

The Role of Pediatric Vestibular Screening, Assessment, and Intervention in Childhood Cancer

Lindsey Adelstein, PT, DPT, Board Certified Clinical Specialist in Pediatric PT Adam Brown, PT, DPT

This course will focus on understanding the impact of pediatric oncologic diagnoses can have on the vestibular system. This will include discussion of peripheral hypofunction secondary to vestibular toxic medications used for chemotherapy as well as potential central vestibular dysfunction due to posterior fossa tumors. Clinicians will learn about simple screening tools that could be used to determine if a patient could benefit from vestibular rehabilitation. This course will also include introduction of intervention strategies for postural control management with a focus on vestibular rehabilitation. This presentation will include case application with outpatient hospital based as well as school contexts to further learning. Brief hands-on practice of screening assessments as well as intervention strategies will be utilized.

Upon conclusion of this session, the learner will be able to:

1. Recognize some of the pediatric chemotherapy agents that may be toxic to the vestibular system.
2. Identify screening tools that can be utilized to identify vestibular deficits in patients with a pediatric cancer diagnosis.
3. Understand the impact of posterior fossa tumors on central vestibular function.
4. Identify rehabilitation strategies for addressing vestibular impairments in pediatric patients with vestibular dysfunction."

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2. Christy JB. Considerations for Testing and Treating Children with Central Vestibular Impairments. *Semin Hear*. 2018;39(3):321-333. doi:10.1055/s-0038-1666821
3. Frühwald MC, Rutkowski S. Tumors of the central nervous system in children and adolescents. *Dtsch Arztebl Int*. 2011;108(22):390-397. doi:10.3238/arztebl.2011.0390
4. Pavlou M, Whitney S, Alkathiry AA, et al. The Pediatric Vestibular Symptom Questionnaire: A Validation Study [published correction appears in *J Pediatr*. 2016 Mar;170:348. Eva-Bamiou, Doris [corrected to Bamiou, Doris-Eva]]. *J Pediatr*. 2016;168:171-177.e1. doi:10.1016/j.jpeds.2015.09.075
5. Schubert MC, Migliaccio AA, Clendaniel RA, Allak A, Carey JP. Mechanism of dynamic visual acuity recovery with vestibular rehabilitation. *Arch Phys Med Rehabil*. 2008;89(3):500-507. doi:10.1016/j.apmr.2007.11.010
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7. Rine RM. Vestibular Rehabilitation for Children. *Semin Hear.* 2018;39(3):334-344. doi:10.1055/s-0038-1666822"

Lindsey Adelstein graduated from Ithaca College in 2017 with her DPT degree. She then completed University of Miami and Nicklaus Children's Hospital's pediatric physical therapy residency. During her residency year, she was able to receive specific mentoring for patients diagnosed with pediatric vestibular disorders and postural control deficits. Quickly, this became an area of significant interest. Lindsey moved to Connecticut and started working full-time at Connecticut Children's as an outpatient therapist in April 2019, where she currently still works full time. Lindsey currently sees patients specifically referred with pediatric vestibular diagnoses.

Adam graduated from the University of Hartford in 2014 with his Doctorate in Physical Therapy. He started his career at Montowese Rehabilitation Center in North Haven, CT. Following a year in the skilled nursing facility, Adam spent 6 years at Connecticut Children's in the outpatient PT department where he developed an interest in vestibular rehabilitation and helped start the Vestibular and Balance Clinic in collaboration with Audiology and ENT. He recently moved into the school setting with Area Cooperative Educations Sevices – Extension Therapy Services (ETS), working with children from Pre-K up to age 22. He currently services the West Haven and Seymour school districts.