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# Original Research

# Assessment of clinical profile of patients with epilepsy

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### ABSTRACT:

**Background:** The present study was conducted to assess clinical profile of patients with epilepsy. **Materials & Methods:** 162 patients diagnosed with epilepsy were clinically evaluated and thorough clinical examination was done. Each patient was subjected to hematological, biochemical and radiological investigations. **Results:** Etiology was infectious in 52, vascular in 34, metabolic in 20, alcoholic in 16, idiopathic in 25, neoplastic in 15 and arachnoid cyst in 10 cases. The seizure type was focal+secondarily generalized in 90 and generalized in 72, mean age at first seizure was 32.4 years, frequency of seizure per year was 64.8 years, mean duration of seizure before starting treatment was 3.1 years and family history of epilepsy was present in 45 cases. **Conclusion:** Focal+ secondarily generalized was the most common seizure type present in present study. **Key words:** Epilepsy, Seizures, Neoplastic.

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# INTRODUCTION

Epilepsy is a common and diverse disorder with many different causes. Outcomes are varied with 60-70% of newly diagnosed people rapidly entering remission after starting treatment, and 20—30% developing a drugresistant epilepsy with consequent clinical and psychosocial distress. Epileptic seizures (ES) and nonepileptic seizures (NES) can occur in the same patient. Eight to 60% of patients with NES may also have a history of ES, with most series reporting 10 to 25 percent.29 Clinical differentiation between ES and NES is often difficult. Patients with NES may be improperly treated with antiepileptic drugs (AEDs) for decades or nonepileptic intubated for convulsive Psychologic or psychiatric treatment is often delayed. Among 50 million people with epilepsy worldwide. 90% of them are found in developing Countries3 and 90% of these patients are not receiving adequate treatment. They could live normal lives if treated. This huge treatment gap may be due to the limited knowledge, poverty, cultural beliefs, stigma, poor

health delivery infrastructure like inadequate supplies of antiepileptic drugs, and shortage of trained health care workers.

Acute symptomatic seizures are clinical seizures occurring in close temporal relationship with an acute central nervous system (CNS) insult, which may be metabolic, toxic, structural, infectious, or inflammatory that may require urgent attention and treatment to reverse potentially damaging causes. Such seizures are considered to be an acute manifestation of the insult and may not recur when the underlying cause has been removed or the acute phase has elapsed. The present study was conducted to assess clinical profile of patients with epilepsy.

# **MATERIALS & METHODS**

The present study was conducted in the department of Medicine. It consisted of 162 patients diagnosed with epilepsy of both genders. All were informed and their consent was obtained.

Data such as name, age and gender etc. was recorded. All patients were clinically evaluated and thorough clinical examination was done. Each patient was subjected to hematological, biochemical and radiological investigations. Depending upon the suspected etiology, patients also underwent certain

specific investigations like CSF examination, serological tests, carotid angiogram – DSA and histopathological examination of biopsy specimen. Results thus obtained were assessed statistically. P value less than 0.05 was considered significant.

### **RESULTS**

**Table I Distribution of patients** 

Total- 162					
Gender	Males	Females			
Number	80	82			

Table I shows that out of 162 patients, males were 80 and females were 82.

**Table II Etiology of Seizures** 

Etiology	Number	P value
Infectious	52	0.01
Vascular	34	
Metabolic	20	
Alcoholic	16	
Idiopathic	25	
Neoplastic	15	
Arachnoid cyst	10	

Table II, graph I shows that etiology was infectious in 52, vascular in 34, metabolic in 20, alcoholic in 16, idiopathic in 25, neoplastic in 15 and arachnoid cyst in 10 cases. The difference was significant (P< 0.05).

