

Balance

CAN BE IMPROVED!

It is not uncommon for individuals with a history of balance problems to regain their balance control through accurate diagnosis followed by specific medical treatment and/or rehabilitation exercises. One famous example is astronaut John Glenn. Following his historic space flights in the 1960's, Glenn experienced balance problems that disqualified him from service. After a rehabilitation program, Glenn was able to return to space at the age of 77 and he performed as well as his younger colleagues. You can recover from balance disorders and regain your control. And you can do this even at an advanced age!

There are many people who have had symptoms just like you who have experienced relief through therapy.

You no longer have to feel like you are "spinning" out of control.

www.backtohealthonline.com

4

Help is available!

The dizziness, lightheadedness, unsteadiness or vertigo sensations you may feel are very real. The good news is that most dizziness disorders can be evaluated and successfully treated. To determine the cause of a balance problem, the results of a problem-focused questionnaire will be combined with a physical examination. Depending on the diagnosis, your doctor may then order tests to determine how key components of your balance systems are functioning. A common test such as an ENG (Electronystagmography) is a series of painless procedures which pinpoint the source of your problem.

These tests document your ability to follow visual objects with your eyes and how your eyes respond to information from your vestibular system. To monitor the movements of your eyes, your doctor places electrodes around your eyes.

An Electronystagmography examination is comprised of the following:

Ocular Mobility: You will be asked to follow with your eyes objects that jump from place to place or move smoothly. Your doctor will be looking for any slowness or inaccuracies in your ability to follow visual targets.

Optokinetic Nystagmus: You will be asked to view a large, continuously moving image to see if your eyes appropriately track these movements.

Positional Nystagmus: Your doctor will move your head and body into various positions to make sure that there are no inappropriate movements of your eyes when your head is in different positions.

Caloric Test: Your doctor will stimulate both of your inner ears (usually one at a time) with warm and then cold air. He or she will be monitoring the movements of your eyes to make sure that both your ears can sense this stimulation.

www.backtohealthonline.com

2

DO NOT become another statistic!

The American Academy of Orthopedic Surgeons predicts that we can *prevent* close to 60% of all falls through diligent screening.

If you suffer from symptoms of dizziness, ask your doctor about Back to Health Balance Centers.

BACK^{TO} HEALTH BALANCE CENTERS

1395 Route 44
Pleasant Valley, NY 12569
845-635-5002

332 Main Street
Beacon, NY 12508
845-440-0770

576 Ulster Avenue
Kingston, NY 12401
845-340-8585

www.backtohealthonline.com

Dizzy?

RISKING A FALL?

*It is estimated that over 50% of the population will experience dizziness or balance problems during their lifetime.
Ask your doctor about*

BACK^{TO} HEALTH BALANCE CENTERS

www.backtohealthonline.com

Balance

PROBLEMS

If you are an older person with a balance problem, you've likely been told that poor balance is a natural and untreatable part of getting older! Or worse, whether younger or older, you've been told that your "dizzy spells" are all in your head!

The good news is that medical research has proven that balance problems are NOT imaginary or inevitable with age, and there are effective treatments available for those who do experience balance problems or dizziness.

There are three main components that maintain your sense of balance.

Somatosensory system. A fancy term for your sense of touch.

Visual System.

Vestibular system. This refers to your equilibrium within your inner ear.

In order to maintain proper balance your brain must process all three systems accurately. In a normal healthy individual our senses of touch (feet, ankles, and joints), sight (eyes) and inner ear motion sensors work together in harmony with the brain. A person with a balance disorder, however, may have a problem in any one of these systems, or in multiple systems. The risk of developing problems in one or more of these systems increases with age as our senses or brain centers are exposed to degenerative or infectious diseases, or the effects of injuries accumulated over a lifetime.

www.backtohealthonline.com

1

Dizziness

DISORDERS

Dizziness is a broad term used to explain how we feel when our sense of balance is not quite right. The term encompasses a variety of sensations that can mean different things to different people. If you have ever been dizzy, you may have found it difficult to describe exactly how it made you feel. Some people who report feeling dizzy say they feel as if everything is spinning around them, or as if they are spinning or turning themselves. This is what doctors usually mean when they refer to vertigo. Others describe feeling wobbly or unsteady as if they were on a boat. And still others may describe their dizziness as a feeling of "floating", lightheadedness or "giddiness".

