

The Effect of Methylphenidate on the Hearing of Children with Attention Deficit Hyperactivity Disorder

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Abstract

Introduction

There has been a sudden idiopathic hearing loss case presented after methylphenidate treatment in a child with attention deficit hyperactivity disorder (ADHD). **Objective** This study was performed to reveal the probable ototoxic side effects of methylphenidate use in patients with ADHD.

Methods

Thirty pediatric patients with ADHD were included in the study. Pure tone audiometry, speech discrimination scores, waves I, III, V absolute latencies and waves I-III, I-V, III-V interpeak latencies at the 80 dB nHL intensity after click stimulus auditory brainstem response (ABR) results were compared before and 3 months after methylphenidate treatment.

Results

There were no statistically significant difference between pretreatment and posttreatment pure tone and speech audiometry findings and ABR results ($p > 0.05$ for all parameters).

Conclusion

Methylphenidate can be regarded as a safe drug regarding ototoxic side effects. Additional studies with a larger sample size and longer follow-up may be needed.