseases, no lab studies or x-rays may be needed.
- If the pain has been present for several weeks, you may get special studies of your back-either CT (computerized tomography) or MRI (magnetic resonance imaging) scans.
- If you have a history of cancer, HIV infection, intravenous drug use, or you have been taking steroids over a period a time, the doctor may want to see plain x-rays of your back or a bone scan.
- Occasionally, laboratory studies may be helpful. A CBC (complete blood count) may suggest infection, anemia due to certain cancers, or other unusual causes of sciatica. Elevated sedimentation rate may suggest inflammation somewhere in the body. Urinalysis can suggest a kidney stone, if there is blood in the urine, or infection, if there are bacteria and pus in the urine.

Is there any treatment for sciatica?

- Your doctor may prescribe you some medicine for the pain.
- You may receive special instructions from your doctor or the emergency physician on dealing with back pain. Some suggest complete bed rest-getting up only to go to the bathroom. Others suggest you sleep on the floor or put a board under your mattress for support. Some will tell you to use heat, others cold. You may also get

a sheet with pictures of back exercises you are expected to start when the pain improves. (These patient education sheets come from different sources and may have conflicting information.)

- Current research recommends that you stay active, within limits imposed by your pain. If you can avoid reinjuring yourself, you should try to stay at work. If the pain forces you to rest, do so, but avoid staying in bed just because you have back pain.
- If you are not improving after a week or 10 days, talk with your doctor about alternative therapies. Millions of people get some relief by visiting physical therapists, osteopaths, and chiropractors. Others find that relaxation techniques and acupuncture work for them.
- If, despite doing everything you are instructed to do, the pain continues, and your CT or MRI shows a problem with the disc or bone, you may need back surgery. This should not be performed until you have tried all other methods of treatment

What is the prognosis?

Most of the time, the pain associated with sciatica goes away in days to weeks. Pain can become more chronic in a small number of people, leading to some disability. Unfortunately, sciatica tends to reoccur frequently, sometimes without warning.

As your back is recovering, avoid twisting your back while bending at the same time because this move may aggravate your healing back and may slow your recovery.

What can I do to prevent sciatica?

- Use proper lifting techniques in keeping your back straight while bending your knees to pick up items often help avoid mechanical back problems.
- Keep flexibility and muscle tone by performing stretching exercises. These will help keep your back from bothering you. Maintaining your weight within your recommended limits for your height will go a long way to maintaining a healthy back as well.

Common sense should tell you what to do

- Continue the simple first-aid measures for easing the pain. Use pain medicines, both over-the-counter and those prescribed for you by your doctor.
- Avoid reinjuring yourself. Pain will be your guide. If you hurt too much, back off on what you are doing and rest. Go slowly, if necessary, but try to keep active.
- Using a cane or a crutch for support will be helpful until the pain is under control.

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