**Graph I Etiology of Seizures** 

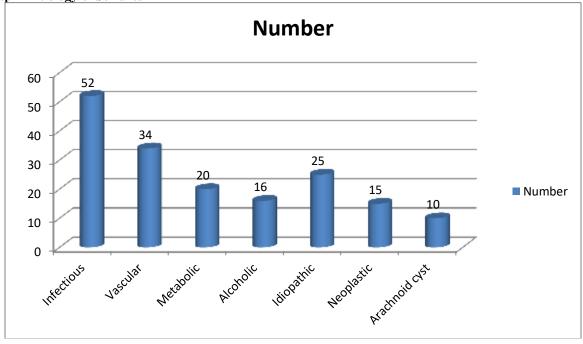


Table III	Demographic	nrofile o	of the	natients
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Parameters	Number	
Seizure Focal+ secondarily generalized	90	
Generalized	72	
Age at first seizure	32.4	
Frequency of seizure per year	64.8	
Duration of seizure before starting treatment (Year)	3.1	
Family history of epilepsy	45	

Table III shows that seizure type was focal+ secondarily generalized in 90 and generalized in 72, mean age at first seizure was 32.4 years, frequency of seizure per year was 64.8 years, mean duration of seizure before starting treatment was 3.1 years and family history of epilepsy was present in 45 cases.

### **DISCUSSION**

Epilepsy knows no geographic, social, or racial boundaries and occurs in men and women and affects all ages, but is more frequently diagnosed in infancy, adolescence, and old age. People with low socioeconomic status mostly living in the rural areas are found to be more affected. Studies have shown that neurocysticercosis and calcified lesions are the commonest radiological findings. People suffering from epilepsy in our country do not have good quality of life because of their poor epilepsy control.

Acute symptomatic seizures are considered to be an acute manifestation of the insult and may not recur when the underlying cause has been removed or the acute phase has elapsed. The knowledge of the etiologic risk factors of acute symptomatic seizures in thirdworld countries will invariably contribute to the effort aimed at preventing and managing medical conditions frequently complicated by seizures.8 The differential diagnosis of a single seizure includes psychogenic nonepileptic events, cardiac and neurogenic syncope, transient ischemic attacks, sleep disorders, and panic attacks. It is important to distinguish all differentials as they do not have the same medical and social consequence of epilepsy. Patients with first onset seizures are common in the tertiary care hospital yet little is known regarding the management of these patients considering the availability of laboratory investigations, EEG, CT scan and MRI. The duration of freedom following first-ever substantially influences the risk of recurrence. 10 The present study was conducted to assess clinical profile of patients with epilepsy.

In present study, out of 162 patients, males were 80 and females were 82. We found that etiology was infectious

in 52, vascular in 34, metabolic in 20, alcoholic in 16, idiopathic in 25, neoplastic in 15 and arachnoid cyst in 10 cases. Kafle et al<sup>11</sup> included a total of 150 patients in the study. There were 76 (50.7%) male and 74(49.3%) female patients. 30(20%) patients reported having one or more precipitants for their seizure. The precipitants in decreasing order were sleep deprivation, alcohol intake, emotional stress, fatigue

and hunger. The presence of precipitants was significantly associated with seizure frequency (p=0.004) The mean duration of seizure before treatment in years was  $2.26\pm3.5$ . The mean number of seizures before treatment was  $24.11\pm32.92$ . Mean frequency of seizures after treatment per year was  $80.34\pm162$ .

We observed that seizure type was focal+ secondarily generalized in 90 and generalized in 72, mean age at first seizure was 32.4 years, frequency of seizure per year was 64.8 years, mean duration of seizure before starting treatment was 3.1 years and family history of epilepsy was present in 45 cases. Ong et al<sup>12</sup> a total of 100 consecutive adult patients above 18 years of age were included. GTCS was the most common type of seizure accounted for 63% and focal seizures in 37% cases. Infections (35%) were the most common cause (Neurocysticercosis 14%, Tuberculoma 9%, Others 12%) followed by Vascular (29%) causes, Idiopathic seizures (17%), Metabolic (7%), Alcohol related seizures (11%). Males presented 2.8 times more often than females to the tertiary care hospital as first onset seizure. Peak incidence was seen in 26- 45 years age

The shortcoming of the study is small sample size.

## **CONCLUSION**

Authors found that most common seizure type was seizure Focal+ secondarily generalized.

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