Sciatica

Sciatica is a broad term that is used to refer to a compression or irritation of the sciatic nerve that causes pain or discomfort. Sciatica is said to occur when the sciatic nerve is irritated which causes pain and discomfort throughout the lower half of the body. In this E-Book, we will break down what you need to know about the sciatic nerve and sciatica, including common causes of sciatica, the signs and symptoms, and different potential treatment options.

Sciatic Nerve

The sciatic nerve is the longest nerve in the human body. This nerve starts in the lumbar of the lower back, moving through the buttocks and down the back of each leg. The sciatic nerve branches out into each leg to innervate into several lower body parts, including the quad, calf, foot, and into the toes. The nerve’s job is to supply sensation, strength, and controls reflexes in the legs. The sciatic nerve is composed of five different smaller nerves. Each of these nerves exists in the spine located between two vertebral segments. These five nerves group together in the piriformis muscle (common irritation point for sciatic pain) in the buttocks to form one nerve. Another area, in the back of the knee in each leg, the nerve then divides into two which are the peroneal nerves. One moves
sideways along the outer part of the knee and down into the upper foot, and the tibial nerves travel down the back to the heel and soul of foot. The sciatic nerve can be irritated by any lower spine injury and cause lower body pain from these several areas where the nerve branches out.

**Causes of Sciatic Pain?**

Sciatica is rarely caused by one specific injury, but normally tends to develop over time. Listed are the most common causes of sciatica:

**Piriformis syndrome**- The piriformis is a muscle in the buttock and the sciatic nerve runs under this muscle. The nerve can become irritated as it passes underneath it, as the muscle can either inflame (be tight) or pinch the nerve.

**A herniated disc in the lumbar region**- When the soft inner core of the disc, known as the nucleus pulpous, exposes itself through its thick exterior, it is called a herniated disc. Also referred to as a slipped disc or a ruptured disc, this can irritate the neighboring sciatic nerve. This herniated disc can bother the nerve if it touches.

**Degenerative disc disease**- Degenerative disc disease can occur as part of the aging process. There are multiple factors in life that can play a roll, although studies show that genetics can also be the case. After the age of 60, disc degeneration is common to happen in some form. Degenerative disc disease causes
inflammatory proteins to become exposed from the inside of disc and eventually irritating the nerve.

**Lumbar spinal stenosis**- Lumbar spinal stenosis is the narrowing of the spinal canal in the lower region causing a compression of the sciatic nerve. This is a common condition for individuals over the age of 60.

**Sacroiliac joint dysfunction**- Sacroiliac joint dysfunction is most common in teenage and middle-aged women, though the cause is not clear. The sacroiliac joint is located at the base of the spine. The dysfunction can cause an irritation of the L5 sciatic nerve branch.

**Diabetes**- People with Diabetes have a higher chance of getting sciatica. High blood sugar in the body causes nerve damage in the legs and feet.

**Previous spinal injury**- Scar tissue can build if there has been previous injury to spine and can pinch nerve.

The cause of the sciatica should be identified to its root problem and taken care of appropriately from there. Sciatica is a symptom and is not a diagnoses.
Symptoms of Sciatica

Intensity of pain or discomfort can vary from person to person depending how much the nerve is pinched and location. Depending where the nerve is compressed can feel different symptoms. The most general symptoms of sciatica are listed below:

**Pain increases when sitting**- A very common symptom of sciatica is increased pain while sitting down. Pain can radiate from the lower back down the buttock and into the foot. When you have a pinch of the sciatic nerve in the lower back, sitting down can intensify the pressure on the nerve causing you more pain.

**Stinging pain buttock or down leg**- A very common experience is shooting pain down one side of the body for sciatic pain. The pains can be distinguished from a dull pain for they are sharp shooting pains when it comes to sciatica.

**Weakness or numbness of leg or foot**- A sciatic nerve pinch can give you the feeling of weak legs seeing that it controls most feeling and strength throughout the legs. Sciatica can be considered to have different intestines from case to case. An individual might have a sciatic nerve compression in more than on location which could cause multiple areas of pain or discomfort.

**Leg feels burning, tingling, or sharp pain**- Pain in the legs is the most common symptoms of sciatica. Individuals often report burning, tingling, or sharp pains in their legs.
Treatment

Treatment of sciatica differentiates from person to person, but some treatment methods can help manage and alleviate sciatica. Commonly, using multiple treatment options can be the most effective way to treat and allude the pain. Here are the most effective ways to treat sciatica:

**Exercise:** Usually, moving around and working all your muscles can help alleviate some sciatic pain. Many people think that rest and lying down will cure sciatica, but actually can worsen it with not enough exercise. Lack of exercise, posture practice and flexibility can cause the lower back and spine’s supporting muscles to become imbalanced. An imbalance of muscle tension in relation to the muscles surrounding your hips can cause some muscles to become underused or overused. The plan is to strengthen the underused muscles and lengthen (stretch) the overused muscles. Here are the core focus points in exercise for sciatica:

- **Gluteal Muscles/Hamstring flexibility** - Many individuals can find relief or comfort when working on gluteal and hamstring flexibility exercises. Stress on the lower back can be intensified with tight hamstring muscles, which can then cause sciatica. Flexibility of these areas can be obtained through static stretching and deep tissue message hence, Sciatic Stretcher product was created.

- **Strength** - Strengthening muscles around the spine will help stabilize and minimize injuries around it that can cause sciatica. Strengthening the back, hips, and buttock are essential to help support the spine. The more you strengthen these muscles and other muscles around the spine you will be less likely to have lower back pain.
• **Cardio/Heart Rate:** Low impact cardio or getting your heart rate up with physical activity can help speed recovery to sciatica as well. Activities such as biking, walking, or hiking help keep the blood moving to parts of your body more efficiently which helps the healing process.

A balanced exercise program of flexibility, strength and cardio can significantly decrease your chances of having an unsupported spine. Exercise is essential to having a decreased chance for bothered sciatic nerve even if you have gotten rid of the pain before.

**Alternating heat and ice:** Icing can help with controlling inflammation and have overall relief. Heating can help with stretching muscles.

**Anti-inflammatory medication:** Anti-inflammatory medications such as ibuprofen, naproxen and other NSAIDs can be used to reduce inflammation and help manage pain levels. A doctor may suggest a steroid injection in a particular area if pain is severe enough.

**Body Manipulation:** Range of motion can be improved as well as muscle balance and body mechanics to relieve body pain and sometimes sciatic pain.

**Surgery:** Surgery should only be evaluated when sciatic pain becomes unreasonable for daily activity. Surgery should not be first attempt at treatment. Consult with your doctor if you feel the need to go further with considering surgery.
If you feel you may be suffering from sciatica, you will want to seek professional medical attention. It is never a good idea to self-treat, before properly diagnosing the cause of sciatic pain. Different causes will require different treatment. Prolonging the cause and treatment method of sciatica can cause chance of permanent nerve damage. If you are suffering from sciatica, consult with your doctor to discuss best options for your health.