Cortical auditory evoked potentials in tinnitus patients with normal hearing

Enaas Kolkaila, Afaf Emmare, Takwa Gabr and Marwa Yousif
Tanta University, Egypt

Background: Tinnitus is a sound perception in one or in both ears, as well as in one’s head which is not related to any external source of stimulation or noise. It is now evident that tinnitus may be initiated by abnormal activity from the peripheral auditory system. However, its progress is due to involvement of the central nervous system.

Objectives: This study was designed to evaluate cortical auditory evoked potentials (CAEPs) in tinnitus patients with normal hearing.

Subjects & Method: This study included two groups: Group I (control group); consisted of 20 normal hearing adults and group II (study group) consisted of 20 normal hearing subjects with bilateral tinnitus. CAEPs were recorded using tone stimuli in frequencies of 500, 1000, 2000 and 4000Hz at 50dB & 70dB sensation levels.

Results: The tinnitus group showed no significant difference among the four frequencies in latencies at 70dBSL. Also, there was more saturation of 4000Hz latency response to increased intensity and the shorter latencies than control group in the four tested frequencies at both intensities used.

Conclusion: Tinnitus patients with normal hearing showed alterations of CAEPs response which confirm the central auditory structures changes in those patients.

Biography
Enaas Kolkaila has finished Medical School in 1983 from Tanta University and completed her Master's in 1987 from Ain Shams University in Cairo. She lived the following years in USA and returned in 1991 when she continued studies and finished MD in 1997 from Ain Shams University. She is a Professor of Audiology in Tanta University which is the 4th largest university in Egypt. She had supervised 22 theses both Masters and MD. She has published more than 30 papers and has been serving as a reviewer in EJENTA.

Notes: