ABSTRACT

Title: Evaluation of Brainstem Auditory Evoked Potentials in patients with chronic kidney disease, Hemodialysis and Renal transplantation patients

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Supervisor & Guide: Prof. Dr. A. Shakeela Banu M.D.,

Department: Department of Physiology and Experimental Medicine.

College: Kilpauk Medical College, Chennai.

University: The Tamilnadu Dr.MGR Medical University, Chennai.


Chronic kidney Disease is defined as the presence of Kidney damage or a decreased level of kidney function for a period of 3 months or more. Auditory system Abnormalities commonly occur in Patients with Chronic Kidney Disease and End Stage Renal Disease patients undergoing Hemodialysis. This Study was done to Evaluate the Brainstem Auditory Evoked Potentials in CKD, HD patients and to document the reversibility of the BAEP changes after Successful Renal Transplantation. The Experimental Group included 20 patients with CKD, 20 patients with CKD stage 5 undergoing Hemodialysis and 20 Patients who have undergone Renal Transplantation within one year of Diagnosis of CKD. Control Group Had 20 Healthy volunteers. Measurements included Absolute Peak Latencies I, II, III, IV & V
and Inter peak Latencies I-III,III-V & I-V of the Auditory Brainstem Responses. Abnormal BAEP Recordings were seen in CKD patients and HD patients in the form of Prolonged Absolute Peak Latencies and Interpeak Latencies. There was a significant improvement in the BAEP Waveforms after Renal Transplantation. Hence this study showed Neural conduction along the Auditory Pathway is delayed in patients with CKD and CKD Patients who were on Hemodialysis. Renal Transplantation significantly improves the Auditory function.

Keywords: CKD, BAEP, HD.