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Sciatica

Pronounced: sigh-AT-i-kuh

by Elizabeth Smoots, MD

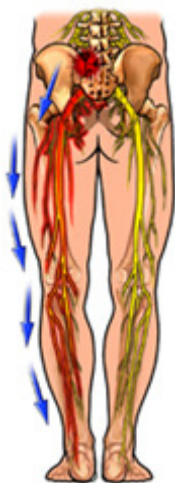
Definition

Sciatica is irritation of the sciatic nerve that passes down the back of each thigh.

The sciatic nerve arises from the lower spine on either side and travels deep in the pelvis to the lower buttocks. From there, it passes along the back of each upper leg and divides at the knee into branches that go to the feet.

Sciatica typically causes pain that shoots down the back of one thigh or buttock. Sciatica pain is often burning, tingling, or numbness on one side of the leg. Pain may also be present on one side of the buttocks that worsens when seated for a long time.

Sciatic Nerve Pain



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Causes

Anything that causes irritation or puts pressure on the sciatic nerve can cause sciatica, including:

- Herniated disk (or slipped disk)—the cushions between the bones of your spine bulge out of place and press on the nerve as it exits the spinal column

- Disk degeneration—caused by aging or arthritis

- Spinal stenosis —narrowing of the spinal canal in the lumbar area

- Spondylolisthesis —slippage of a bone in the low back

- Sprain or strain of muscles or ligaments in the area

In rare cases:

- Benign or malignant tumors

- Infections

- Blood clots

- Metabolic problems like diabetes

- Toxins, such as excessive alcohol

Risk Factors

These factors increase your chance of developing sciatica. Tell your doctor if you have any of these risk factors:

- Age: 25-45 years old

- Injury, such as:

- Lifting a heavy object

- Suddenly moving or twisting

- Family members with sciatica or low back problems

- Vibration from vehicles or heavy equipment

- Lack of regular exercise

- Obesity

- Smoking

- Stress

Symptoms

Sciatica causes symptoms that can range from mild to severe.

Typical symptoms include:

- Burning, tingling, or a shooting pain down the back of one leg

- Pain in one leg or buttock that is worse with:

- Sitting

- Standing up

- Coughing

- Sneezing

- Straining

- Weakness or numbness in a leg or foot

More serious symptoms associated with sciatica that may require immediate medical attention include:

- Progressive weakness in a leg or foot
- Difficulty walking, standing, or moving
- Loss of bowel or bladder control
- Fever, unexplained weight loss, or other signs of illness

Diagnosis

The doctor will ask about your symptoms and medical history, and examine your back, hips, and legs. The physical exam will include tests for strength, flexibility, sensation, and reflexes.

Other tests may include:

- X-ray —a test that uses radiation to take a picture of structures inside the body, especially bones
- MRI Scan —a test that uses magnetic and radio waves to make pictures of structures inside the body
- CT Scan —a type of x-ray that uses a computer to make pictures of structures inside the body
- Nerve conduction study —a test in which an electrical current is passed through a nerve to determine the health or disease of that nerve

Treatment

The goal of treatment is to reduce sciatic nerve irritation.

Treatment options include:

Limited Physical Activity

Prolonged bed rest is usually not advised. However, your doctor may recommend resting in bed for 1-2 days. Too much bed rest can weaken muscles and slow healing. Doctors generally recommend staying active within the limits of your pain and avoiding activities that worsen back pain.

Medication

Medications used to treat sciatica include:

- Pain relievers, such as acetaminophen (Tylenol), aspirin, or ibuprofen
- Muscle relaxers for muscle spasm
- Cortisone pills or injections where the sciatic nerve comes out of the spine
- Antidepressants for chronic pain

Physical Therapy

Physical therapy may be done at home or at work. It may include the following:

- Hot or cold packs
- Stretching and strengthening exercises

Massage
Ultrasound treatments
Electrical stimulation

Alternative Therapies

These therapies have not been proven by scientific studies to have an effect on sciatica. However, some people may find some pain relief from the following:

Biofeedback
Acupuncture

Surgery

Surgery may be done to relieve pressure on the sciatic nerve. This is performed in emergency situations or if conservative treatments fail. Common surgical procedures are microdiscectomy and lumbar laminectomy.

Talk to your doctor about the right treatment plan for you. For example, a study found that after one year, there was little difference between patients that had microdiscectomy and those that had conservative treatment (such as rest, physical therapy, and medications). But, people that had surgery did report faster recovery time.

If you are diagnosed with sciatica, follow your doctor's instructions.

Prevention

Sciatica tends to recur. The following steps may help keep it from coming back or, in some cases, from happening in the first place:

Lose weight. Being overweight increases the risk of sciatica as well as other back, bone, and joint problems. The greater the weight problem, the greater the risk.

When lifting, hold the object close to your chest, maintain a straight back, and use your leg muscles to slowly rise.

Practice good posture to reduce pressure on your spine.

Sleep on a firm mattress.

Exercise regularly, at least 30 minutes most days of the week. Good choices include: walking, swimming, or exercises recommended by your doctor or physical therapist.

Exercises that strengthen the abdominal muscles will also help by supporting the back.

If possible, avoid sitting or standing in one position for prolonged periods.

Use a low back support during prolonged sitting. Rest one foot on a low stool if standing for long periods.

Consider job retraining if your work requires a lot of heavy lifting or sitting.

If you smoke, quit. Smoking can damage your sciatic nerve.

RESOURCES:

American Association of Neurological Surgeons

<http://www.neurosurgery.org/>

Sciatica.org

<http://www.sciatica.org/>

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