

Sciatica

WHAT IS SCIATICA?

The sciatic nerve is the largest and longest nerve in the body with a diameter of almost 2cm. It starts from the sacral plexus, a network of nerves in the pelvis region, branching out down into each of the legs.

The sciatic nerve carries out two basic functions, namely motor (movement) functions and sensory (feeling) functions. When the nerve is compressed, the symptoms are called sciatica. Aside from sharp shooting pain, symptoms such as loss of reflexes, weakness and numbness are often present when both its motor and sensory functions are imparied.

WHAT CAUSES SCIATICA?

One common cause of sciatica is a herniated disc or "slipped disc". The herniated disc protrudes and places pressure on the nerve root which connects to the sciatic nerve.

As the longest nerve in the body, there are ample opportunities for the nerve to be compressed. They include:

- Piriformis Syndrome is pain caused by the piriformis muscle that may be in inflamed, or irritated. This muscle is in your buttock and lies right on top of the sciatic nerve as it exits the spine and goes down your leg. When inflamed or irritated, this muscle swells and applies pressure on the nerve giving you the sciatica like symptoms.
- Spinal Stenosis, which is the narrowing of the spinal canal can cause sciatica-like symptoms. The narrowing can be caused by disc problems as well as arthritis of the spine.

Sciatica-like symptoms may also be caused by other than compression on the sciatic nerve such as.

- Sacroiliitis is an inflammation of your sacroiliac joint, where your hip meets the spine. Inflammation caused by trauma or arthritis can give you sciatica-like symptoms.
- Lumbar Facet Joint Syndrome is pain that comes from the joints of your back causing not only back discomfort, but also it can give you sciatica-like symptoms. The facet joint, like any other joint of your body, such as the knee or elbow, can get inflamed and cause pain.
- Iliolumbar Syndrome is simply inflammation or a tear of the Iliolumbar ligament. This ligament extends from the spine to the iliac crest, which is the back of your pelvis.

Your doctor or physiotherapists can perform one or more movement tests to determine the exact cause of your symptoms.





WHAT ARE THE SYMPTOMS?

One or more of the following sensations may occur as a result of sciatica:

- 1. Pain in the rear or leg that is worse when sitting.
- 2. Burning or tingling down the leg
- 3. Weakness, numbness or difficulty moving the leg or foot
- 4. A constant pain on one side of the rear
- 5. A shooting pain that makes it difficult to stand up

If severe pain symptoms occur along with bowel or bladder control problems, consider this as an emergency and is to be evaluated as soon as possible by a neurologist or orthopaedic specialist.

TREATMENT

As nerve pain is caused by a combination of pressure and inflammation on the nerve root, and treatment is centered on relieving both of these factors:

- 1. Manual treatments for sciatica including physiotherapy treatments such as mobilisation and manipulation to help relieve the pressure and inflammation with electrophysical agents.
- 2. Medical treatments for sciatica (such as NSAID's, oral steroids, or epidural steroid injections) to help relieve the inflammation.
- 3. Surgery for sciatica (such as microdiscectomy or lumbar laminectomy) to help relieve both the pressure and inflammation may be warranted if the sciatic nerve pain is severe and has not been relieved with appropriate manual or medical treatments.

When sciatica has resolved, the patient should maintain optimum conditions for their spine. The fact that the spine has had a prolapse, and is not normal, does not preclude a relatively normal lifestyle. Specific exercises such as core stability exercises to maintain flexibility and strengthen the abdominal and spinal muscles are important.

