

A Note on Neurological Disorders Causes and Effects

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Introduction

Any condition of the nerve system is referred to as a neurological disorder. A variety of symptoms can be caused by structural, metabolic, or electrical abnormalities in the brain, spinal cord, or other nerves. Paralysis, muscular weakness, poor coordination, loss of feeling, convulsions, disorientation, pain and altered states of awareness are some of the symptoms. There are several neurological problems, some of which are rather common but many of which are uncommon. Neurological examinations can be used to assess them and they can be investigated and treated in the fields of neurology and clinical neuropsychology.

Preventive measures, lifestyle modifications, physiotherapy or other treatment, neurorehabilitation, pain management, medicines, procedures performed by neurosurgeons, or a specialised diet are all examples of interventions for neurological illnesses. In 2006, the World Health Organization projected that neurological illnesses and its consequences affect up to one billion people globally, citing health inequities and societal stigma/discrimination as key contributors to disability and its consequences.

Neurological problems impact hundreds of millions of individuals across the world. Every year, more than 6 million individuals die as a result of a stroke; over 80% of these deaths occur in low- and middle-income nations. Epilepsy affects more than 50 million individuals globally. Alzheimer's disease is the most prevalent cause of dementia, accounting for 60–70% of cases. There are an estimated 47.5 million individuals worldwide with dementia, with 7.7 million new cases per year. Migraine affects more than 10% of the world's population.

Description

Many neurologic illnesses are "congenital," or present at birth. However, some of the illnesses are "acquired," meaning they appeared after birth. "Idiopathic" refers to conditions that have no recognised aetiology. A range of neurologic illnesses can be influenced by genetic factors, which are normally transmitted from parents via genes and chromosomes. Chromosomes are lengthy strands of DNA that are located in the nucleus of human cells and are maintained by protein. Genes are sections of DNA that convey the chemical information that determines who we are. Thousands of genes make up a chromosome. In a typical human body cell, there are 46 (23 pairs) chromosomes, half of which are inherited from the mother and half from the father.

The chemical processes that occur in the body are referred to as metabolism. Metabolic problems can have long-term consequences and should be detected as soon as feasible (for example, through blood or urine tests). Phenylketonuria (PKU) and homocystinuria are two metabolic diseases. PKU is a hereditary condition in which the amino acid phenylalanine (found

in food) can accumulate to dangerously high levels in the blood serum. This harms brain cells and impairs intellectual abilities. Blood samples are submitted for 'universal newborn screening,' which detects several metabolic problems at birth. Each state in the United States has its own screening testing protocols and not all nations have such screening programmes [1-3].

Complex interplay between genes, environment and behaviours are thought to be the cause of congenital 'defects.' Tuberous sclerosis, for example, is a disorder in which children develop growths in the brain, heart, eyes, skin, kidneys and lungs. Epilepsy, learning difficulties/impairments and autism are all possibilities. Neurological symptoms have as many sources as the nervous system itself. The peripheral nervous system, which carries sensory impulses from the rest of the body to the central nervous system, is a typical source of neurological symptoms (brain and spinal cord).

One or more nerves can cause neurological symptoms. When the nerve is squeezed and deprived of normal blood supply, several disorders develop, such as carpal tunnel syndrome. Neuropathies (nerve illnesses) are a common complication of diabetes, which are caused by nerve damage caused by high blood sugar levels. Neurological symptoms can also be caused by autoimmune disorders like lupus or Guillain-Barré syndrome, as well as viral infections like the human immunodeficiency virus (HIV) or the Epstein-Barr virus.

Neurological illnesses can be treated in a variety of ways, depending on the severity of the condition. Neurorehabilitation is usually the primary therapy, with the goal of restoring, minimising, or compensating functional impairments in the patient while maintaining realistic expectations about what is attainable. Some symptoms can be alleviated with medicine or surgery in some circumstances [4,5].

Conclusion

Overall, therapy strives to enhance the quality of life of people with neurological disorders, allowing them to live as independently as possible. An early diagnosis is critical in all neurological illnesses so that the expert may determine the most effective treatment for each instance.

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Conflict of Interest

No potential conflict of interest was reported by the authors.

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