



Self-Esteem, Social Phobia and Depression Status in Patients with Epilepsy

Epilepsili Hastalarda Benlik Saygısı, Sosyal Fobi ve Depresyon

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ABSTRACT

Introduction: The increased risk for psychiatric disorders in epilepsy can be related to a number of clinical, psychosocial and biological factors. Due to the unpredictability of seizures and the possibility that they may occur at any time and in any place, patients with epilepsy may develop social phobia and may have feelings of worthlessness and stigma. These factors decrease their psychosocial function, self-efficacy, and quality of life and even increase the suicide rate. Considering the above-mentioned scientific data, the present study was designed to investigate phobia, self-esteem and depression status in patients with epilepsy.

Methods: One hundred thirty-two patients (aged 21-52 years) and age- and gender-matched control group of 61 subjects (aged 25-60 years) were included in this study. All patients in both groups were administered the Liebowitz Social Anxiety Scale (LSAS), Coopersmith Self-Esteem Inventory (CSEI), and the Beck Depression Inventory (BDI).

Results: The mean ages of the patient group and the healthy controls were 29.66±11.3 and 32.16±7.99, respectively. There was no statistical significance between the two groups in terms of age and sex ($p>0.05$). BDI, LSAS and CSEI scores in the patient group were statistically significantly different than in the control group ($p<0.05$).

Discussion: Our results showed that social phobia, lower self-esteem and depression are important comorbid conditions in epileptic patients. Psychiatric disorders are usually underrecognized and undertreated in patients with epilepsy. Therefore, it is very important to identify and treat the psychiatric comorbid conditions in epilepsy because of their significant burden on patients' quality of life. (*Archives of Neuropsychiatry 2013; 50: 320-324*)

Key words: Self-esteem, social phobia, epilepsy

Conflict of interest: The authors reported no conflict of interest related to this article.

ÖZET

Giriş: Epilepside psikiyatrik bozuklukların görülme riski, çeşitli klinik, psikososyal ve biyolojik faktörlere bağlıdır. Nöbetlerin önceden belirlenememesi ve herhangi bir yer ve zamanda ortaya çıkabilmesi, epileptik hastalarda sosyal fobi ve değersizlik hissi gelişimine neden olabilir. Bu faktörler hastaların psikososyal fonksiyonunu, yaşam kalitesini azaltırken intihar oranını artırır. Bu çalışmada epileptik hastalarda depresyon, sosyal fobi ve benlik saygısı düzeyi araştırılmıştır.

Yöntem: Çalışmaya, 132 hasta (21-52 yaş); yaş ve cinsiyet uyumlu 61 kontrol dahil edilmiştir. Liebowitz Sosyal Anksiyete Ölçeği (LSAÖ), Coopersmith Benlik Saygısı Ölçeği (Coopersmith BSÖ) ve Beck Depresyon Ölçeği (BDÖ) her iki gruba da uygulanmıştır.

Bulgular: Hasta ve kontrol grubundaki kişilerin ortalama yaşı sırasıyla, 29,66±11,3 ve 32,16±7,99'dur. LSAÖ, Coopersmith BSÖ ve BDÖ, hasta grubunda kontrol grubuna göre anlamlı oranda farklı bulunmuştur ($p<0,05$).

Sonuç: Bizim sonuçlarımız, sosyal fobi, düşük benlik saygısı ve depresyonun epileptik hastalarda önemli psikiyatrik komorbid faktörler olduğunu göstermiştir. Epilepside psikiyatrik bozukluklar sıklıkla atlanmakta ve iyi tedavi edilmemektedir. Bu nedenle, epilepside komorbid faktörleri tanımlamak ve tedavi etmek, hastaların yaşam kalitesininin iyileştirilmesi için çok önemlidir. (*Nöropsikiyatri Arşivi 2013; 50: 320-324*)

Anahtar kelimeler: Benlik saygısı, sosyal fobi, epilepsi

Çıkar çatışması: Yazarlar bu makale ile ilgili olarak herhangi bir çıkar çatışması bildirmemişlerdir.

Introduction

Epilepsy is a brain disorder with a predisposition to generate epileptic seizures in which cognitive, psychological, and social consequences may develop. (1). Previous research has demonstrated that the overall incidence of epilepsy is 16 to 51 per 100,000 population every year and the prevalence rate is 3.14 to 7.8 cases per 1000 population (2,3).

Epilepsy significantly affects a person's physical, social and psychological situation. Patients with epilepsy faces fear, anger, stigma and worthlessness (8). Stigmatization leads to discrimination, and patients with epilepsy have been the target of prejudicial behavior in many spheres of life (9,10). These factors decrease their psychosocial function, self-efficacy, and quality of life (11,12) and may increase the suicide rate (13).

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Due to the unpredictability of seizures and the possibility that they may occur at any time and in any place, patients with epilepsy may develop social phobia (14,15). Poor self-esteem has been found to be prevalent in patients with epilepsy in a number of studies (16-19) and appears to be a common feature of the disorder. Clearly, the prevalence of poor self-esteem among patients with epilepsy has important implications for psychosocial functioning. Vasquez and Devinsky argue that anxiety may be a consequence of the unpredictability of epilepsy, restricted social activities, low self-esteem, stigma and rejection from society (20,21).

