

DEALING WITH DIZZINESS

SPONSORED BY THE BALANCE CENTER OF MARYLAND AND THE METROPOLITAN NEUROEAR GROUP

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VESTIBULAR NEURITIS OR LABYRINTHITIS?

Understanding inner ear infections

Vestibular neuritis is a viral infection of the vestibular nerve causing disruption to the peripheral vestibular system. Labyrinthitis presents with the same symptoms as neuritis with the addition of hearing loss. The onset of neuritis is sudden, and patients often report severe vertigo, dizziness, nausea, vomiting, and imbalance. In the acute phase, the patient's symptoms are treated, and the neuritis usually resolves within 3 weeks. When dealing with labyrinthitis, antibiotics may be prescribed if a middle ear infection is also suspected. The recovery time for labyrinthitis is the same as neuritis, and vestibular rehabilitation may be warranted if symptoms persist beyond the acute phase and dynamic compensation does not occur. However, some patients will continue to experience symptoms beyond this time and may require vestibular

rehabilitation to teach central nervous system compensatory mechanisms.

Using Frenzel lenses or video goggles, the practitioner will observe direction-fixed, spontaneous nystagmus that increases when gaze is shifted in the direction of the fast component and decreases with gaze in the direction of the slow component.

The nystagmus observed will be primarily horizontal with a slight torsional component and will decrease with visual fixation. The affected side will demonstrate a weakness or a non-response on caloric testing, and the patient may demonstrate abnormal dynamic visual acuity. Additional testing may be required to rule out other diagnoses that have a similar presentation including, but not limited to, BPPV, central vertigo, migraine headache, and CVA.



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MECLIZINE/ANTIVERT

Is there a real benefit?

Many practitioners commonly prescribe Meclizine/Antivert to patients complaining of dizziness and/or vertigo, but it must be understood that while the symptoms may improve, these medications may lessen the brain's ability to compensate for poor vestibular function. Patients are often searching for that "magic pill" to make their vertigo go away; however, these patients must understand that they may be doing themselves a disservice by taking these medications. While acute symptoms may warrant prescribing these medications, they are not intended for long-term use.

Vestibular Support Group and Lecture Series

The last Monday of each month at 7:30 pm

Please contact BCOM@earsite.com or 301-493-9409 for details

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TREATMENT OF NEURITIS & LABYRINTHITIS

What physical therapy can do to help

The purpose of vestibular rehabilitation in this patient population is to teach the patient central nervous system compensatory techniques. The goal of dynamic compensation is to normalize gaze stability and postural control in both static and dynamic conditions. In order for dynamic compensation to occur, the patient must have exposure to stimuli that challenge the system. A common group of prescribed exercises are gaze stabilization exercises. These exercises are designed to restore gain of the vestibular ocular reflex (VOR), the ability of the eyes to focus on an object while the head and/or body is moving. Habituation exercises, exercises that promote long-term reduction of a response due to repetitive exposure to that stimulus, may also be warranted. Additionally, the patient may also benefit from static and dynamic balance exercises.

WHAT IS VIDEONYSTAGMOGRAPHY (VNG)?

Videonystagmography (VNG) and Electronystagmography (ENG) test inner ear function and central motor function and can differentiate between unilateral and bilateral peripheral deficits and central oculomotor findings. VNG is the preferred method of testing because it records eye movements through an infrared camera instead of recording eye muscle movements with electrodes.



Balance Center of Maryland

In the next issue of *Dealing with Dizziness:*
Dizziness & Imbalance in the Geriatric Population



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