

The Effect of Anti-epileptic medication on Visual voltage in Patients with Generalized Tonic-clonic Seizures: A Prospective Case controlled Study

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Abstract:

The most purpose of the current study was to see whether or not anti-epileptic medication induce any abnormal changes within the visual voltage (VEP) patterns. ways and material: This prospective case controlled study was done at the Neurology Department of King Abdulaziz University Hospital, Jeddah, Asian nation (between Gregorian calendar month 2013 and Dec 2014). The study subjects were divided into cases and controls; with the case cluster subjects being those brain disease patients receiving anticonvulsant medication. victimization the Visual induced Potentials (VEPs), management and case subjects were compared with relevance the values of: Latency N75, Latency P100 and Amplitude P100. Results: A statistically vital distinction was seen between the controls and therefore the subjects receiving anticonvulsant double and triple drug therapy; with relevance the worth of Latency P100 (P-value zero.042 and 0.044 respectively). The analysis of variances (ANOVA) unconcealed a statistically vital distinction (P-value zero.007 and 0.038) with relevance the mean countless Latency N75 and therefore the mean countless Amplitude P100; in relevance age; between the controls and therefore the case cluster patients receiving anti-epileptic monotherapy. A statistically vital distinction ($p=0.01$) was noted with relevance Latency N75 associated with age, between the controls and patients receiving anticonvulsant double medical aid. a major distinction was additionally noted in Latency P100 mean scores associated with age ($p=0.05$). A gender-wise comparison unconcealed a statistically vital distinction, within the mean countless Latency P100, with the distinction showing a male predilection Conclusion: Anti-epileptic medication will induce

abnormalities within the VEP patterns. Age and gender ar factors that may influence the prevalence of such abnormalities; in relevance the quantity of anti-epileptic medication taken by the patients. Future studies ar suggested to guage the impact of the kind and length of brain disease, in inflicting VEP connected abnormalities.

A total of eighty healthy subjects not victimization any anti-epileptic medication were chosen for the management cluster. The management cluster subjects were recruited from among the laboratory personnel, clinic employees and medical students. cardinal subjects were feminine and thirty two were male, with ages starting from half-dozen to ninety seven years recent. Visual voltage (VEP), visual induced response (VER) and visual induced brain wave (VECP) ar similar terms used for relating electrical potentials, that ar generated by visual stimuli. These short stimuli ar recorded from the scalp, superjacent the cortical area. By signal averaging, electroencephalogram is that the technique usually utilized to capture and record the VEP waveforms. VEPs area unit} most significantly wont to measure the visual pathways' purposeful integrity from the membrane, via the optic nerves, up to the cortical area within the brain. many studies are conducted to guage the consequences of anticonvulsant medication on the visual pathway by mensuration VER. the aim of this study was to elicit a potential relationship between VER connected abnormalities among brain disease patients and therefore the range of anticonvulsant medication being taken. give a outline of the age-wise distribution of the epileptic patients (cases) and controls enclosed within the study. In (0 to 25) thirty two.1% management compared to five.8% patients ontriple medical aid, 11.5% double medical aid, and 12.2% on

monotherapy. In social class (25 to 50), 13.5% management is compared with three.5% of patients ontriple medical aid, 3.2% double medical aid, and 9.0% on mono medical aid. In age (≥ 50),5.8% management compared with one.3% double medical aid, and 1.9% patients on mono medical aid. showed a statistically vital distinction within the mean countless Latency P100, between the male and feminine case cluster subjects. No vital distinction was noted with relevance the mean countless Latency N75 and Amplitude P100. Upon comparison the mean countless the management cluster.