

**Audiovestibular assessment of children with diabetes  
mellitus type 1**

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of

Master Degree in Audiology

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## **Abstract**

Type 1 diabetes is a chronic illness characterized by the body's inability to produce insulin due to the autoimmune destruction of the beta cells in the pancreas. The study is designed to evaluate the effect of diabetes type 1 on the audiovestibular system. This study included 50 children which were divided into 2 groups: the cases group consists of 25 children, suffering from Type 1 Diabetes Mellitus (T1D) and the control group which comprised 25 children known to be free from T1D. The entire study group was subjected to basic audiological and vestibular assessment. The results showed 84% of cases with bilateral within normal peripheral hearing, 16% revealed hearing loss. Regarding Vestibular assessment; all cases and controls were subjected to VNG tests. The saccade test gave the highest percentage of abnormal results 80%. It is most critical to document whether a vestibular impairment exists or not in a patient with T1D, even without complaints, for appropriate rehabilitative therapy to be prescribed.

### **Key Words:**

Type 1 Diabetes mellitus, Vertigo, Dizziness, Audiometric findings, Vestibular assessment.