

Update in Diagnosis and Treatment of Vertigo in Children

Essay

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List of Abbreviations

ABR	auditory brainstem response
BAM	Balance Accelerometry Measure
BPPV	benign paroxysmal positional vertigo
BPV	benign paroxysmal vertigo of childhood
COCH	Coagulation factor C homology
CPA	Cerebellopontine angle
CSOM	chronic suppurative otitis media
DEH	Delayed endolymphatic hydrops
DS	double limb feet together stance
DVA	Dynamic Visual Acuity test
EMG	electromyography
ENG	electronystagmography
EVA	enlarged vestibular aqueduct
HTT	Head Thrust Test
m-ECVCT	modified Emory Clinical Vestibular Chair Test
MCTSIB	Modified Clinical Test of Sensory Interaction on Balance
MEE	middle ear effusion
MD	Meniere's disease
NF2	neurofibromatosis type 2
OKN	Optokinetic nystagmus
PLF	perilymph fistula
PDS	Pendred syndrome
PTA	pure-tone audiometry
SCC	semicircular canals
SCAV	slow component angular velocity
SNHL	sensorineural hearing loss
SOT	Sensory Organization Test
SV	somatoform vertigo
TS	tandem stance
cVEMP	Cervical Vestibular evoked myogenic potential
VM	vestibular migraine
VN	Vestibular neuritis
VNG	Videonystagmography
VOR	vestibulo-ocular reflex
VSR	Vestibule-spinal reflex

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Introduction

INTRODUCTION

Vertigo and dizziness are not particularly rare occurrences in children. If present, both these symptoms seriously interfere with the intellectual and physical development of the child although they can be missed for a long time owing to the failure of many children to communicate clearly. Therefore, the role of the physician becomes fundamental to aid in rapid diagnosis and instigate appropriate treatments when a vestibular pathology is suspected. In particular, when approaching this topic, the otolaryngologist should always consider all of the possible entities connected with these symptoms, even those typically managed by other specialists. The prevalence of vestibular disorders in the pediatric population ranges between 0.7% and 15% (*Gioacchini et al., 2014*).

Vertigo in childhood is not easy to diagnose since this rare disorder has a number of causes, ranging from traumatic, infective and malignant disorders of the central nervous system to a wide variety of otological disorders (*Inoue and Yabe. 2013*).

The pathologic diagnoses in approximately one-third of the patients had a **peripheral vestibular disturbance** (inner ear malformations with enlarged vestibular aqueducts,