

ORIGINAL ARTICLE

ASSESSMENT OF CASES OF EPILEPSY VISITING THE DEPARTMENT- A CLINICAL STUDY

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ABSTRACT:

Background: Epilepsy is a group of neurological condition characterized by seizures that are episodes that can vary from brief and nearly undetectable periods to long periods of vigorous shaking. The present study was conducted to assess the cases of epilepsy. **Materials & Methods:** The present study was conducted on 42 patients of epilepsy confirmed by clinical symptoms and later on CT scan skull, magnetic resonance imaging (MRI) and electroencephalography. In all patients, causes, symptoms and radiographic findings were recorded. **Results:** Out of 42 patients, males were 25 and females were 17. The difference was non- significant (P- 0.1). Common etiology was vascular in 12 males and 8 females, post traumatic & degenerative in 10 males and 6 females and non- identified in 3 males and 3 females. The difference was significant (P< 0.05). Common findings were impaired consciousness in 13 males and 9 females, focal seizures in 6 males and 4 females, generalized tonic clonic seizures in 3 males and 2 females and multiple seizures in 3 males and 2 females. The difference was significant (P< 0.05). Common imaging findings was diffuse brain atrophy in 14 males and 10 females, isolated microangiopathy in 7 males and 4 females and microangiopathy with focal cerebral gliosis in 4 males and 3 females. The difference was significant (P< 0.05). **Conclusion:** Epilepsy is a common neurological condition characterized by seizures. It is seen commonly in males and common etiology being vascular, post traumatic & degenerative and non- identified.

Key words: Epilepsy, seizures, Tonic clonic

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This article may be cited as: Katiyar V. Assessment of cases of epilepsy visiting the department- A clinical study. J Adv Med Dent Sci Res 2015;3(2):181-184.

INTRODUCTION{“

Epilepsy is a group of neurological condition characterized by seizures that are episodes that can vary from brief and nearly undetectable periods to long periods of vigorous shaking. These episodes can result in physical injuries. About 39 million people have epilepsy. 80% of cases occur in the males. It resulted in 125,000 deaths up from 112,000 deaths in 1990. Epilepsy is more common in older people.¹

It is believed this incidence is underestimated because of incorrect diagnosis of epileptic seizures. The incidence of late-onset epilepsy is two times greater than childhood-onset epilepsy at 70 years of age and three times higher at 80 years of age. Most people with epilepsy have their first seizure before the age of 20 and it can affect their development. There is evidence of association between epilepsy and specific learning disabilities. The difficulties presented by children with epilepsy may be related to epilepsy itself and also to variables involved with the schooling process such as: low expectations from parents and

teachers about their success, rejection from teachers and schoolmates and low self-esteem.²

Psychosocial factors predisposing to depression in people with epilepsy include adjustment difficulties, limitations and restrictions in social settings which the disorder imposes, as well as the unpredictable nature of the seizures and the associated feelings of helplessness and loss of control over one's life. The unpredictability limits mobility, hinders the work and education, and may lead towards the psychological disorders.³ The present study was conducted to assess the cases of epilepsy visiting the department.

MATERIALS & METHODS

The present study was conducted on 42 patients of epilepsy confirmed by clinical symptoms and later on CT scan skull, magnetic resonance imaging (MRI) and electroencephalography. All were informed regarding the study and written consent was obtained. Ethical clearance was taken prior to the study.

General information such as name, age, gender etc. was recorded. In all patients, causes, symptoms and radiographic findings were recorded. Results thus obtained were subjected to statistical analysis using

chi- square test. P value less than 0.05 was considered significant.

