

# Spinal Disease: An Overview

Nimesha Cheruku\*

Department of Neuroscience, Stanford University, USA

## Commentary

Spinal illness is a condition that affects the backbone. Various illnesses of the back or spine ("dorso-"), such as kyphosis, are among them. Back discomfort is referred to as dorsalgia. Spinal muscular atrophy, ankylosing spondylitis, lumbar spinal stenosis, spina bifida, spinal tumors, osteoporosis, and cauda equine syndrome are some of the additional spinal illnesses.

There are many different types of spinal illnesses, some of which are more frequent than others. Cervical spine illnesses, which affect the vertebrae in the neck, are also classified as spinal diseases. The cervical spine has a lot of flexibility, so it's easy to harm it over time. Degenerative disc disease, cervical stenosis, and cervical disc herniation are some of the most frequent cervical spine illnesses. The discs within each vertebra in the neck begin to come apart and deteriorate over time, causing degenerative disc disease. Because each vertebra can generate pain in different parts of the body, the disease's discomfort can manifest itself in the back, leg, neck, or even arms. When the spinal canal loses its gap and becomes thinner, it can cause pain in the neck, as well as numbness in the arms and hands. Those are the signs and symptoms of cervical stenosis. Cervical disc herniation occurs when the fibers in the discs between each vertebra begin to degrade. Because this condition is usually a result of ageing, it is less common in younger people.

**Spina bifida:** The most prevalent abnormality affecting the Central Nervous System is spina bifida (CNS). Myelomeningocele is the most prevalent and severe variant of Spina Bifida. Myelomeningocele affects those who are born with an incompletely fused spine, exposing the spinal cord through a back hole. In general, the more severe the spinal damage, the more functionally impaired the person is. Bowel and bladder problems, weakness and/or lack of sensation below the area of the lesion, paralysis, and orthopedic concerns are all possible symptoms. The severity of symptoms varies depending on the situation.

**Cauda equine syndrome:** This is an uncommon condition that affects the spinal nerves in the cauda equine region of the lower back (Latin for "horses' tail"). Injury to the cauda equine might have long-term consequences for the person. Lower back pain, bladder problems, bowel dysfunction, and numbness or paresthesia between the thighs are some of the symptoms. Surgery may be a realistic strategy for preventing increasing neurological abnormalities. [1,2]

**Tumors:** When abnormal tissue begins to form and spread in the spinal columns or spinal cords, it is called a spine tumor. The unique tissue is made

up of aberrant cells that multiply rapidly in one area. Tumors are classified as benign, which means non-cancerous, or malignant, which means cancerous, as well as primary and secondary. Primary spinal tumors start in the spinal cord or the spinal column, whereas secondary spinal cancers start somewhere else and spread to the spine. Symptoms of spinal tumors vary depending on the type of tumor, the location of the tumor in the spine, and the patient's overall condition. Back pain is the most common symptom, and it might be problematic if it is intense, lasts longer than it would for a normal injury, and worsens when lying down or at rest. Loss of muscular function, bowel or bladder dysfunction, leg discomfort, scoliosis, or even strange feelings in the legs are some of the other symptoms, aside from back aches. Although scientists have looked into probable causes, there is no recognized reason for the initial tumor. Because studies have shown that the incidence of spinal tumors is higher in some families, cancer may be connected to genes. Von Hippel-Lindau disease and Neurofibromatosis 2 are two hereditary illnesses that may be associated with spine tumors. [3-5].

## References

1. Araki, Jun, Masahiro Jona, Hitomi Eto and Noriyuki Aoi et al. "Optimized preparation method of platelet-concentrated plasma and noncoagulating platelet-derived factor concentrates: maximization of platelet concentration and removal of fibrinogen." *Tissue Eng. Part C Methods* 18(2012): 176-185.
2. Armentano, I., L. Marinucci, M. Dottori and S. Balloni et al. "Novel poly (L-lactide) PLLA/SWNTs nanocomposites for biomedical applications: material characterization and biocompatibility evaluation." *J. Biomater. Sci. Polym. Ed.* 22 (2011): 541-556.
3. Arora, Navneet S., Thaminda Ramanayake, Yan-Fang Ren, and Georgios E. Romanos. "Platelet-rich plasma: a literature review." *Implant Dent.* 18(2009): 303-310.
4. Asghari, Fatemeh, Mohammad Samiei, Khosro Adibkia and Soodabeh Davaran et al. "Biodegradable and biocompatible polymers for tissue engineering application: a review." *Artif Cells Nanomed Biotechnol* 45, no. 2 (2017): 185-192.
5. Avitabile, Elisabetta, Laura Fusco, Silvia Minardi and Lucia Gemma Delogu et al. "Bioinspired Scaffold Action Under the Extreme Physiological Conditions of Simulated Space Flights: Osteogenesis Enhancing Under Microgravity." *Front. Bioeng. Biotechnol.* (2020): 722.

**How to cite this article:** Cheruku, Nimesha. "Spinal Disease: An Overview." *J Spine* 11 (2022): 519.

\*Address for Correspondence: Nimesha Cheruku, Department of Neuroscience, Stanford University, USA, E-mail: cherukunim@uter.ac.uk

**Copyright:** © 2022 Cheruku N. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

**Received:** 08 January 2022, Manuscript No. jsp-22-52987; **Editor assigned:** 10 January 2022, PreQC No. P-52987; **Reviewed:** 14 January 2022, QC No. Q-52987; **Revised:** 21 January 2022, Manuscript No. R-52987; **Published:** 26 January 2022, DOI: 10.37421/jsp.2022.11.519