VESTIBULAR DISORDERS ASSOCIATION

5018 NE 15TH AVE · PORTLAND, OR 97211 · FAX: (503) 229-8064 · (800) 837-8428 · INFO@VESTIBULAR.ORG · VESTIBULAR.ORG

Visual Preference and Vestibular Deficiency

By Jeffrey Kramer, MD, Clinical Co-Director, Mercy Comprehensive Dizziness Center; Chief, Section of Neurology, Mercy Hospital & Medical Center, Chicago, Illinois

This article was written for the "Clinical Observations" column of the spring 2004 issue of On the Level, *VEDA's newsletter. "Clinical Observations" provides health professionals with an opportunity to share information about diagnosis and treatment experiences in their own clinics.*

Over the past two decades, my neurology practice has become more than 20 percent neurovestibular in nature. That is, two or three of every 10 new patients that I see have complaints of dizziness and/or balance dysfunction. The easy part is diagnosing and treating the more common disorders, such as benign positional vertigo (BPPV), acute labyrinthitis, and multiphysiologic dysequilibrium. Patients with mal de débarquement do present some challenge; but none of these disorders can compare to the complaint of "Doctor, I am not really dizzy, but I feel very off, disoriented, and my depth perception is terrible." These are patients who have what I call a visual-preference vestibular deficiency.

Typical comments from such patients include:

- *My last doctor sent me to a psychiatrist.*
- *Medicine only makes me feel worse.*
- *I cannot be in a crowd of people nor in wide-open spaces; both situations make me feel disoriented and panicky.*
- *I often take a cart in a grocery store even when I'm shopping for only one item.*
- *I've become so frustrated I would rather just stay home.*

Such patients were and are commonly seen by physicians and therapists specializing in dizziness and balance disorders. Yet I know that when I went to medical school and again throughout my residency, these patients were more often seen in psychiatric clinics. Either no one understood this vestibular disorder or no one would claim to understand it well enough to teach the pathophysiology of these complaints.

After 20 years of seeing patients with the most severe form (agoraphobia) to the more benign form (functional but fatigued), I believe that visual preference is one of the most common vestibular disorders—and one that is also relatively easy to explain.

Usually, the initial event is a unilateral vestibular insult (viral, toxic, BPPV, etc.) that goes untreated. If given a medication to suppress vestibular irritability, nearly

50 percent of patients improve within about two weeks after the initial event. The patient becomes asymptomatic. However, in the other 50 percent, the severe vertigo subsides but the brain compensates inadequately. That is, the patient's brain will initially compensate for the vestibular dysfunction by becoming more reliant on vision, but then not revert to a normal state of compensation. The brain no longer wants to "deal with the conflict"; thus, vestibular input is suppressed and the patient becomes extremely reliant on vision to maintain balance.

We have proven this numerous times in our clinic by using dynamic posturography. This computerized equipment helps us document the patient's visual-preference vestibular deficiency. Anything that floods the patient's vision (grocery-store aisles with fluorescent lights, walking into a crowd of people at the mall, not being able to focus on anything in a wide-open space) will lead to disorientation, symptoms of panic, and severe discomfort.

After trying to tell several physicians about these symptoms (which often makes the physicians uncomfortable), many patients either give up and go to a psychiatrist or, even worse, withdraw to the point of agoraphobia. Often, patients who come to our clinic with visual preference have previously seen at least five physicians. It is not easy to explain this vestibular disorder to patients or their referring physicians.

After several years of developing different strategies, from physical therapy with 20-diopter glasses in order to retrain the brain to trust the inner ears again, to the more revolutionary methods of virtual reality, I am comfortable diagnosing and treating patients who present with symptoms of visual preference. Working in conjunction with a physical therapist who is able to "think outside the box" has made me even more comfortable and a better clinician. Over the past 20 years, Jim Buskirk, PT, SCS, Director of Balance Centers of America, has assisted me in developing some of these strategies.

People who have been told that they will just have to live with their symptoms, or see a psychiatrist, or be placed on medication, should look for a specialist in vestibular and balance disorders, and never give up without a full explanation of their symptoms. Patients with visual-preference vestibular deficiency *can* be treated with vestibular rehabilitation and can frequently become much more functional.

VESTIBULAR DISORDERS ASSOCIATION

5018 NE 15TH AVE · PORTLAND, OR 97211 · FAX: (503) 229-8064 · (800) 837-8428 · INFO@VESTIBULAR.ORG · VESTIBULAR.ORG

Did this free publication from VEDA help you?

Thanks to VEDA, vestibular disorders are becoming widely recognized, rapidly diagnosed, and effectively treated.

VEDA's mission is to inform, support, and advocate for the vestibular community.

You can help! Your tax-deductible gift makes sure that VEDA's valuable resources reach the people who can benefit from them most – vestibular patients like you!

JOIN VEDA TO DEFEAT DIZZINESS™

By making a donation of: ❒ $40 ❒ $75 ❒ $100 ❒ $250 ❒ $1,000 ❒ $2,500

Senior discounts are available; contact us for details.

Members receive a Patient Toolkit, a subscription to VEDA's newsletter, *On the Level* - containing information on diagnosis, treatment, research, and coping strategies - access to VEDA's online member forum, the opportunity to join V-PALS, a pen-pals network for vestibular patients, and more!

For healthcare professionals: Individual and clinic/hospital memberships are available. Professional members receive a subscription to VEDA's newsletter, a listing in VEDA's provider directory, co-branded educational publications for their patients, access to a multi-specialty online forum, and the opportunity to publish articles on VEDA's website. For details, call (800) 837-8428, email info@vestibular.org or visit https://vestibular.org/membership.

MAILING INFORMATION

Name _____

Address _____City _____

State/Province _____ Zip/Postal code _____Country _____

Telephone _____E-mail _____

❒ Send my newsletter by email (Free) ❒ Send my newsletter by mail (U.S. – Free; $25 outside the U.S.)

PAYMENT INFORMATION

❒ Check or money order in U.S. funds, payable to VEDA (enclosed)

❒ Visa _____ _____ _____

❒ MC Card number Exp. date (mo./yr.) CSV Code

❒ Amex _____

Billing address of card (if different from mailing information)

Or visit us on our website at https://vestibular.org to make a secure online contribution.