Drug and substance abuse in refractory epilepsy

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