ABSTRACT

**TOPIC:** EVALUATION OF VESTIBULOCOCHLEAR NERVE AND OPTIC NERVE INVOLVEMENT IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE BY USING EVOKED POTENTIAL STUDY.

The aim of the study is to evaluate the visual evoked potential (VEP) and brainstem auditory evoked potential (BAEP) abnormalities in COPD patient and its correlation with C-reactive protien (CRP) as a part of multi system disorder.

40 study group with chronic obstructive pulmonary diseases and 40 control group between the age group of 30-60 years were included in this study based on criteria defined in the global initiative for chronic obstructive lung disease (gold) 2004- guidelines.

Patients with chronic neuropathy without COPD diabetes mellitus, chronic alcoholism, uremia, cystic fibrosis, sarcoidosis, leprosy, malignancy, history of intake of neurotoxic drugs, hearing and visual impairment were excluded.

Informed written consent from the study and control group were obtained.

**Result:** There was significant prolongation of (P100) over the right eye in COPD patients compared with controls. BAEP recording shows significant prolongation of latency of wave I, II, III, IV and V over the left ear.

The indices of spirometry FVC, FEV FEV1/FVC, were significantly decreased in COPD patients and CRP were significantly increased in COPD patients when compared with control

**Key words:** VEP, BAEP, C-Reactive Protein, Chronic obstructive pulmonary disease, Hypoxemia