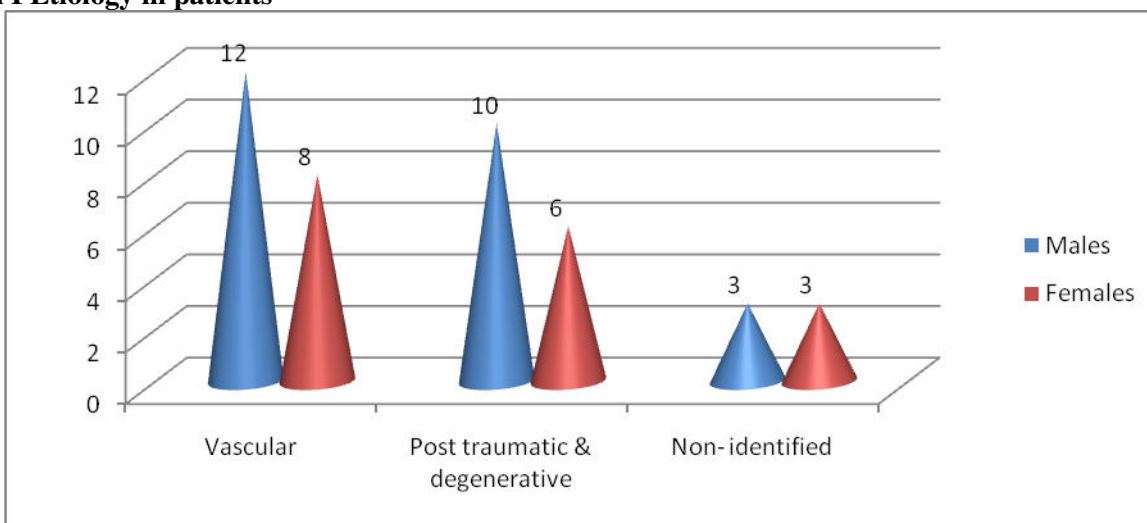
RESULTS

Table I Distribution of patients

		Total- 42	
Males	Females		P value
25	17		0.1

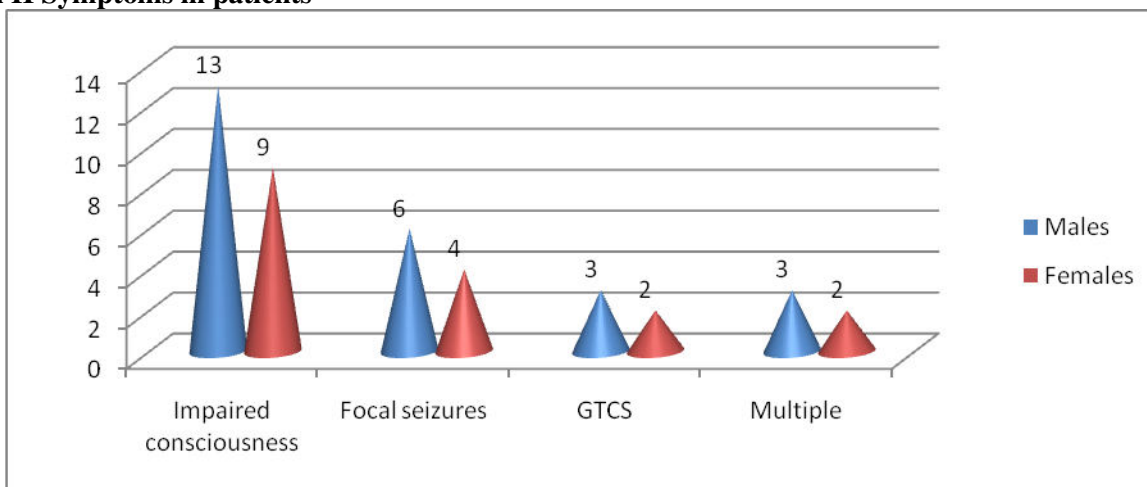
Table I shows that out of 42 patients, males were 25 and females were 17. The difference was non- significant (P- 0.1).

Graph I Etiology in patients



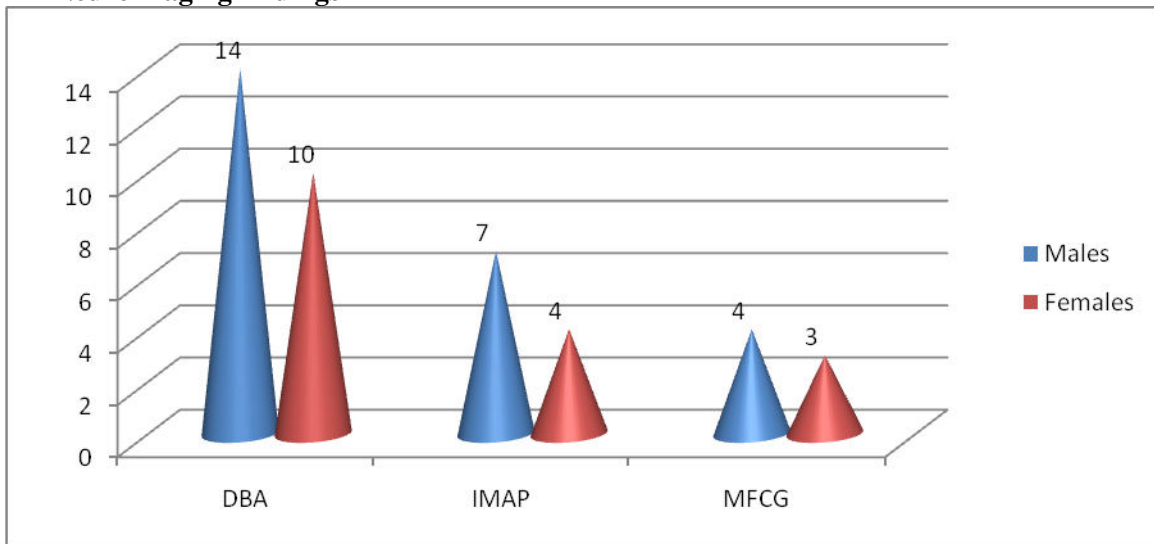
Graph I shows that common etiology was vascular in 12 males and 8 females, post traumatic & degenerative in 10 males and 6 females and non- identified in 3 males and 3 females. The difference was significant (P< 0.05).

