

Orthotics in neurology: disorders, treatment and causes



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Introduction

Orthotics refers to all kind of problems related to the shape, function and posture of the body and all part it contains. Since all the parts of the body and their movement are associated with the brain, thus orthotics is highly related to neurology. Orthotics in neurology encompasses all the elements <https://assignbuster.com/orthotics-in-neurology-disorders-treatment-and-causes/>

that relate to the functioning of muscles, organs and joints which are utterly controlled by the nerves which carry the orders of a brain to the respective body part. The problems that can occur due to bone disorders and neurological deficits are limb problems, joint complications and abnormalities in locomotion system. Besides these, there are certain minor problems too that may turn into major abnormalities if orthotics occurs in neurology (Houlden, Charlton, & Singh, 2007).

The initial indicator of orthotics is identified by a defect in the motor neurons that carry the message from the brain to the parts of the body. When a defect in a motor neuron is diagnosed, it becomes crucial for the individual to consult an orthotic consultant so that the disorder can be minimized at the very stage. The most common disorders that occur as a result of disorders in lower motor neurons are: traumatic peripheral nerve lesions and neuromuscular disorders. The disorders related to the upper motor neurons are often regarded as stroke and vertebral palsy. These disorders are commonly as chronic conditions like poliomyelitis etc. these are the most usual type of disorders the result due to orthotics in neurology and to cure such abnormalities at mild stage or at developed stage, neurologist, psychiatrist or orthotics expert must be consulted (Houlden, Charlton, & Singh, 2007).

Explanation

To overcome the diseases of orthotics, an appropriate diagnosis is needed to avoid extreme consequences of disorders. To get the disorders diagnosed at initial stages, it is recommended to get regular electro-diagnostic

investigations, radiological and routine blood tests. Moreover, genetic testing <https://assignbuster.com/orthotics-in-neurology-disorders-treatment-and-causes/>

is most commonly used and positive results will give the assurance of negligence offensive procedures.

Disorders

The most common disorders that are diagnosed as a result of orthotics in neurology are given as follows:

Posture and Gait: Such kind of disorders of neuromuscular relates to the typical patterns of muscular movements such as ataxic and waddling gait, high stoppage gait, drop foot gait and spastic gait (Houlden, Charlton, & Singh, 2007).

Deformity: These disorders occur when muscles get weak; it results in instability in joints. The most common consequences are limb floppy and flail which results in balanced paralysis. This is most common when one of the muscles become weak in a group of muscles and loses its strength to carry out functions of controlling the movements and locomotion in the body. The deformity is surely curable when it is diagnosed in the initial stages (Houlden, Charlton, & Singh, 2007).

Muscle Weakness: This is caused due to disorders in the lower or upper motor muscle disorder and neurons lesions (Houlden, Charlton, & Singh, 2007).

Contractures and Spasticity: These are the most frequently occurring orthotics disorders found in the neurology, they are mainly caused due to any defect incurred in the upper motor neuron lesions. It results in the contraction of muscles if no proper treatment is done on time. The exercise

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recommended for its cure is muscles stretching. The contractures result due to disorders in lower neuron as well. Spasticity is painful which can damage the activities of daily routine.

Sensory problems: These are major symptoms of pain and may result into extreme consequences of disorders in neuropathic joints, ulcers and pressure sores etc.

Autonomic Functions: These are the disorders in involuntary functioning of the system of an individual. They can be recurring in nature and highly disabling as they result from the abnormality of high sweating, sphincter control, increased or decreased heartbeat or pulse rate and unstable blood pressure etc. (Houlden, Charlton, & Singh, 2007).

Treatment

For the purpose of treatment of such abnormalities in the human body, it is essential to consult an orthotics consultant, physician, neurologist or pharmaceutical clinical staff that can help minimizing the disorders experienced by the individual. The main emphasis of treatment order is considered steady and long term in which patient is diagnosed on the regular basis and certain physical exercises with the adequate dose of medicine are prescribed. This results in steady improvement in the neurons of the patient as in case of neurology abrupt and intense treatments are used rarely only when there is no option left because treating the neurons is recommended for a lighter and ongoing process which reduces the symptoms of disease and minimizes intensity of disorders (Wade, 2013).

The physical exercises are highly recommended in case of orthotics disorders. The exercises may include stretching of uses every now and then, this increases the flow of blood circulation to the muscles and also improves the ability of neurons to receive and send orders from and to the brain in an effective manner. This eliminates the possibility of any disorder caused due to lack of functioning of the muscles. A process called self-management is majorly recommended to all those who seek ways to overcome orthotics in neurology. This relates to managing the stability of functioning of neurons by your own self. The management can be done by scheduling the routines of exercising in order to improve both physical and mental health. The stretching of muscles and continuous routine of running, jogging or walk helps in reducing the chances of abnormalities or disorder problems related to heart, brain, and muscles. This is because medicine merely is a formula that dissolves in the blood and improves the functioning. But exercise is a continuous process that keeps the muscles of body in function which increases circulation of blood, improves heartbeat and pulse rate, enhances the efficiency of neurons ability to receive and send messages of brain, advances the reflex action and controllability element in the human body. Thus, the foremost suggested way to overcome orthotics disorders is to maintain a routine of exercise. Even after exercising the neuron shows disorders as a side effect of any other disease then the dose of proper medicine must be scheduled (Wade, 2013).

Causes

These disorders are often caused by consuming drugs or alcoholic products. The overuse of such drugs highly affects the neurons and make them

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damage or causes the cells of the nervous system to die which results in disability or malfunctioning of neurons. The other causes can be irregular eating habits, consumption of carbonated drinks or high intake of junk food etc. all these products affects directly or indirectly to the neurons which may cause the disability in their functioning. Sometimes, orthotics can be caused by being overweight or underweight which exerts high pressure on the brain and thus the neurons are adversely affected. In few cases, such disabilities are found genetic in the individual who may or may not be diagnosed in early age but becomes prominent when the person reaches maturity (Wade, 2013).

Conclusion

Orthotics in neurology has an overall impact on the entire human body, its structure, and systems and the neurology holds and controls all the functioning of an organism. The disorders of orthotics are controllable if proper exercise is made mandatory in the daily routine. Alongside, regular checkups of blood pressure and pulse rate etc. are recommended to get notices of any disorder incurred in the neurons of the body. A periodic meeting with the clinician must be scheduled to get noticed of every change being occurring in the system. Further, to avoid such disorder healthy diets are suggested with the minimal use of drugs and related items. All these help the body to maintain its normality. On the whole, healthy activities with healthy food are suggested to overcome the chances of orthotics in neurology as its occurrence can be dangerous for health.

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