Research Paper Medical Science

A Study of Interictal Anxiety Status in People Suffering with Epilepsy

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ABSTRACT

The aim of this study was to study interictal anxiety status in patients with epilepsy. 45 healthy subjects and 45 epileptic patients were interviewed in outpatient clinic for epilepsy. The participants were introduced Indian version of Taylor's Modified Anxiety Scale developed by D. Sinha (1961). 25 epileptic patients were having anxiety scores in high and very high range whereas only 8 healthy subjects had high anxiety scores. There was statically highly significant difference in mean anxiety scores between the two groups, t=4.04 and p value > 0.001. There was a significant association between epilepsy and anxiety.

Keywords : epilepsy, interictal anxiety

Introduction

As both neurology and psychiatric deal with the diseases of same organ, the brain, interrelation between neurological and psychiatric disorder therefore cannot be taken for granted. It is widely reported that anxiety and depression are the most frequently encountered disorders in epileptic children and adults [1,2,4,10]. There are numerous studies reporting that the severity of anxiety and depression in epileptic patients is higher than normal controls [1,6,7]. The co morbid anxiety in patients with epilepsy offers a potentially rich nexus for theoretical and empiric investigation of the neuro circuitry and psychological mechanisms underlying each of these phenomenon[5]. Anxiety is a common adjunct of chronic disorders and epilepsy being a chronic disorder therefore to study presence of anxiety disorder in epileptic patients is not that much unreasonable.

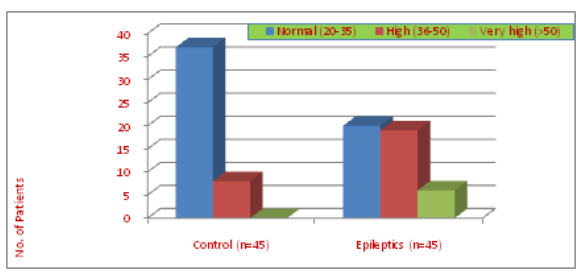
Methodology – This cross sectional study was conducted in 45 epilepsy patients who were attending the epilepsy clinic of the Department of Medicine and Department of Physiology Gandhi Medical College, Bhopal. The control group was constituted by 45 normal healthy individuals who used to accompany the patient to the hospital. Both the patient and controls were between 13-46 yrs of age and did not have any evident metabolic and psychiatric disease. Written informed consent was obtained from the participants. Cases of GTCS (Generalized Tonic Clonic Seizures) diagnosed clinically in accordance with the criteria laid down by ILAE[11],and confirmed electro-encephalo-graphically were included in the study. Patients suffering from any neurological disorder other than epilepsy, previous history of head injury or suffering from any other chronic illness, which might predispose them to anxiety were excluded from the study.

The participants were introduced to Indian version of Taylor's Modified Anxiety Scale developed by D. Sinha (1961) to assess their anxiety status[9].

Table no 1
Based on the anxiety scores the level of anxiety was categorized as follows:

SCORE	LEVEL OF ANXIETY
< 20	Low level of anxiety
20-35	Normal level of anxiety
36-50	High level of anxiety
> 50	Very High level of anxiety

ANXIETY STATUS OF THE PARTICIPANTS
Chart no 1



Results

In control group 91% participants showed normal anxiety status and 9% were in high anxiety group. In epileptic 44.44% were categorized in normal anxiety group and 42.22% were categorized in high anxiety group. Only 13.33% fell in very high anxiety group. Increase in percentage of subjects having high anxiety scores among the epileptic patients signify high frequency of anxiety disorders in epileptic patients..In control group the mean anxiety score was (31.08+5.2) and in epileptic patient mean anxiety score was (39.8+11.1) .The difference of mean anxiety score between the epileptic and control group was statistically highly significant p value ($p < 0.001$).

Table no 2
Anxiety status of the participants

Group	Normal 20-35	High 36-50	Very high >50	Mean Anxiety Score
Controls n=45	30.08 ± 4.2037	38.19 ± 5.28	-	31.08 ± 6.745
Epileptics n=45	31.04 ± 3.120	39.12 ± 5.619	61.08 ± 6.76	39.8 ± 11.0545

t=4.04 ,p<0.001

Discussion

Epilepsy is one of the most frequently encountered chronic illnesses in childhood. Moreover, adolescent and adults with epilepsy are at risk for developing psychiatric disorders. In

the epidemiological study of children and adolescents, reported a frequency of psychiatric disorders in 6.6% of the general population, in 10.3% of patients with chronic illnesses, except those with neurological causes, and in 28.6% of epilepsy patients without additional central nervous system involvement[8]. It was observed that similar findings were found in the studies that followed [3,11]. Anxiety and depression are the most frequently encountered psychiatric disorders in epileptic children and adults [1,2,4,10]. There are numerous studies reporting that the severity of anxiety and depression in epileptic patients is higher than normal controls [1,6,7].

For the epileptic patients, epileptic spectrum can be considered to be a reason for the genesis of interictal anxiety. Unpredictability of seizure with often the risk of injury particularly with drop attacks, seizure behaviors can be bizarre and embarrassing at public places, strict adherence to a restrictive drug regime and adverse side effects of the drugs and cognitive difficulties can also lead to genesis of anxiety in these patients. Decreased self confidence, low self esteem of the patient, high unemployment rates among adults, children may experience teasing and bullying at school and epilepsy still carries a sizeable social stigma and prejudice, these all can lead to development of anxiety in epileptic patients. Despite high prevalence of anxiety disorders in epileptic patients, no systematic treatment or evidence based guidelines are available for treating anxiety disorder. Thus in the light of this study it becomes imperative that the multi centric studies shall be carried out to assess the anxiety status in epileptic patients and ample measures shall be taken to treat anxiety as a psychiatric co-morbidity in epileptic patients.

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