

INTRODUCTION

Dizziness and Balance in Daily Life

Dizziness and Balance

Usually, you don't think about your balance system. However, if you are dizzy or if you develop a balance problem, it can cause profound disruptions in your daily life. Balance is crucial to common daily activities such as getting out of bed, standing and walking from a chair, putting on your shoes, bathing, driving or shopping. Just about everything you do in daily life, whether for work or recreation, requires control of your balance system. In addition to increased risk for falls, balance disorders shorten your attention span, disrupt sleep patterns, and cause fatigue. People with balance problems or dizziness can have difficulty with the simplest of tasks.

The good news is that there are professionals specifically trained in the evaluation and treatment of balance disorders. We can implement effective treatment plans for individuals who experience balance problems or dizziness.

How do I keep my balance?

Your ability to maintain balance is a complex process that depends on three major systems in your body: Your senses for accurate information about your body's position; your brain's ability to comprehend and use this information; and your muscles and joints for coordinating your bodies movements to maintain balance.

The sensory system includes: proprioception; your sense of touch, position and pressure (feet, ankles, joints), your vision, and your inner ear motion detectors. For example, you rely on your feet and joints to tell you if the surface you are standing on is uneven or moving. You rely on your eyes to tell you if the surface you are standing on is uneven or moving. You rely on your eyes to tell you if the environment around you is moving or still. And you rely on your inner ear motion detector to tell you if you are upright or leaning, standing still, or moving.

Are you headed for a slip and fall?

Normally these senses work in harmony with the brain. A person with a balance problem with a dysfunction in any one or a combination of these systems. The incidence of balance disorders , and thus the risk for falls and serious injury, is proven to increase significantly with age. An inexplicable fall or

dizziness gives rise to the concern that something might not be right. However, loss of balance or dizziness is not inevitable with aging.

So how do you know if you are at risk for falling? There are several risk factors, both related to yourself (physical fitness, chronic conditions, psychological and social factors) and your environment (the surfaces you walk on, obstacles, lighting, etc.) that influence your susceptibility to falling. Some common indications of a balance problem include dizziness or un-steadiness, taking one or more medications, a recent period of bed rest or inactivity, loss of strength or feeling in the legs or feet, or a loss of confidence in your ability to get around. There are also many subtle indicators that you or your physician may not be aware that you have. To complicate the matter even more, falls are usually not the result of a single event or risk factor, more often, they are the result of a combination of factors.

What can be done about my balance problem?

Because of the complexity of equilibrium, not all balance problems are the same. In addition, the wide variety of balance problems can make it difficult to determine the cause of a balance disorder and which treatment options are the most appropriate. In the past 20 years advances in the evaluation and treatment of balance disorders have proven to be highly effective and offer relief to those suffering from imbalance or dizziness.

If you have experienced a recent fall, feel un-steady on your feet, have spells of dizziness, or have other reason to believe you might have a balance problem, you should talk to your doctor. While your family physician may not be a balance specialist, he or she can refer you to Western Audiology. We are equipped to do a complete balance assessment to determine to underlying cause(s) of your problem.

To help determine if you may be headed for a fall, take the Balance Self Test below. If you answer yes to one or more of the questions, you could be at risk. The best way to determine if you have a problem, however is to see us.

- Have you fallen more than once in the past year?
- Do you take medicine for two or more of the following disease: heart disease, hypertension, arthritis, anxiety or depression?
- Do you feel dizzy or unsteady if you make sudden changes in movement, such as bending down or quickly turning?
- Do you have black-outs or seizures?

- Have you experienced a stroke or other neurological problem that has affected your balance?
- Do you experience numbness or loss of sensation in your legs and/or feet?
- Do you use a walker, wheelchair or do you need assistance to get around?
- Are you inactive? (Answer yes if you do not participate in a regular form of exercise such as walking 20-30 minutes at least three times a week.)
- Do you have difficulty sitting down or rising from a seated or lying position?

Dizziness and loss of balance are not inevitable as we grow older. However, these conditions put us at greater risk for slips and falls. Serious complications due to slips and falls increases significantly with age.

Testing Equipment:

The Video ENG diagnostic system is a tool used to measure eye movement during oculomotor function testing and positional testing of a patient. There are two areas of the body that can be detected for abnormal function. The first area is the central nervous system, and the second area is the peripheral system or inner-ear organs. Therefore, there are two modalities in testing these areas.

The oculomotor module and light-bar can present a target to the patient eye. The patient being instructed to follow the target under certain conditions will allow the physician to examine CNS function in the brain and brain stem.

The Goggle allows the patient eye to be recorded while the patient's head is placed in certain positions. This allows the physician to examine the function of the inner-ear, specifically the semi-circular canals.

The end result is a complete examination of the vestibular functions to determine the cause of vertigo, dizziness and related balance dysfunction.

The Video ENG diagnostic system has special eye-tracking hardware and clinical software approved by the FDA that is a computerized analysis system to assist the physician with an accurate and non-invasive diagnosis.