

# Neurology: Neurochemistry, Neuropharmacology and Neurosciences

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## Drug and substance abuse and epilepsy

### 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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