

# BalanceMD Bulletin

Your guide to the latest developments in vestibular medicine and hearing health

BalanceMD is committed to providing expert care in the diagnosis and treatment of patients suffering from dizziness and imbalance. As a part of this commitment, our Indianapolis audiologist, Michelle Koley, annually instructs the “Vestibular Disorders: Diagnosis & Treatment” course for the Purdue University AuD program. Purdue AuD graduate students are not only able to learn with the most updated diagnostic equipment, including rotary chair and VEMP, but also participate in patient evaluations to facilitate their learning of this underserved patient population.



Michelle Koley, MA, CCC-A  
Vestibular Audiologist  
Indianapolis office

## Study: The Cause of Dizziness is Often Misdiagnosed

The Vestibular Disorders Association (VEDA) surveyed hundreds of people suffering with a vestibular disorder and the results were published in the journal *Otology & Neurotology* in 2016. The results are as we would have predicted based on reported patient experiences prior to their initial visit to BalanceMD and are in keeping with many blogs and newsletter articles we have written on this subject over the past decade.

The purpose of the survey was to collect information on vestibular patients' experiences with healthcare providers as they searched for answers to their problems - what they were told was causing their symptoms and what treatments they were given.

Some findings from the study are as follows:

**Meniere's disease was the top diagnosis given** - 25% of those in the survey reported being diagnosed with Meniere's disease. We know that Meniere's actually represents a very small portion of vestibular disorder patients, less than 5%. On the other hand, only 18% of those in the study received the diagnosis of vestibular migraine, while nearly 50% actually have migraine as the underlying cause of their symptoms. Most experts place the Migraine:Meniere's ratio 20-30:1. This highlights the popularity of the Meniere's diagnosis and the under recognition of vestibular migraine.



**Take home point:** Meniere's disease is a relatively rare condition and causes a specific type of hearing loss. Most who have been diagnosed with Meniere's without hearing loss actually have a migraine syndrome as the underlying cause of their dizziness or vertigo spells.

**Nearly half reported being treated with canalith repositioning maneuvers (such as the Epley maneuver) for BPPV**, but only 15% reported being diagnosed with BPPV. In essence, over 30% of patients underwent an Epley maneuver, but never had BPPV.

**Take home point:** BPPV is commonly over diagnosed. While there is no harm in doing an Epley maneuver, treating for a condition that isn't present doesn't work! Appropriate treatment is delayed while the Epley maneuver is repeated unsuccessfully over weeks or months. There are several known types of BPPV amenable to immediate cure with a unique canalith repositioning maneuver over 90% of the time.

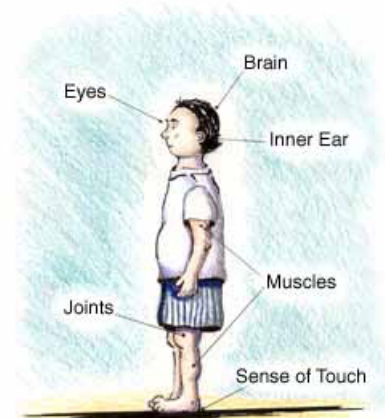
**Close to 9% were diagnosed with bilateral vestibular hypofunction (weakness of both vestibular nerves)**. The actual number of patients with bilateral vestibular hypofunction is < 1%. The reason for this large discrepancy is that most facilities offering vestibular testing do not have a rotary chair. The diagnosis of “bilateral vestibular hypofunction” likely comes from weak caloric (air blown in the ears to induce nystagmus) responses in both ears. The best way to confirm (or refute) bilaterally weak vestibular nerves is the rotary chair. With bilateral vestibular hypofunction, the rotary chair test will be markedly abnormal.

**Take home point:** Unfortunately, most facilities who perform vestibular testing do not have a rotary chair and will mis-diagnose a significant number of patients they test.

## “You have a different approach...”

We’ve all heard the idiom “If I had a nickel for every time.... I’d be rich”. At BalanceMD, this phrase applies to when physical therapist Stephanie Ford is told by her patients “you have a different approach”. Stephanie specializes in vestibular rehabilitation therapy (VRT), a specialized form of physical therapy (PT) that focuses on treating the sensory part of balance. Frequently, we see patients who have had physical therapy elsewhere for their vestibular and balance problems, but they did not feel it was effective. We are told they worked on the stationary bike, did arm/leg exercises with stretchy bands, walked a “tightrope”, and stood on one leg.

There is more to balance than being able to walk a tightrope or stand on one leg. Those activities can be used as measures of balance, but when do we need to walk a tightrope in our daily life? Most of the time, balance disorders are not due to leg or abdominal weakness. It’s a problem with the sensory part of balance (vision, sensation in the feet, and the inner ear) OR the brain’s ability to put together this sensory information and come up with the correct response under various conditions.



Balance Sensors

Improving the sensory part of balance is what VRT offers - it is different than typical physical therapy in that it focuses on getting the brain to use sensory information better to improve balance under a variety of conditions, not just hard surfaces, but also soft and uneven surfaces. The exercises are quite simple but very effective. They may involve standing on the floor with eyes open, eyes closed, feet close together, then progressing to standing on a cushion, or moving the head while walking. The exercises need to be challenging but not unsafe, gradually progressing the type of exercise based on the underlying problem(s) while also ensuring safety in practicing these exercises at home.



At BalanceMD, our patients are often surprised when they start feeling better with their balance within 1-2 weeks of beginning their custom exercises. As the exercises progress, they feel more confident and safer to do their normal daily activities again.

So, VRT is a “different approach”, and a very effective one for improving balance and reducing or eliminating dizziness.

*Stephanie Ford, PT, is BalanceMD’s vestibular therapist. She has extensive post-graduation training and many years of experience treating patients with vestibular system disorders. She utilizes the results of vestibular function testing in order to obtain maximal improvement in her patients.*



Stephanie Ford, PT  
Vestibular Rehabilitation