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## Striking the Right Balance

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In this edition of "Striking the Right Balance," Janna Brubacher, AuD, looks at how audiologists can integrate vestibular and balance screening in their Audiology practice with minimal investment or equipment.

Dr. Michael J. Vekasi, AuD, R.Aud, Aud(C) coordinates the "Striking the Right Balance," feature which will cover the latest information on 'all things vestibular.' If you would like to be more involved in all things vestibular, please check out and like our Facebook page by searching for "CAA National Vestibular Special Interest Group" within Facebook. You can also reach us by email at CAAvestibular@gmail.com.

## **Vestibular Screening**

Are you interested in expanding your clinic's services to include vestibular and balance testing but unsure where to begin or what tools are essential? Do you want to provide comprehensive audiological care and establish your clinic as a leader in audiology services? By identifying vestibular dysfunction early and connecting patients with the appropriate specialists or rehabilitation options, you position your clinic as a cornerstone in a multidisciplinary approach to healthcare. In this guide, we'll explore practical, cost-effective ways to start incorporating vestibular and balance screenings into your hearing clinic with minimal initial investment.

First off, it is important to emphasize that screening is only truly effective when a well-defined referral pathway is in place. This ensures that patients identified through screening can receive appropriate follow-up care. If you're not already familiar with the referral process to your nearest hospital or clinic specializing in balance and vestibular disorders, establishing this understanding should be your first step. Building a robust network by connecting with local healthcare providers—such as otologists, vestibular physiotherapists, and family physicians—will ensure seamless care coordination for your patients.

Integrating vestibular and balance screening protocols into practice can be as simple as enhancing

the case history targeted questions. Encouraging patients to elaborate on their experience of 'dizziness' without using the term itself can provide valuable insights. Descriptions such as a sensation of the room spinning or a feeling of motion often indicate vertigo, pointing to potential involvement of the vestibular system or brainstem. Additionally, exploring triggers and the duration of these sensations can assist in determining whether a referral is necessary and identifying the appropriate specialist for further evaluation.

You could also consider administering the 25-item Dizziness Handicap Inventory for those patients' reporting dizziness. The DHI measures the impact of the patient's dizziness on daily life across emotional, functional, and physical subscales. Responses are scored as "yes" (4 points), "sometimes" (2 points), or "no" (0 points). Those with scores over 10 points should be referred for further diagnostic evaluation.

For those interested in minimal equipment investment, video Frenzel goggles and a reclining chair or massage table can facilitate positional and positioning tests to diagnose and treat BPPV, the most common cause of dizziness. These goggles also support various screening protocols, including spontaneous nystagmus testing, headshake testing, and basic gaze or smooth pursuit tests using your thumb as a target.

Video head impulse test (vHIT) goggles provide a comprehensive assessment of all six semicircular canals to identify vestibular hypofunction and detect potential vestibular insults. While the head impulse test can be performed without goggles, it is limited to evaluating the horizontal canals. vHIT goggles offer significantly more detailed information, aiding in identifying patients who may benefit from vestibular rehabilitation. Although primarily a screening tool when used alone, vHIT goggles can also contribute to a full diagnostic evaluation when integrated into broader testing protocols.

In addition to the vestibular screening protocols already discussed there are some simple screening methods to assess a patient's functional balance. First there is the modified clinical test of sensory interaction in balance (mCTSIB). It is a bedside test of postural control under various sensory conditions. The test involves four conditions with the patient standing on firm and foam surfaces with eyes open and closed. Each position is timed for 30 seconds. If the patient demonstrates excessive sway or must take a step to maintain balance, they should be given two additional attempts. If they continue to have difficulty, they should be referred for further evaluation.

The Timed Up and Go Test (TUG) is another test that looks at balance and mobility and can give you insight into whether a patient is at risk for falling. For this test all you need is a stopwatch and a chair with armrests. The patient starts in a seated position wearing regular footwear. The patient then stands up upon the therapist's command, walks 3 meters, turns around, walks back to the chair and sits down. Once the patient is seated the timer stops. If the patient takes more than 12 seconds to complete the task, they are at a higher risk for falling and this should be flagged to their general practitioner for further investigation.

Another easy to implement screening test requiring minimal additional equipment is the dynamic visual acuity (DVA) test using a Snellen chart. DVA assesses the visual ocular reflex (VOR), often impacted by vestibular hypofunction. The patient reads the chart with and without head movement. Head movement should be at 2 Hz, and this can easily be accomplished with the use of a metronome app on a cell phone. The idea is that if there is damage to the vestibular ocular reflex then a patient's visual acuity would be poorer with head movement due to their inability to

stabilize their gazed during head movement. A difference of more than two lines is a referral indicator for further testing.

Incorporating vestibular and balance screenings into your clinic is a valuable step toward offering more comprehensive patient care. While there is the need for upfront investment in training and possibly some equipment this is manageable, and the potential impact on your patients' quality of life is significant. Start small, deepen your knowledge of these protocols, and watch as your clinic's offerings grow to meet the needs of this underserved population.