



THE VESTIBULAR- VISION CONNECTION

VEDA

LIFE REBALANCED



NEURO-OPTOMETRIC
REHABILITATION ASSOCIATION

Vision plays a significant role in our ability to balance, orient ourselves in space, and process movement of things in our environment. The vestibular (inner-ear balance) system and the visual system coordinate with each other through brain pathways in order to control the eyes' ability to maintain a visual gaze on a single location. This connection, known as the vestibulo-ocular reflex, has a critical role in keeping the eyes still during head motion and helping us maintain our balance.

Common Visual Dysfunctions

Nystagmus - A reflexive motion, where the eyes appear to jerk one direction (fast) and then slowly reset in the opposite direction, leading to vertigo, the perception of movement/spinning, either of the self or of the environment.

Oscillopsia - During head movement, persons may experience problems focusing on an object or perceive that objects are moving from side to side or revolving around them.

Binocular Vision Dysfunction - When the eyes don't work as a team, resulting in misalignment between the line of sight of one eye and the other and causing problems with focusing and double and/or blurred vision.

Vertical Heterophoria - When one eye aims higher than the other, causing the person to tilt their head to help align the eyes. This causes dizziness, imbalance, neck pain, headaches, anxiety, nausea, motion sickness and reading/learning disabilities.

Aniseikonia - A condition where there is a significant difference in the perceived size of images. This can cause disorientation, eyestrain, headache, dizziness and imbalance.

Evaluation

A regular eye exam may not reveal the extent that the visual process is affected. Specialists who may be involved in the evaluation of visual deficits related to a vestibular disorder include:

- **Neuro-Optometric Rehabilitation**

Optometrist: An eye care professional who specializes in the diagnosis and treatment of neurological conditions adversely affecting the visual system.

- **Neurologist:** A medical doctor who may be able to identify central nervous system causes of visual/vestibular deficits.

Treatment

Treatment for balance problems related to vision is first aimed at correcting (if possible) the underlying cause of the disorder. A combination of neuro-optometric rehabilitative therapy and balance or vestibular therapy can be effective for reducing or resolving these symptoms.

Optometric therapies may include:

- Corrective lenses including prisms and spectacles
- Phototherapy (light therapy)
- Therapy to enhance vision and functional visual skills such as fixation, eye movement, focusing, and eye teaming ability

GET HELP

Vestibular Disorders Association: (800) 837-8428, info@vestibular.org

Neuro-Optometric Rehabilitation Association™: (949) 250-0176, info@noravisionrehab.org

This information is not intended to be a substitute for professional medical advice, diagnosis, or treatment.