

# Sciatica

Sciatica is a condition involving pain, weakness, numbness, or tingling in the leg. It is caused by injury to or compression of the sciatic nerve.

## Causes

Sciatica is a form of peripheral neuropathy. It occurs when there is damage to the sciatic nerve, located in the back of the leg. This nerve controls the muscles of the back of the knee and lower leg and provides sensation to the back of the thigh, part of the lower leg and the sole of the foot. Incomplete damage to the sciatic nerve may appear identical to damage to one of the branches of the sciatic nerve (tibial nerve dysfunction or common peroneal nerve dysfunction).

A problem in a single nerve group, such as the sciatic nerve, is classified as a mononeuropathy. The usual causes are direct trauma (often due to an injection into the buttocks), prolonged external pressure on the nerve, and pressure on the nerve from nearby body structures. It can also be caused by entrapment -- pressure on the nerve where it passes through a narrow structure. The damage slows or prevents conduction of impulses through the nerve.

The sciatic nerve is commonly injured by fractures of the pelvis, gunshot wounds, or other trauma to the buttocks or thigh. Prolonged sitting or lying with pressure on the buttocks may also injure it. Systemic diseases, such as diabetes, can typically damage many different nerves, including the sciatic nerve. The sciatic nerve may also be harmed by pressure from masses such as a tumor or abscess, or by bleeding in the pelvis.

In many cases, no cause can be identified.

**Note:** A ruptured lumbar disk in the spine may cause symptoms that simulate the symptoms of sciatic nerve dysfunction.

## **Symptoms**

## **Treatment**

Treatment is aimed at maximizing mobility and independence. The cause of the nerve dysfunction should be identified and treated as appropriate. In some cases, no treatment is required and recovery is spontaneous.

Conservative treatment like chiropractic care or physical therapy is usually appropriate if there was sudden onset, minimal sensation changes, no difficulty in movement, no history of trauma to the area, and no evidence of degeneration of the nerve axon.

Surgical removal of lesions that press on the nerve, such as a herniated disk, may relieve symptoms, but is only recommended in less than 5% of all cases of sciatica. In cases of severe injury to the nerve, such as laceration, recovery may be not possible or may be limited.

Injections can be used to reduce inflammation around the nerve. Over-the-counter or prescription analgesics may be needed to control nerve pain.