Graph II Symptoms in patients



Graph II shows that common findings were impaired consciousness in 13 males and 9 females, focal seizures in 6 males and 4 females, generalized tonic clonic seizures in 3 males and 2 females and multiple seizures in 3 males and 2 females. The difference was significant (P< 0.05).

Graph III Neuroimaging findings



Graph III shows that common imaging findings was diffuse brain atrophy in 14 males and 10 females, isolated microangiopathy in 7 males and 4 females and microangiopathy with focal cerebral gliosis in 4 males and 3 females. The difference was significant ($P < 0.05$).

DISCUSSION

According to Souza et al⁴, the diagnosis of epilepsy as a neurological condition, brings a series of burdens to the patient and his family, affecting their behavior and well-being. Being diagnosed with epilepsy activates a whole system of beliefs in personal and social levels that could potentially modify behavior towards oneself and society. Furthermore, it involves individual perceptions and expectations related to the life history of each affected person in different ways.

Convulsive seizures are the most common type of seizures. Of these, one-third begin as generalized seizures affecting both hemispheres of the brain. Two-thirds begin as focal seizures which may then progress to generalized seizures. Out of 42 patients, males were 25 and females were 17.

We found that common etiology was vascular in 12 males and 8 females, post traumatic & degenerative in 10 males and 6 females and non- identified in 3 males and 3 females. This is in agreement with Abhiman et al.⁵ Igor⁶ included 50 patients in the study with an average age of 75.3 (± 13) years. 30 (60.0%) were female and 20 (40.0%) were male. The average age at the first seizure episode was 72.5 (± 11.5) years. Focal epilepsy seizures were the most predominant (83.8%). The occurrence of status epilepticus was low in this group (4.0%). Symptomatic epilepsy was the most frequent type and most of the causes were of vascular etiology

(43.0%). Carbamazepine was most commonly used for treatment, and the patients responded well to low-dose monotherapy. Electroencephalograms displayed normal results in many cases (50.0%) and neuroimaging showed nonspecific findings for most individuals (83.0%).

A number of researches have reported the comorbidity of anxiety along with depression in patients with epilepsy. The most common emotional responses of people with epilepsy include fear of the unexpected seizure, humiliation after a seizure, particularly if incontinence occurs, and feelings of alienation at work and social situations.⁷

In present study, common findings were impaired consciousness, focal seizures, generalized tonic clonic seizures and multiple seizures. Emotional responses are not limited to cognitive impairments, but also affect the social domain of functioning. Since the person who has seizures has no control over other people’s reactions during a seizure, therefore they prefer solitary activities or reduce their social contacts. It has been reported that people with epilepsy have feelings of low life satisfaction in the areas of employment, peace of mind, and social relationships.⁸

Fernandez et al⁹ found that two hundred and twenty-five education professionals were interviewed in three different cities. Approximately 65% of subjects would attempt to open the mouth of a student during a seizure and the stigma measured by Stigma Scale

of Epilepsy before the course was 45.4 ± 16.61 . The data indicate that education professionals have partial knowledge about epilepsy and a short duration course would be able to improve it and reduce its stigma in this population.

We found that common imaging findings was diffuse brain atrophy, isolated microangiopathy and microangiopathy with focal cerebral gliosis. This is similar to Bak et al¹⁰. It has been reported that depression is the most commonly reported problem in epilepsy. Factors associated with depression include lack of occupation, antiepileptic medications, and the severity of epilepsy. Psychosocial factors predisposing to depression in PWE include adjustment difficulties, the limitations and restrictions which the disorder imposes as well as the unpredictable nature of the seizures and the associated feelings of helplessness and loss of control over one's life.

CONCLUSION

Epilepsy is a common neurological condition characterized by seizures. It is seen commonly in males and common etiology being vascular, post traumatic & degenerative and non- identified.

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