

# Vestibular & Balance Center Assists All Specialties

**B**alance problems are not normal at any age. Over time there may be some physical deterioration of the balance system, but dizziness and unsteadiness are always abnormal symptoms. Each year up to 8 million patients complain about dizziness to physicians, and the cost of medical care for these patients is estimated to exceed \$1 billion per year in the United States.

Often the onset of dizziness is gradual and may be the result of a condition such as Parkinson's disease or multiple sclerosis. Alternatively, patients may present with a sudden onset of dizziness associated with viral illness or traumatic injury. In many cases, however, the underlying cause of a patient's dizziness may not be obvious without thorough evaluation.

The Vestibular & Balance Center (VBC) at the University of Virginia Health System is one of the few clinics in the country, and the only one of its type in Virginia, dedicated to

managing vestibular and balance disorders. The clinic's purpose is to assist physicians in managing their patients with dizziness or balance disorders by identifying the nature and extent of the dysfunction.

The VBC has state-of-the-art testing capabilities for patient evaluation. Because the balance system coordinates reflexes for both slow and quick movements, it is necessary to evaluate the full range of sensitivities involved in balance to get a more complete picture of possible problems. The evaluations include:

- ▶ Rotary Chair Testing records eye movements made during and after the patient undergoes rotational stimulation. These eye movements are used to evaluate the overall responsiveness and symmetric function of the inner ear balance structures.
- ▶ Electronystagmography (ENG) tests inner ear balance function by recording eye movement responses to several head and body positions as well as responses to stimulation of each ear. Eye movement recordings also are made for various visual targets to determine the effectiveness of the system that moves the eyes.
- ▶ Dynamic Posturography tests spinal reflexes needed for balance and posture. The patient attempts to maintain a quiet stance as visual and other cues that contribute to balance are systematically manipulated. By doing so, information regarding the integration of information from the inner ear balance sensors, vision and sense of touch can be determined.

Patients are referred to the VBC from many medical disciplines, including otolaryngology, neurology, primary care and internal medicine. The audiologists at the VBC are highly trained and have particular expertise in vestibular assessment and rehabilitation. Their goal is to provide needed care as well as detailed reports with recommendations for further care or treatment for each patient. All patients return to their referring physicians with these reports.

When referring a patient, the first step is to send the VBC a complete case history. Any relevant clinic notes would be helpful, including pharmaceutical use, tests performed, test results, history of diseases and other conditions, record of recent falls, and previous complaints of dizziness.

Following this, the patient will be scheduled for a thorough evaluation. Patients should be advised to avoid nonessential medications and alcohol for 48-72 hours before evaluation. Patients should wear comfortable clothes because the audiologists may move patients through different physical positions during the evaluation.

If the exact cause of a balance disorder proves elusive, VBC evaluation often can differentiate among central, peripheral and multifactorial origins of the patient's symptoms. After the patient has been evaluated, the VBC audiologists may be able to provide treatment on site or suggest follow-up treatments in reports to physicians. Patients with benign paroxysmal positional vertigo often can be remediated with particle repositioning maneuvers during a visit to the clinic. Others may need additional assessment and treatments.

Individualized treatment plans are designed based on the patient's symptoms and test data. These plans range from self-directed exercises to treatments directed by physical therapists. Patients are urged to follow up with the VBC and their referring physician, particularly if their symptoms are not improving.

*The UVA Vestibular & Balance Center welcomes questions from community physicians throughout the state and region. We invite you to work with us when caring for your patients with dizziness and balance disorders. Please visit our facility and learn more firsthand. Center hours are from 9 a.m. to 5 p.m., Monday through Friday. For more information or to discuss a patient's case, contact **A. Tucker Gleason, Ph.D.**, Director, at (434) 924-2050 or visit our web site at [www.med.virginia.edu/otolaryngology](http://www.med.virginia.edu/otolaryngology)*



# Clinical Minutes

