

Recognizing Vestibular Problems in Children

Author: Jennifer Braswell Christy, PT, PhD

FACT SHEET



Vestibular Rehabilitation
Special Interest Group



1111 North Fairfax Street
Alexandria, VA 22314-1488
Phone: 800-999-2782,
Ext 3237
Fax: 703-706-8578
Email: neuropt@apta.org
www.neuropt.org

What is the vestibular system?

The vestibular system is a tiny organ located in each inner ear that helps with balance and allows steady vision during head movements. The cochlea (hearing organ) is closely linked to the vestibular system and therefore children who are born with severe hearing loss might also have vestibular problems. Migraine syndrome can cause temporary sensations of spinning (vertigo), motion sensitivity and poor balance, related to the vestibular system. Middle ear infections (otitis media) can also cause poor balance and clumsiness that gets better following placement of tympanostomy tubes.

How can I recognize a vestibular problem in my child?

Children with vestibular problems might have poor balance leading to falls, especially during high level motor skills (e.g. hopping, skipping and walking on a balance beam). Babies with vestibular problems are typically delayed in learning to sit, stand and walk. Although children rarely complain, they might also have trouble focusing their eyes during head movement (e.g. reading a sign when walking). If vestibular function is suddenly lost on one side, the eyes will beat quickly away from the less active side (nystagmus) and your child might complain of vertigo. This can also happen right after a child undergoes cochlear implant surgery. The nystagmus and vertigo should go away after a few days but the balance problems and visual blurriness could remain. Migraine can cause varying symptoms such as headache, vertigo, balance problems, ringing in the ears and difficulty speaking. These symptoms might go away immediately or remain for a few days¹.

How can a physical therapist (PT) help my child with a vestibular-

A PT can assess your child's balance and motor skills to determine if he/she is functioning at an age appropriate level. Special tests can be done to screen for vestibular problems². If these tests are abnormal, your child will be referred to a physician for further testing. If problems with balance or motor skills exist, the PT can prescribe exercises that should be done every day. There are also special exercises to help your child learn to see clearly during head movements. The therapist will show you and your child the exercises in the clinic, and then give you exercises to incorporate into your child's daily routine. Research shows that these exercises, if done for at least 12 weeks, can improve motor skills, balance and gaze stability^{3,4}. Migraine is most often treated with medication. However, a PT can help with balance and motion sensitivity problems associated with migraine.

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