

Poster Abstracts

PO-20

ROLE OF ELECTROENCEPHALOGRAPHY IN PROGNOSTICATION OF METHADONE COMATOSE PATIENTS

Hossein Hassanian-Moghaddam¹, Ehsan Sakhaee², Hossein Pakdaman², Maziar Shojaei², Latif Gachkar³

¹ Department of Clinical Toxicology, Loghman-Hakim Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran, ² Department of Neurology, Loghman-Hakim Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran ³ Infectious Diseases and Tropical Medicine Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Objectives: Electroencephalography (EEG) is a prognostic tool in comatose patients. The value of this old technique is less investigated in poisoned patients. We aimed to determine EEG findings and clinical manifestations in methadone poisoned patients.

Methods: In a prospective observational study, demographic characteristics, clinical findings, lab tests, EEG findings (for 30 minutes) and outcome of 30 methadone unconscious patients (dead vs. alive) were retrieved. EEG was interpreted based on ACNS Standardized Critical Care EEG (version 2012) by one of the co-authors and non convulsive status epilepticus (NCSE), non convulsive seizure (NCS), Interictal epileptiform discharges, Diffuse low voltage cerebral activity, Burst-suppression, Diffuse slow background, Non-specific focal slowing, temporal intermittent rhythmic delta activity (TIRDA), frontal intermittent rhythmic delta activity (FIRDA), Triphasic Wave, Generalized periodic discharges, lateralized periodic discharges (LPDs) and bilateral independent periodic discharges (BIPDs) were evaluated for each case. Results of the EEG were compared between dead and alive patients.

Results: Six patients (20%) died. In dead versus alive patients, Interictal Epileptiform Discharges was happened in [2 (33%) vs. 18 (75%)], NCS in [0 vs. 1 (4.2%)], Diffuse low Voltage Cerebral Activity in [1 (16.7%) vs. 1 (4.2%)], Predominant Theta in [4 (66.7%) vs. 10 (41.4%)], Predominant delta in [0 vs. 1 (4.2%)], LPDs in [1 (16.7%) vs. 0], FIRDA in 3 [0 vs. 3 (12.5%)], diffuse alpha activity in [0 vs. 3 (12.5%)], diffuse beta activity in [0 vs. 1 (4.2%)], showing no statistically difference in dead and alive patients.

Conclusion: It seems that there is no relation between EEG findings and outcome of the methadone intoxicated patients. Unlike many other causes of loss of consciousness, EEG failed to demonstrate a prognostic role for outcome prediction. Even severe encephalopathic EEG patterns may lead to complete recovery. This should be considered in comatose methadone intoxicated patients and conservative therapies should be continued.