Dizziness or vertigo can be caused by a disturbance in a particular part of the inner ear-the vestibular system. This is the part of your balance system that provides your brain with information about changes in head movement with respect to the pull of gravity. When your vestibular system is not working properly, the result may be dizziness, vertigo, imbalance, disorientation and possibly nausea and vomiting.

www.backtohealthonline.com

Ask
your Doctor
to refer you
to

BACK^{TO} HEALTH BALANCE CENTERS

1395 Route 44
Pleasant Valley, NY 12569
845-635-5002

332 Main Street
Beacon, NY 12508
845-440-0770

576 Ulster Avenue
Kingston, NY 12401
845-340-8585

3

Some disorders which cause dizziness /vertigo:

Acoustic Neuroma is loosely defined as a tumor on the nerve from the inner ear to the brain. Patients with this disorder may experience a gradual hearing loss, ringing or buzzing in the ears and dizziness. A sensation of pressure and fullness may also be present.

Arteriosclerosis, a narrowing of blood vessels that supply blood to the brain, may cause decreased blood flow, resulting in dizziness.

Benign Paroxysmal Positional Vertigo (BPPV) is a balance and dizziness disorder caused by a problem in the vestibular system of the inner ear which forms part of the balance organs. Small particles or crystals become detached from their normal location in the inner ear and interfere with the normal function of the vestibular system. As the name indicates, the vertigo, which can be intense, comes on suddenly following certain movements of the head.

"Central" or Neurological Vertigo refers to dizziness that results from problems in the balance centers of the brain, rather than the ear. Strokes, multiplesclerosis, brain tumors or cysts and deformities of the upper spine or the back of the brain are all possible causes.

Cervicogenic Balance Disorder is a cervical spine subluxation particularly at the level of C1 and can cause a vertigo sensation.

Hyperventilation can cause temporary dizziness and sometimes occurs when you are exercising strenuously or if you hold your breath when you are under stress.

Meniere's Disease is a condition of repetitive attacks of vertigo, accompanied by pressure in the ears, buzzing or ringing, and partial hearing loss that can fluctuate during an episode.

Ototoxicity is caused by exposure to, or ingestion of a particular substance which damages the auditory and inner ear system. Ototoxicity may result in irreversible damage to hair cells in the inner ear and/or vestibular system, which cause vertigo, vision problems, hearing loss, gait unsteadiness and imbalance.

www.backtohealthonline.com

5

Osteoarthritis, a joint disease, can affect the neck or cervical area of the spine. Openings in the neck vertebrae contain arteries, which supply the brain with blood. When these openings narrow as a re-sult of osteoarthritis, blood flow to the brain is restricted, resulting in dizziness.



A-auditory
B-temporal lobe
C-Broca's area
D-prefrontal area
E-frontal lobe
F-frontal eye field
G-sensorimotor area
H-parietal lobe
I-visual
J-visual association
K-auditory association

Post-Traumatic Vertigo is dizziness resulting from a head injury, concussion or whiplash.

Tinnitus is buzzing or ringing in the ears and can occur with dizziness or as a symptom by itself.

Viral Labyrinthitis is a viral inflammation of the inner ear. It causes dizziness /vertigo which may last days or weeks, usually following a cold or flu.

Vascular Vertigo is dizziness caused by problems with the blood supply to the inner ear or the balance centers of the brain. This can occur in people who suffer from migraine or those who are overweight, smoke, have high blood pressure or do not get enough exercise.

Vestibular Neuronitis is an infection of the vestibular nerve, generally viral.

Postural Hypotension is indicated by lightheadedness or blackouts, and is typically experienced when rising from a lying or sitting position.

www.backtohealthonline.com

6