**Neurological Disorders and Balance**

**What Neurological Disorders Cause Balance Problems?**

Your brain and the central nervous system are collectively responsible for maintaining the balance on your feet – If something disrupts the communication between your central nervous system and brain, this will hinder their coordination and lead to spinal stenosis and balance problems. There are a few specific health conditions that can cause balance problems as a symptom.

Many people want(ed) to know what neurological disorders cause balance problems and how to treat these issues? The primary physician first needs to diagnose the underlying medical condition that is causing the loss of balance in a person, along with the help of vestibular rehabilitation therapy, which is designed to work against the symptoms of balance problems.

*What is a Balance Problem?*

Responsible for enabling you to remain steady and upright, while maintaining stability as you move around and navigate, your sense of balance is itself reliant on streamlined coordination and a steady flow of information between your brain, eyes, muscles, ears, and tissues. A person experiences a loss of balance when something hinders their ability to coordinate and maintain that flow of information.

*What Causes Balance Problems?*

There are several different conditions that can cause you to have balance problems; some of the main causes are listed below:

Vertigo – Sense of Motion or Spinning

Vertigo is caused by conditions that are (include) inclusive of:

Benign paroxysmal positional vertigo (BPPV): BPPV is the most commonly occurring cause of vertigo, mainly in adults; and causes you to suffer from spinning sensations on movement such as turning or tilting of the head. There are calcium crystals present in your inner ear that are responsible for enabling control over your balance; when these crystals are dislodged from their actual position and are repositioned somewhere else, this is what causes BPPV to occur.

Semi tubular canals in the inner ear.

Vestibular neuritis: Another disorder that commonly causes vertigo is vestibular neuritis, which is a virus-based inflammatory disorder caused when inner ear nerves are affected. It brings along symptoms such as nausea and difficulty walking, which can go on for a few days but will eventually get better.

Persistent postural-perceptual dizziness: This disorder causes the affected person to suffer from symptoms such as unsteadiness and feeling constant motion and instability in the head. Reading, visually distracting environments, and looking at moving objects are a few things that worsen the symptoms of this disorder.

Migraine: Being one of the leading causes of dizziness, migraine also induces motion sensitivity in a person along with all the pain that it brings with it.

Acoustic neuroma: Although rarely occurring, acoustic neuroma is a serious disease. It is a gradually growing and non-cancerous tumor that develops itself on the hearing and balance nerve, leading you to have balance problems due to constant dizziness.

Ramsay Hunt syndrome: Also known as herpes zoster oticus, this condition occurs when a shingles-like infection affects the facial, auditory and vestibular nerves near one of your ears. You might experience vertigo, ear pain, facial weakness, and hearing loss.

Head injury: Concussions as well as other head injuries can also become cause you to experience vertigo.

Motion sickness: Motion sickness is one of the most commonly known conditions, and is especially common among people who also suffer from migraine. This causes you to feel as if your head is spinning and you are getting dizzy when you are moving, like being in a moving car, boat, airplane, or even the rides in the amusement park.

*Feeling of Faintness or Lightheadedness*

Lightheadedness is caused by:

Hemodynamic orthostatic hypotension (postural hypotension): People can end up getting faint or feel extremely lightheaded, due to a massive blood pressure drop if they sit up or stand in a fast manner.

Cardiovascular disease: Reduction in the flow of blood causes a person to feel as if they’ll faint or lightheaded. There are a few causes that can reduce the blood flow in a body such as Hypertrophic Cardiomyopathy (i.e thickened heart muscle), blocked or narrowed blood vessels, Heart Arrhythmia (i.e. abnormal heart rhythms), or reduced blood volume.

*Loss of Balance or Unsteadiness*

Loss of balance is a result of:

Vestibular problems: If a person’s inner ear is suffering from certain irregularities, this can cause them to feel unsteady in dark places and feel as if they’re floating which hinders balance.

Nerve damage to your legs (peripheral neuropathy): Peripheral neuropathy is the leading cause of walking difficulties.

Joint, muscle or vision problems: Weakened joints and muscles also affect the balance of a person; while unsteadiness also occurs due to eyesight problems.

Medications: (Polypharmacy) Consumption of medications can also cause balance problems as a side effect.

Certain neurological conditions: Neurological disorders such as Cervical Spondylosis and Parkinson’s Disease also have symptoms that include balance problems.

*Dizziness*

Causes of dizziness & lightheadedness are inclusive of:

Inner ear problems: Malfunctioned vestibular system causes the affected person to feel a false sense of constant motion.

Psychiatric disorders: Dizziness and consequent loss of balance are also caused by neurological disorders such as Anxiety, Depression, etc.

Abnormally rapid breathing (hyperventilation): Hyperventilation induces anxiety in a person, and eventually causes lightheadedness which leads to balance problems.

Medications: There are some medications that have side effects such as dizziness and lightheadedness.

*How Can a Balance Problem Be Treated?*

Healthcare providers such as Manhattan’s best medical hub Manhattan Medical Arts have experienced physicians who are experts at treating the underlying neurological disorders that are causing you to suffer from balance problems.

A special type of physical therapy called vestibular rehabilitation therapy may also be recommended to the patients – this kind of therapy consists of physical exercises that involve certain specific techniques that are focused on establishing and improving your balance problems. Sometimes neurological disorders cause muscle cramps which can be treated in a very short span of time with medical treatments and physiotherapy.

SOURCE: Manhattan Medical Arts

<https://manhattanmedicalarts.com/blog/what-neurological-disorders-cause-balance-problems/>

Other Neurological disorders include: (ELABORATE on how neurotransmitters work between synapses)

Alzheimer’s

Dementia

Parkinson’s

The study published in the British Journal of Sports Medicine attributes living longer to continued work on balance and stability. Researchers say the study found just 50% of participants ages 70 to 75 were able to complete a 10-second balance test. The study ties the proportion of deaths was nearly four times higher for those unable to complete the balance test, which is standing on one leg for 10 seconds.

SOURCE:

British Journal of Sports Medicine

<https://www.nbc15.com/2023/01/18/how-balance-exercises-contribute-healthy-aging/>

**More information can be found at:**

Disorders Talk

<https://www.disorderstalk.com/what-neurological-disorders-cause-balance-problems/>