

DRUG UTILIZATION AND EVALUATION OF ANTI-EPILEPTIC DRUGS IN SEIZURES

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Article Received on
21 April 2024,

Revised on 11 May 2024,
Accepted on 31 May 2024

DOI: 10.20959/wjpr202411-32712



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ABSTRACT

Background: Antiepileptic drugs are available to treat seizures and epilepsy. The main purpose of the study is to evaluate the utilization and prescribing pattern of antiepileptic drugs. **Methods:** Case reports of 126 seizures patients with anti-epileptic drugs were collected in the neurology department of sunshine hospital, Secunderabad. The collection of information regarding the initial treatment prescribed for patients with seizures and its prescribing pattern was studied, analyzed, and evaluated. **Results:** Among the 126 the percentage of male (58.7%) and females (41.3%). Most of the patients from the department of neurology (52%). Based on the anti-epileptic drugs in seizures, levetiracetam was the mostly employed medications (87%) in patients and lacosamide was the mostly employed medication in patients with (14.2%). Mostly employed route of administration of medication was the intravenous route. **Conclusion:** The review uncovered that the pervasiveness of seizures was more among males at

58.7% when contrasted with females at 41.3%. The commonness of seizures was viewed as more around the age gathering of 41-50 years. It was seen that the majority of the patients are having a low recurrence between the seizure episodes and are influencing their personal satisfaction. Mono treatment hostile to epileptic medications was usually recommended among the review members. The most recommended enemy of epileptic medication was found to be levetiracetam at the level for 110 patients (87.3%) trailed by Lacosamide for 18 patients, Librium for 14 patients, and brivaracetam for 13 patients.

KEYWORDS: Drug utilization and evaluation, Anti-epileptic drugs and rational uses.

INTRODUCTION

Systematic drug promotion, distribution, prescription, and use in society are referred to as DUE. An ongoing, authorized, and systemic quality improvement based on the evaluation of drugs.

DUE programs are fundamental in helping oversee medical care frameworks to understand, break down survey, and upgrade drug endorsing, organization, and utilization. DUE permits the drug store for oversee care to detect designs in suggesting inside specific patient populaces whether by factors one of a kind to a given medication or by illness state (like those with asthma, diabetes, or hypertension).

The best medication treatment for a patient with seizures will depend on the exact grouping of the seizures the sort of epilepsy or epileptic disorders, as well as persistent factors, drug accessibility and openness viability unfriendly impact profiles, and comfort of organization.

Sort of epilepsy, patient age, and orientation, simplicity of dosing, viability, long haul incidental effect profile, neuropsychiatric profile, narcotic weight and associations with different prescriptions, co-horrible circumstances meds, patient moderateness, the treating doctor's inclination, and the training climate are significant elements that influence the utilization of hostile to epileptic medications (AEDs). The current review's goal was to look at how against epileptic drugs (AEDs) are utilized by paediatric patients encountering various kinds of epileptic seizures.

Drug use assessment is a nonstop cycle that capabilities best when done in cycles rather than in stages. The objective of this proof-based way to deal with drug use is to clarify rules for a specific disease or prescription utilize in view of the best clinical information right now.

Seizures

Seizures are describe by sudden, wild actual developments and conduct anomalies that outcome from abnormal eletrical action in the cerebrum. Epilepsy victims are logical acquainted with seizures including persistent illnesses however often including mind anomalies. "EPILEPSY" is a cognitive impairment, not a psychiatric condition, and is not contagious.

Types of seizures

1. Partial seizures
 - Simple seizures: Occurs without impairment of consciousness
 - Complex seizures: Occurs with impairment of consciousness
2. Generalized seizure
3. Unclassified seizures were needed
4. Status epilepticus

Anti-epileptic drugs

Anti-epileptic drugs also known as anticonvulsants.

Anti-epileptic drugs should never be terminated suddenly. Management of seizures includes the use of anti-seizure drugs.

First generation drugs

- Phenytoin,
- Barbiturates (Phenobarbital, Primidone),
- Valproic acid

Second generation drugs

- Lamotrigine,
- Topiramate,
- Levetiracetam

OBJECTIVE

The main objective of the study include to identify more frequent combination of anti epileptic drugs. To assess the prescribing pattern of anti epileptic drugs. To assess the comorbidities associated seizures and adverse drug reactions of anti epileptic drugs.

METHODOLOGY**Study Site and Period**

The study was performed in the Kim's-sunshine hospital, Secunderabad for a period of 6 months.

Study design

A prospective observational study.

Study size

A total of 126 patients are included in the study and were followed for the DUE anti-epileptic drugs in seizures.

