## P03-22 - PERTURBATIONS IN P50 AUDITORY EVOKED POTENTIAL AND HALLUCINATORY BEHAVIOR IN SCHIZOPHRENIA

## A. Vedeniapin<sup>1</sup>, N. Boutros<sup>2</sup>

<sup>1</sup>Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston, SC, <sup>2</sup>Department of Psychiatry and Behavioral Neurosciences, Wayne State University School of Medicine, Detroit, MI, USA

Earlier findings suggested auditory evoked potentials as diagnostic measure in schizophrenia. However, the relationship between different components of middle latency auditory evoked response (MLAER) and clinical symptoms of schizophrenia is unclear. In this study we explored the relationship between the amplitude of P50 potential and hallucinatory behavior in medicated schizophrenic patients. MLAER from thirty seven outpatient, clinically stable medicated schizophrenic patients (mean age 43.5 years, SD = 11.7), twenty six males, were measured. The evoked potentials were elicited in a paired click paradigm. The amplitude of P50, measured from pre-stimulus baseline, was studied. The bandpass filter was 1-50 Hz. Twenty seven (20 males) patients experienced hallucinatory behavior. Schizophrenic patients with hallucinatory behavior had significantly (p< 0.05) smaller P50 amplitude, elicited by both first and second clicks in the pair. No significant differences were found for P50 amplitudes, measured from preceding negative deflection. Preliminary analysis suggests that the amplitude of the P50 auditory potential, measured from the pre-stimulus baseline in a paired click paradigm is related to hallucinatory behavior in schizophrenic patients.