A COMPARITIVE STUDY OF PSYCHAITRIC DISORDERS AMONG PATIENTS WITH EPILEPTIC SEIZURES WITH VERSUS WITHOUT PSYCHOGENIC NON EPILEPTIC SEIZURES

Tarek Kamal Molokhia, Ahmed Refat Rady, Amr Mohamed El Fatatry, Aya adel Mohamed Ahmed Radwan.

Department of Neurology and Psychiatry, Faculty of Medicine, University of Alexandria, Egypt.

Introduction

The International League Against Epilepsy defines psychogenic nonepileptic seizures (PNESs) as attacks that superficially mimic epileptic seizures but without any electrophysiological evidence of abnormal neuronal activity(1). PNESs are considered Experiential and behavioral responses to triggers , either external or internal , that resembles epileptic seizures but are neither associated with epileptic discharges in the electroencephalogram (EEG) nor other readily identifiable pathophysiological changes(2).

PNES does not finds home either in psychology or in medical settings because of its pseudo neurological and psychological features, and thus, management of PNES, remains a challenge because it involves combined effort of psychologist, psychiatrist, and neurologist(3)

The epidemiology of dual diagnosis of epilepsy and PNES is considerably uncertain ; actively comorbid epilepsy has been reported in 6%to 60% of patients with PNES.(4,5)

Patients with PNES were found to have high rates of comorbid psychiatric disorders, with nearly all patients with PNES having at least one current additional psychiatric disorder. The comorbidities may act as precipitator or triggers of PNES or may coexist without such a direct relation.(4)

For an accurate diagnosis to be reached both , meticulous history taking with episodes semiology coherent with the characteristic features of PNES, and video-EEG recording lacks epileptiform activity in all the stages (i.e., immediately before, during or after the ictal event) are required. (6)

Aim of work

The purpose of the present study was to study the prevalence of associated psychiatric disorders and personality disorder cluster among epileptic patients with versus without psychogenic nonepileptic seizures (PNES)

Methods and Materials

33 patients with epileptic seizures (group I), and 33 patients experience both epileptic and psychogenic non epileptic seizures(group II) were recruited from outpatient epilepsy clinic and inpatient epilepsy center at El- Hadara University Hospital over a period of one and half year2019-2020.

All patients are subjected to the following :

- Complete history taking
- Complete neurological examination
- EEG
- Brain imaging
- Arabic validated version of The Mini-International Neuropsychiatric Interview
- Arabic validated version of The Structured Clinical Interview II.

Results

- Patients in group II were suffering from more comorbid psychiatric illness and the difference was statistically significant in comparison to patients in group I (87.9 % vs 33.3%) (p <0.001*).
- Patients in group II had significantly more mood disorders in comparison with group I (72.7% vs 30.3) (p 0.001*).
- 18 patients in group II were suffering from anxiety disorders in comparison to 5 patients in group I and the difference was statistically significant (p 0.001*).
- Also 9 patients out of group II had past history of suicidal attempts/ thoughts in comparison to 3 patients only of group I (p 0.056).
- Three percent of patients in group II had symptoms of PTSD the difference was not statistically significant . Figure 1

Figure (1):Comparison between the two studied groups according to provisional diagnosis according to screening by MINI scale

On the other hand, 87.9% of patients in group II had at least one personality disorders in comparison with 69.7% of patients in group I. Cluster B was significantly higher between patients in group II (P 0.003*), while no significant difference was detected between the studied groups regarding cluster A nor cluster C. Figure 2

Figure (2):Comparison between the two studied groups according to personality cluster

In studying the relation between duration of illness and rates of Comorbid Psychiatric Illnesses no statistical significance was found. (table 1)

	Duration of illness						McP
Total Comorbid Psychiatric Illnesses	<10		10 – 20		>20		
	No.	%	No.	%	No.	%	
Group I	(n = 10)		(n = 13)		(n = 10)		
No	6	60.0	10	76.9	6	60.0	0.719
Total Comorbid Psychiatric Illnesses	4	40.0	3	23.1	4	40.0	
Group II	(n = 7)		(n = 14)		(n = 12)		
No	0	0.0	4	28.6	0	0.0	0.059
Total Comorbid Psychiatric Illnesses	7	100.0	10	71.4	12	100.0	

Table (1):Relation between duration of illness and Total Comorbid Psychiatric Illnesses in each group

Conclusions

From this study, it is concluded that: Major depressive disorder and anxiety are the most common comorbid psychiatric disorders in patients with comorbid PNES and epilepsy. Also, cluster B is the most common personality cluster among patients with comorbid PNES and epilepsy.

Recommendations

- To study areas of psychiatric disorders among patients with comorbid PNES and epilepsy across larger groups in different centers.
- To study the effect of AEDs on the development of PNES in patients with epilepsy.
- To study the effect of delayed diagnosis of PNES on quality of life and the various social consequences of these delay .

Contact

Aya adel Mohamed ahmed radwan
Department of Neurology and Psychiatry – Faculty of Medicine – Alexandria University
Email: drayaadel14@gmail.com
Phone: +201280081771

References

1. Diprose W, Sundram F, Menkes DB. Psychiatric comorbidity in psychogenic nonepileptic seizures compared with epilepsy. Epilepsy Behav [Internet]. 2016;56:123–30. Available from: <http://dx.doi.org/10.1016/j.yebeh.2015.12.037>
2. Myers L, Trobliger R, Bortnik K, Zeng R, Segal E, Lancman M. Dissociation and other clinical phenomena in youth with psychogenic non-epileptic seizures (PNES) compared to youth with epilepsy. Seizure [Internet]. 2019;70(June):49–55.
3. Dhadphale M, Hospital KN. Official Publication of Indian Psychiatric Society Western Zonal Branch. 2018;(June):58–60.
4. Markoula S, Reuber M. Epilepsy and psychogenic nonepileptic seizures [Internet]. The Comorbidities of Epilepsy. Elsevier Inc.; 2019.
5. Kutlubaev MA, Xu Y, Hackett ML, Stone J. Dual diagnosis of epilepsy and psychogenic nonepileptic seizures: Systematic review and meta-analysis of frequency, correlates, and outcomes. Epilepsy Behav [Internet]. 2018;89:70–8.
6. Anzellotti F, Dono F, Evangelista G, Di Pietro M, Carrarini C, Russo M, et al. Psychogenic Non-epileptic Seizures and Pseudo-Refractory Epilepsy, a Management Challenge. Front Neurol. 2020;11(June):1–14.