Study criteria

The study criteria are inpatients with seizures in medicine, ICU and casualty departments who were treated with anti-epileptic drugs.

Inclusion criteria

Age > 15years and < 90years.

- Inpatients.
- Patients with associated co- morbidities.
- Patients with or without surgical history.

Exclusion criteria

- Pediatrics.
- Outpatients.
- Pregnant and lactating women.
- Comatose or terminally ill patients.
- Age < 15years and >90years.

Sources of data collection

Patient data relevant to the study was collected from sources like patient case record, medication chart and lab reports.

Study materials

Patient consent form: It comprises the demographics of the patient, the study objective, and a brief description of the study.

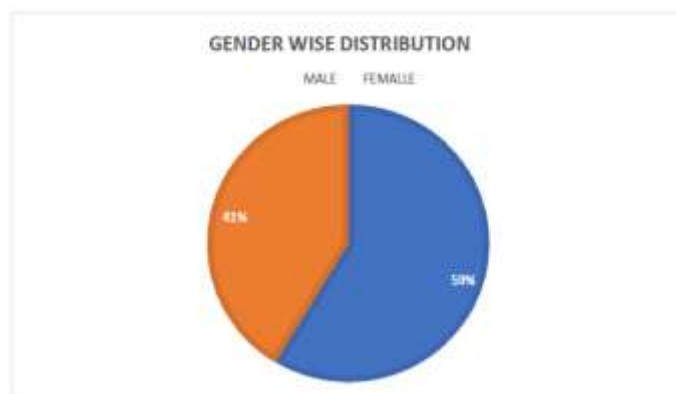
Patient data collection form: It contains patients' socioeconomics, protests on confirmation, clinical, drug and social history, sensitivities, and medical procedures gone through for patients, and it likewise incorporates an actual assessment, lab discoveries, conclusion and prescription graph, unwanted impacts, and release medicine.

Study procedure

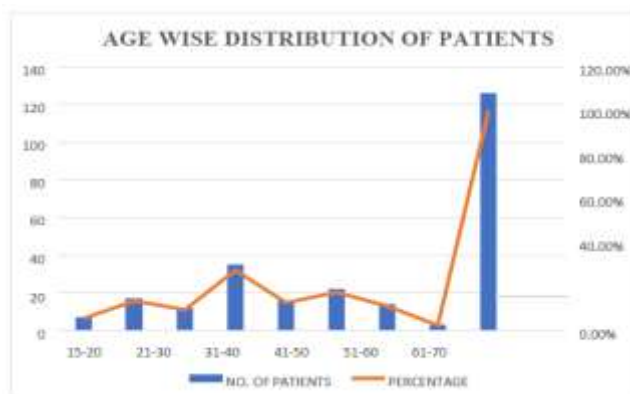
It is an imminent observational review where 126 patients are acknowledged to sign up for

the concentrate in the wake of getting assent. During the information assortment strategy, we tended to patients who met our consideration measures, introduced the concentrate in full to them, and obtained their understanding after they got it. After information assortment - complete number, rate, chi- square any place pertinent, minuscule succeed, and word 2010 were utilized to create diagrams, pie graphs, and tables.

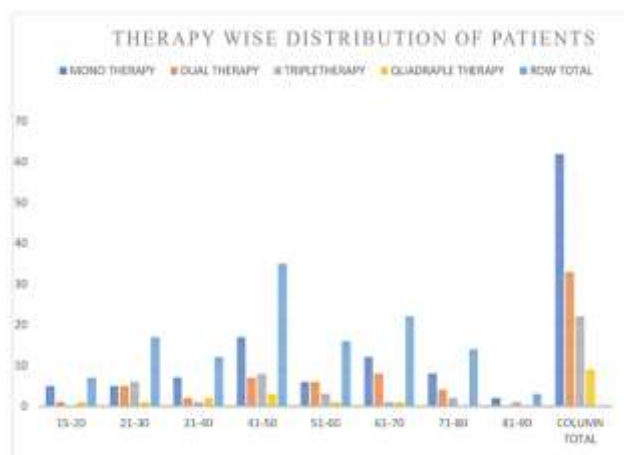
RESULTS



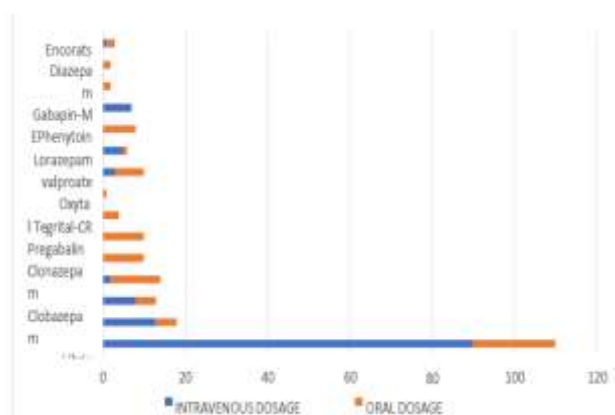
Gender-wise distribution of patients.



