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Sciatica

**Introduction**

 Sciatica refers to a pain that is traced along the passage of sciatic nerve. It branches for the lower back to hips and buttocks, moving down to each leg. Sciatica occurs when a herniated disk or a bone spur on the spine. It is also called narrowing of the spine that compresses a nerve or a few parts of the nerve. (Hall, et, al. 2019, pp. 1-25).

Characteristic

 Sciatica is characterized by severe pain in the lower back, and leg. The pain in leg can be so worse that it can create hindrance in sitting. Hip pain is also termed as one of the characteristics of this disorder along with burning or tingling down in the leg. Weakness, difficulty in moving the leg and numbness is accompanied by constant pain on one of the sides of hip along with shooting pain that makes it hard for a patient to stand up. It is asserted that Sciatica usually affects only one side of the lower back. Moreover, this pain can extend to other parts, where, in severe cases, pain may extend to toes or foot. (Hall, et, al. 2019, pp. 1-25).

Prevalence

According to the statistical information, it is estimated that about 4.1 million American’s have the symptoms of this disorder, taking into account the intervertebral disk disorder that effected the subject population from 1985 to 1988. The total prevalence is assumed to be about 2% in men and 1.5% in the women, according to a study that was conducted in French. It is asserted that the population of 295 Finnish concrete workers who have an age of 15-64 years was found to have this disorder where 42% were men and about 60% were women. (Hall, et, al. 2019, pp. 1-25). According to an interview with a medical specialist, within the timespan of five years, the prevalence of Sciatica has increased from 42% to about 59%. It is more added that the ratio of Sciatica has increased by 1.4% for every individual who is of 10 yrs. and it exceeds to 64 years of age. (Hall, et, al. 2019, pp. 1-25).

 Moreover, it is found that there are both environment and inherent factors that are responsible for causing this disorder such as gender, body habitus, age, parity, occupation and genetic factors. (Hall, et, al. 2019, pp. 1-25).

**Causes**

 Research has proven that Sciatica is accused by a severe irritation on the roots of the lower lumbar and the lumbosacral spine. Major cause includes, lumbar spinal stenosis, that is marked by narrowing of the spinal canal in the lower back of the body. Degenerative disc disease, referring to the breakdown of the disc also causes Sciatica because the cushion between the vertebrae is broken. (Hall, et, al. 2019, pp. 1-25). Muscle spasm, spondylolisthesis, a condition in which one of the vertebrae slips forward over the another also cause the subject disorder. There are some other factors that may facilitate Sciatica, such as back pain, being overweight, lack of exercises and wearing high heels. (Jungen, et al. 2019).

Major Victims

 The people who have a sedentary lifestyle are at a greater risk of having Sciatica. It includes people who spend their day sitting or doing a job that lacks movement of the lower back. Manual labor is also found to be at risk of this disorder because of lifting high load and the twisting of the spine because of the heaving loads. A large number of diabetic patients are also found to be a victim of this disorder because of nerve damage, accompanied by pressing of sciatic nerve. Osteoarthritis is termed as one of the causing factors of Sciatica because it narrows the opening of nerve roots, similarly, it also injures nerve fibers. Piriformis syndrome is also termed as one of the major causes of Sciatica because the muscles in buttock compress the sciatic nerve leading to Sciatica. (Oosterhuis, et al. 2019)

**Treatment**

There are four types of treatment that are given to patients who are suffering from Sciatica. Each of the treatment is highly dependent on the severity of pain and the adversity of condition. The major goal of treatment of disorder is to increase mobility and decrease the pain. (Oosterhuis, et al. 2019)

Medicine

 Anti-inflammatory drugs and pain killer medicine can help to relieve the pain along with a reduction in the stiffness of muscles and nerves by increasing mobility and exercise. Commonly suggested medicines are anti-inflammatory drugs also called non-steroidal medicines. Some patients are also given muscle relaxants such as cyclobenzaprine that can help a patient get rid of the discomfort that is associated with muscle spasm. It is important to note that this medicine is not suggested to the people who are older. (Oosterhuis, et al. 2019)

Physical Therapy

 The aim of physical therapy is to recommend exercises and muscle movements that could decrease sciatic pain by reducing nerve pressure. Patient is usually recommended stretching exercise, along with aerobic exercise such as walking. There are a lot of people who think that yoga can be one of the treating methods of Sciatica, along with massage and biofeedback. Biofeedback is the psychological management of the pain that is regulated by the ability of an organism to cope with pain. Physical therapy is usually recommended in the initial stages of the disorder, it is usually recommended for people who are in the initial stages of Sciatica or they have the potential to bear pain. (Baloh, et, al. 2019, pp. 33-46).

Spinal injection

 One of the most commonly used treatments for Sciatica is "spinal injection". It is an injection of cortisone, also called an anti-inflammatory medicine that is injected in the lower back of the patient to reduce inflammation and swelling in the nerve roots so as to increase mobility. (Baloh, et, al. 2019, pp. 33-46).

Surgery

 Surgery is used for the people who are not responsive to the conservative treatment or these patients who have progressing symptoms. Patients are given two options for surgery defined below.

Microdiscectomy

 It is a procedure that is used to remove the fragment of herniated disc, mitigating and overcoming Sciatica. (Baloh, et, al. 2019, pp. 33-46).

Laminectomy

 It is the removal of bone that covers spinal cord and tissues that causes pressure on the sciatic nerve. (Baloh, et, al. 2019, pp. 33-46).

**Prevention**

It is asserted that there are few cases in which there is no space for the prevention from Sciatica such as back strain due to pregnancy any accidental fall or the degenerative disc disease. However, in other cases Sciatica can be prevented by using and learning safe lifting techniques, avoiding or stopping cigarette smoking and adopting a healthy lifestyle that is accompanied by good physical activity. Developing proper sitting habits and avoiding sitting for a long time can also play a major role in the prevention of this disorder. (Oosterhuis, et al. 2019)

**Science behind illness**

Psychology of Sciatica

 The psychology of Sciatica can be related to emotional trauma that is more worse than the physical pain caused by neuropathy condition of the lower back. Sciatica is also called as an overlooked aspect of leg pain and chronic pain in the lower body. Moreover, Sciatica has a negative impact on the psychological state of every patient. moreover, depression, anxiety, and certain phobias can also cause Sciatica. (Jungen, et al. 2019).

Physiology of Sciatica

Physiological study of Sciatica highlights that it is caused by the compression of lumbar nerves of the spinal cord. Usually, it is caused by the compression of the sciatic nerve itself. However, the narrowing of spinal nerves also called, spinal stenosis can cause the compression of spinal cords leading to Sciatica pain. In one of the researches, it is asserted that pregnancy can also cause sciatic pain because of the weight of fetus, that presses the sciatic nerve. (Jungen, et al. 2019).

Work Cited

Baloh, Robert W. "What Causes Sciatica?." *Sciatica and Chronic Pain*. Springer, Cham, 2019. 19-32.

Hall, James A., et al. "Systematic Review of Decision Analytic Modelling in Economic Evaluations of Low Back Pain and Sciatica." *Applied health economics and health policy* (2019): 1-25.

Jungen, Maarten J., et al. "Inflammatory biomarkers in patients with Sciatica: a systematic review." *BMC musculoskeletal disorders* 20.1 (2019): 156.

Oosterhuis, Teddy, et al. "Systematic review of prognostic factors for work participation in patients with Sciatica." *Occupational and Environmental Medicine* (2019): oemed-2019.