Hearing disorders in Multiple Sclerosis patients

Abstract:

Introduction: Multiple sclerosis (MS) is a neurological disease that causes sudden deaf. In this research auditory disorders were studied in the patients with multiple sclerosis (MS).

Material & Method: This cross sectional descriptive-analytical study was performed on 107 patients with multiple sclerosis in the range of 20-45 yrs. There were not history of trauma and middle ear disease in all cases. Sampling was randomized. A complete auditory evaluation including pure tone audiometry, speech audiometry, immittance audiometry and brainstem Auditory Evoked Potential were performed on patients.

Finding: In pure tone audiometry, 19.62% of cases had sensory neural high tone loss. In speech audiometry and immittance audiometry 18 and 31 cases were abnormal, respectively. 55.14% of cases had abnormality in BAEP. The most of abnormalities were prolonged latency of V, decrease of V/I amplitude ratio and poor reproducibility, respectively. With high rate of stimulation, 77.57% of cases were abnormal. Statistical analysis showed significant difference between latency of V and stimulation rate.

Conclusion: According to findings of this research it seems that hearing evaluation is very important for follow-up and early rehabilitation of auditory disorder in patients with MS.

Also auditory test battery especially BAEP with high stimulation rate are useful in the diagnosis, BAEP, High stimulation rate

Key words: Hearing disorder/ Multiple sclerosis