Age-wise distribution of patients.



Therapy wise distribution of patients.



Distribution of adverse drug reactions among the patients.

DISCUSSION

Seizures are characterized as wild actual developments and social irregularities that outcome from an unreasonable electrical movement from the mind.

Drug usage and assessment is the foundational promoting, conveyance, and solution and medication use in the general public.

The primary point of the review is to preclude the medication use and assessment of against epileptic medications in patients with seizures.

126 patients were signed up for the concentrate in the wake of acquiring their assent. It was an imminent observational review acted in the Kims-Daylight medical clinics, Secunderabad for a time of a half year.

The orientation wise dissemination of the members uncovered that most of the patients with seizures were 74 patients (58.7%) and females 52 patients (41.3%) out of 126 patients.

Age-wise dispersion of the review members showed that the biggest number of patients were in the age gathering of 41-50 years-35 patients (27.5%) trailed by the age gathering of 61-70 years-22 patients (17.4%), trailed by the age gathering of 21-30 years-17 patients (13.5%), trailed by the age gathering of 51-60 years-16 patients (12.7%), trailed by the age gathering of 71-80 years-14 patients (11.1%), trailed by the age gathering of 31-40 years-12 patients (9.5%), trailed by the age gathering of 15-20 years-07 patients (5.5%) and the most reduced no. of patients were seen in the gathering of 81-90 years-03 patients (2.4%).

Different enemy of epileptic medications were given to 126 patients in the example. Among them the most usually recommended drug was Levipil for 110 patients (87.3%) trailed by lacosamide for 18 patients (14.2%), trailed by Librium for 14 patients (11.1%), trailed by Brivaracetam for 13 patients (10.3%), trailed by Oxytal and clobazam for 10 patients (7.93%), trailed by Lorazepam for 08 patients (6.34%), trailed by Phenytoin for 07 patients (5.55%), trailed by Valproate for 06 patients (4.76%), trailed by Pregabalin for 04 patients (3.17%), trailed by Encorats for 03 patients (2.38%), trailed by Gabapin-ME and Diazepam given for 02 patients (1.58%) and the most un-given enemy of epileptic medication was Tigretal-CR for 01 patient (0.79%).

Among the 126 patients, different enemies of epileptics were recommended for the administration of seizures. A large portion of them were endorsed to guys than to females. Specifically, Levipil, Brivaracetam, Librium, Oxytal, Valproate, and Clobazam were the medications recommended more in guys when contrasted with females.

Various portions of hostile to epileptic medications were given to the review members in various measurement structures.

The most often noticed unfavorable impacts among 126 patients were dazedness, Ataxia, Obscured vision, and migraine for the medications Phenytoin, Carbamazepine, topiramate, Levipil, Zonisamide, lacosamide, Gabapentin, and Pregabalin.

Limitations

Little examples are utilized in populace studies, and the consequences of those reviews are given in the information.

Antiepileptic drug issues are at present consistent as per the populace review.

They are just alleviating summed up tonic-clonic seizures in 85% of patients and nonappearance seizures in up to 75% of patients.

CONCLUSION

The review uncovered that the pervasiveness of seizures was more among males at 58.7% when contrasted with females at 41.3%. The commonness of seizures was viewed as more around the age gathering of 41-50 years. 27.5%.

It was seen that the majority of the patients are having a low recurrence between the seizure episodes and are influencing their personal satisfaction. Mono treatment hostile to epileptic medications was usually recommended among the review members.

The remedy design is seen to have differed with various enemies of epileptic medications. Very nearly 15 assortments of hostile to epileptic medications in various recommending designs were seen in the remedy of the review populace.

The solution of the review populace additionally contained various portions of the counterepileptic medications. The most recommended enemy of epileptic medication was found at the level for 110 patients (87.3%) trailed by Lacosamide for 18 patients, Librium for 14 patients, and brivaracetam for 13 patients.

The review is directed to comprehend the significance of medication use and assessment which is a significant piece of a medical services framework. Conventional anti-epileptic drugs were prescribed in higher frequency than newer drugs. It may be due to higher cost and non-availability in government supply of newer drugs.

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