ABSTRACT

TITLE :

Evaluation of auditory brain stem evoked response in migraine patients and to compare it with normal subjects.

AIM :

To evaluate the Auditory Brain Stem Evoked Response in Migraine Patients and to compare it with normal subjects.

OBJECTIVE :

1. To evaluate 'Auditory Brain Stem Evoked Response' in migraine patients.

2. To compare the latency and interpeak latency of BERA waves between migraine and normal subjects.

MATERIALS AND METHODOLOGY :

This is a case control study conducted in the Department of Physiology, Chengalpattu Medical College. The study group included 30 subjects fulfilling the criteria of migraine as per International headache society of age group 20 -50 years of both sexes who attended neurology OP at Chengalpattu Medical College participated in the study & Control group which included 30 age & gender matched normal subjects. Ethical committee clearance and informed consent obtained. BAEP was done using NEUROPERFECT EMG-20009EMG/NCV/EP system.

RESULTS :

BAEP parameters such as latency, and inter peak latency of the study group was compared with the control group. The data were statistically analyzed **by using** SPSS version 18 and their significance derived using independent samples T-Test and paired T-Test. Latency I, II, III, IV, V are prolonged indicating defective brainstem neurotransmitter signaling .Interpeak latency I – V, I – III, prolongation supported the serotonergic control system dysfunction taken for analysis.

CONCLUSION :

This study does not compare the duration of the disease with the changes in the BAER and the quantification of neurotransmitter signaling. BAER can be used as an effective non-invasive, reliable, and diagnostic technique and an earliest indicator of impending auditory involvement in migraine patients enabling to intervene even before in migraine patients without aura.

Key words: Brain Stem Auditory Evoked Potential ; Migraine ; latency.