



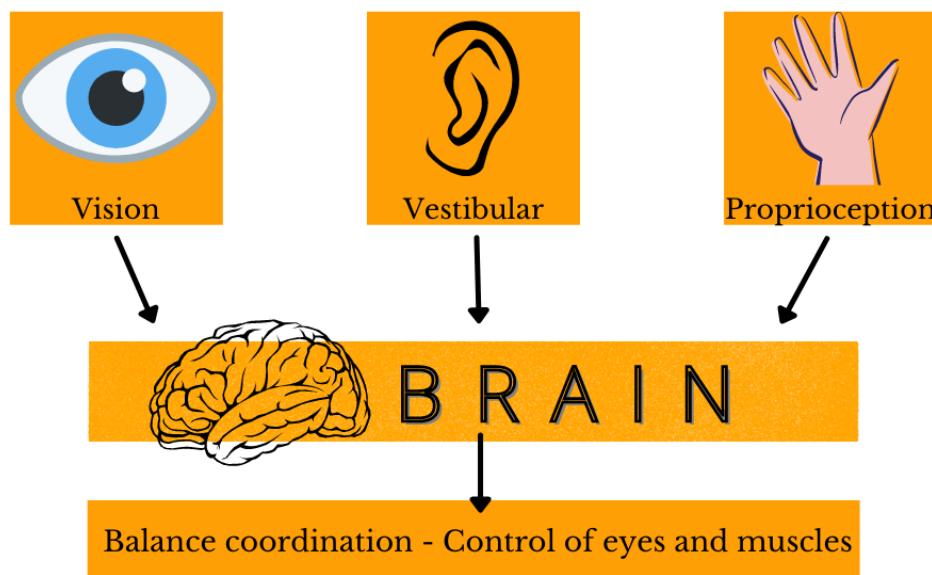
Sound Source

Vestibular Evaluation and Management in Pediatrics

More than 1 in 20 children in the nation experience dizziness or some form of balance disorder. The chances of a child developing such a disorder also increases if they have hearing loss.

Approximately 36% of children with dizziness/balance problems are seen by healthcare professionals for their symptoms and 29.9% receive treatment (Li et al., 2016).

When vestibular disorders are undiagnosed and untreated, it can lead to lack of normal movement reactions, vision disruptions, and posture and/or motor control disruptions. Symptoms of vestibular impairment in children include visual disturbances, headaches, and frequent falls. In addition, they may have motor delays and learning delays.



Presenting Symptoms

- Headaches
- Vertigo/Dizziness
- Recurrent Otitis Media
- Blurred Vision
- Reading Difficulties
- Difficulty Navigating in the Dark
- Unsteadiness
- Delayed Motor Milestones
- Lightheadedness
- Disorganized Writing
- Abnormal Eye Movements
- Frequent Falls
- Motion Intolerance
- Nausea or Vomiting
- Visual Disturbances

Common Causes of Pediatric Vestibular Disorders

Chronic Ear Infections
Certain Viruses

Migraines
Genetic Conditions

Certain Syndromes
Head or Neck Trauma

Evaluation and Management

Evaluation at Callier

- Vestibular screening for patients ages 4-12 years (30 minutes):
 - Includes screening of oculomotor function, balance, middle and inner ear function
 - If child does not pass the screening, they are referred for a comprehensive assessment of balance and/or a hearing evaluation
 - Video of BOT-2 balance screener:
<https://www.youtube.com/watch?v=pdE0XaN4m4c> 
- Comprehensive assessment of balance (2-3 hours):
 - Includes diagnostic assessment of otolith and semicircular canal function
 - Test battery is broken down per patient's age and presenting symptoms



Management

- Physical or occupational therapy
- Medical management
 - Medication
 - Surgery
 - Lifestyle modifications
- Vestibular retraining programs

Potential Vestibular Diagnoses

Benign Paroxysmal Vertigo of Childhood (BPVC) – Superior Semicircular Canal Dehiscence (SSCD)

Enlarged Vestibular Aqueduct Syndrome (EVA) – Saccular Dysfunction – Utricular Dysfunction

Peripheral Vestibular Hypofunction – Central Vestibular Dysfunction – Vestibular Migraine

Resources

- Vestibular Disorders Association (VeDA): vestibular.org
 - Information for patients and healthcare professionals
- Callier Center Website: calliercenter.utdallas.edu/evaluation-treatment/pediatric-balance/
- If you have any questions or would like more information, contact our pediatric audiologists at Amanda.Frost@utdallas.edu or Stephanie.Williams@utdallas.edu