Insight Medical Publishing

The Journal of Neuropsychiatry

2020

Vol.4No.1

Drug and substance abuse in refractory epilepsy

Abdeldayem Raafat and Hazem Maha

Associate Prof of Toxicology, Emergency Hospital, Faculty of Medicine

Prof of Neurology, Neurology Department, Faculty of Medicine

Mansoura University, Egypt

Abstract

Object: The present work aimed to study the etiology of non-response to antiepileptic drugs by estimating their serum levels and screening of drugs and substance abuse in patients with resistant epilepsy.

Methods; this study was conducted in epilepsy outpatient clinic. 924 patients with intractable epilepsy were included. They subjected to

-Toxicology screen for detection of drug and substances abuse by analysis of urine and blood samples.

-Measurements of the level of antiepileptic drugs in the blood.

All assays run on the system use of EMIT and confirmed by GC/MS.

Results; Confirmed Positive results for drugs and substances abuse were detected in 246 of 924 patients (26.62%) by GC/MS. Cannabis was the first abused drug (29.27%). Only 17 patients show serum level of antiepileptic drugs within therapeutic range, but 169 patients' levels were below it and 60 patients with levels above it.

Conclusions; Substances abuse may be the cause of resistant epilepsy as they are epileptogenic by themselves or due to drug-drug interaction with the antiepileptic.

Recommendations;

- A screening test for drug and substances abuse performed if drug abuse or withdrawal suspected in patients with resistant epilepsy even if patients deny the use of them.
- To confirm the results of EMIT, further study is needed by using GCMS as it is more sensitive and more specific than EMIT system.

Key words; urine samples; blood samples; EMIT; GC / MS.

Biography:

Dr. Raafat have completed his PhD from Mansoura University and postdoctoral Studies from Mansoura University Schools of Science and Medicine.

Name: RAAFAT A ABDELDAYEM

University/organization name: Mansoura University

Designation: Ass. Prof of Toxicology

Country: EGYPT

Research interest: Forensic Chemistry and Toxicology, water pollution and medical analysis

Telephone: +201225260108

mandourraafat@yahoo.com raafat_mandour@hotmail.com

Bottom Note:

This abstract has been taken from the conference world neuroscience dated on 27th May 2020