

**Common vestibular disorders in children in
Fayoum governorate**

Thesis submitted for partial fulfillment of M.D degree in Audiology

By

Mahmoud Mohamed Magdy

M.B., B.CH, M.Sc. of Audiology

Supervised by

Prof. Dr. Hossam Abd El Ghaffar

Professor and Head of Audiology unit

Helwan University

Prof. Dr. Sherif Safwat Guindi

Professor and Head of ENT department

Fayoum University

Dr. Mona Ahmed El Akkad

Lecturer of Audiology

Fayoum University

Dr. Reham Rafie El Shafie

Lecturer of Audiology

Fayoum University

Faculty of Medicine

Fayoum University

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Summary

The etiology of vertigo in children varies widely from that of adults; besides, the inability of the affected children to describe the characteristics of the observed symptoms, makes it difficult to determine the appropriate diagnosis in such cases. Furthermore, the lack of knowledge among the clinicians of the complexities in symptomatology and management algorithms may lead to the delay in diagnosis.

A cross sectional study design was implemented to evaluate the causes of dizziness in children who presented to the Audio-Vestibular unit, Fayoum University hospital and the role of questionnaires in diagnosis. The study group was subjected to basic audiological and vestibular test battery and filled in the questionnaire prior to testing. This study was conducted during a period of 4 years, between August 2016 and February 2020.

The most common causes of dizziness in children encountered were otitis media that represented (23.9% - 203 cases) either alone (11.1%-94 cases) or combined with other disease (12.85%- 109 cases), followed by benign paroxysmal vertigo of childhood (17.6% - 149 cases) and vestibular migraine (11.2% - 95 cases).

In the current study, the diagnosis by pediatric dizziness questionnaire was agreed with the final diagnosis reached by full assessment in about 78.3% of cases with possible diagnosis, which emphasizes the importance of pediatric dizziness questionnaire in the assessment of dizzy children.

47.7% of cases with unexplained dizziness were categorized as psychic patients by pediatric dizziness questionnaire, which may suggest the need of a psychiatrist in the assessment of unexplained dizzy children.

There was statistically significant high mean of BMI among patients with unexplained dizziness with p-value <0.01, which indicated increase in BMI was associated with occurrence of unexplained dizziness. Body mass index should be considered in any dizzy child, especially when there is no obvious causes.

Evaluation of dizziness in children is challenging. However, it is of great importance to reach the correct diagnosis, in order to prevent the consequences of balance disorders by implementing early therapeutic options. Structured history taking is the most important diagnostic tool, in order to guide treatment strategy, which can improve the general well-being and quality of life of those children. The questionnaire seems to be a reasonable tool for diagnosis of dizzy children.

Video Head Impulse test, Rotatory chair and VEMP should be included in the protocol of vestibular testing in children especially young age, to avoid drop outs encountered in the current study, in addition to the following:

- A- Careful and detailed history taking.
- B- Basic Audiological evaluation.
- C- Bedside examination.
- D- VNG.