

Sciatica

What is sciatica?

Sciatica means that there is inflammation of the sciatic nerve. The sciatic nerve supplies information about movements to the leg, and sends information about sensations back to the brain. The sciatic nerve is quite large. It is the largest peripheral nerve in the body. The sciatic nerve exits the lower part of the spinal cord (lumbosacral region), passes behind the hip joint, and runs down the back of the thigh.

How does this nerve normally function?

The sciatic nerve, like most other nerves, performs two basic functions: first, it sends signals to your muscles from the brain; and second, it collects sensory information from the legs and passes this back to your brain. Conditions such as sciatica that affect the nerve will alter these normal functions. This usually manifests as either weakness of these leg muscles, pain in the legs and thighs, or both.

What causes sciatica?

The most common cause of sciatica is a herniated spinal disc. When this happens, the normal cushion between the vertebra of your spine ruptures. This causes the disc to push out into areas normally occupied by these nerves. The nerves are compressed and people then experience the symptoms of pain, weakness, and numbness. Other conditions, such as spinal stenosis, spondylolisthesis, or piriformis syndrome can also cause sciatica symptoms by irritating the nerve.

What are the signs and symptoms of sciatica?

As stated above, sciatica can cause both sensory and muscular abnormalities in the legs and thighs. Often there is a sudden onset that may be attributed to over-exertion or a back injury. Common symptoms of sciatica include:

- cramping sensation of the thigh
- Shooting pains from the buttock, down the leg
- Tingling, or pins-and-needles sensations in the legs and thighs
- A burning sensation in the thigh

In addition, injured workers with sciatica may notice a worsening of their symptoms with manoeuvre such as squatting, coughing or sneezing. These manoeuvres can increase pressure around the nerve and magnify the symptoms of sciatica.

What treatments are available for sciatica?

Treatment is initially aimed at addressing the inflammation associated with sciatica. Rest, anti-inflammatory medications, and muscle relaxants are often used. Some injured workers require a more powerful anti-inflammatory treatment and are given oral steroids. These steroids do have potential side-effects, but the powerful anti-inflammatory effect can be helpful in the treatment of sciatica.

As the pain subsides, exercises and physiotherapy are helpful. Many people find that heat packs and ice packs soothe the muscles that are painful in sciatica. Some doctors may prescribe an epidural steroid injection that can deliver anti-inflammatory medication directly to the inflamed area around the nerves.

Surgical treatment of sciatica is not usually needed, but in individuals who undergo the above treatments for a minimum of three months, and still have symptoms, a referral to a surgeon may be considered. The surgical procedure is one that allows more room for the nerve in the area being compressed. This may mean removing the ruptured disc, opening up the bone around the nerve, or a combination of both.

Recovery Time:

This is the good news. Most people (80-90%) fully recover from sciatica without surgery. In most cases the nerve is not permanently damaged, and individuals recover in the 3-week to 3-month time frame.

Sciatica is not a medical emergency. However, if you experience difficulty with bowel or bladder function, decreased sensation around the genitals, or progressive leg weakness, this may be the sign of cauda equina syndrome, a medical emergency. If you have these symptoms, contact your doctor or go to the emergency room immediately.