Considering the above-mentioned scientific data, the present study was designed to investigate phobia, self esteem and depression status in patients with epilepsy.

Methods

In this study, 132 ambulatory patients with epilepsy (aged 21-52 years), who were admitted to the epilepsy outpatient unit for their routine controls, were consecutively recruited. Age- and gender-matched control group of 61 healthy subjects (25-60 years) were included in the study. The study was approved by the Ethics Committee of Kocaeli University, Kocaeli, Turkey. Written informed consent was obtained from all participants.

The inclusion criteria for patients were;

- At least 2 years follow-up from diagnosis
- Having no additional serious, acute or chronic disorder that could interfere with general health status
- Having no serious cognitive deficits that might prevent reasoning required for the completion of the questionnaires introduced
- Being able to speak and understand Turkish

The inclusion criteria for the control group were;

- Having no serious or chronic disorder that could interfere with general health status.
- Having never sought medical help for any reason at least within the last 3 months.

After obtaining informed consent, demographic characteristics of all subjects in both groups were recorded. Additional information about the educational and economical levels and the occupational and marital status of all subjects were also collected.

Epileptic patients were asked about the factors associated with the disease such as, age of onset of seizures, duration of the disease, type of seizures, frequency of seizures (per month).

All patients in both groups were administered the Liebowitz Social Anxiety Scale (LSAS), Beck Depression Inventory (BDI), and the Coopersmith Self-Esteem Inventory (CSEI). In the present study, self administration method was used.

BDI is a 21-item scale administered to assess depression levels (24). The total scores of this scale range from 0 to 63 with higher scores indicating higher levels of depressive symptoms. In the present study, 17 was accepted as the cut-off point for severe depression. The validity and reliability of the BDI have been shown by Hisli et al (25).

CSEI was developed by Stanley Coopersmith (26) and its reliability and validity was done by Tufan and Turan in 1987 (27). It consists of twenty-five questions that can be marked as "like me" or "not like me". The scores can range from 0 to 100. Self-esteem does not have a certain limit. Therefore, the scores obtained below the mean, indicate low self-esteem, and those above indicate high self-esteem.

Statistical Analysis

All analyses in this study were performed with NCSS 2007 software. Besides, descriptive statistical methods (mean± standard deviation (SD), paired t-test was used to assess the differences between the groups. The chi-square test was used to compare the qualitative data. A significance level of 0.05 was used in all comparisons.

Results

In this study, 132 ambulatory epilepsy patients (88 female, 44 male) living in the community and 61 healthy controls (36 female, 25 male) were included. The mean ages of the patient group and the healthy controls were 29.66±11.3 and 32.16±7.99, respectively (Table 1). There was no statistically significant difference between the two groups in terms of age and sex ($p>0.05$) (Table 1).

All subjects in both groups were administered the BDI, LSAS and the CSEI.

Total scores for BDI were 19.27±11.89 and 9.02±7.38 in patients and control groups, respectively. This difference was statistically significant $p<0.001$ in the patient group compared to the controls (Table 2).

The patients had significantly higher LSAS scores compared to controls ($p<0.001$). LSAS-Anxiety and LSAS-Avoidance subscales' scores in patients were 49.32±15. and 38.93±8.87, respectively. LSAS-Anxiety and LSAS-Avoidance subscales' scores in controls 46.71±15 and 37.8±9.16, respectively (Table 2).

CSEI scores were significantly lower in the (49.85±15.23) ($p<0.001$) (Table 2).

There was no significant difference in BDI, LSAS and CSEI scores between male and female patients ($p>0.05$) (Table 3).

The relationship of the presence of generalized tonic-clonic seizures with BDI, LSAS and CSEI scores were assessed and no statistically significant relationship was found ($p>0.05$) (Table 4).

We did not find any significant relationship between the variables in the patient group such as age, duration of the disease, frequency of seizures, and types of seizures and BDI, LSAS and CSEI scores (Table 5).

Discussion

Epileptic patients experience various problems which affects their quality of life. Seizure frequency, psychological comorbidity and stigma are the major factors associated with the disease severity. These factors may seriously decrease the quality of life of the epileptic patients. (28). The aim of the present study was to

investigate depression, phobia and self-esteem status in patients with epilepsy. The major finding in our study was the statistically significant difference in the total BDI, LSAS and CSEI scores between the patients and the healthy controls.

Fear of seizures seems to play a very important role in psychiatric aspects of this disease. Davis et al, stated that after an experience of a generalized epileptic seizure, a subsequent and anticipatory fear may well be seen in the sufferer (29). The authors also underlined that there is a sufficient evidence in the literature suggesting that epileptic patients commonly fear death and or brain damage resulting from their seizures. Furthermore, there is a strong association between the degree of psychopathology and the intensity of patients fears. Stigma is another important feature of epilepsy. De Boer et al. studied stigma in epilepsy and they stated that people with disabilities are among the most vulnerable ones in any society (10). Epilepsy may lead to even a greater vulnerability. Epileptic people may fear going outside their homes unaccompanied and they also fear what people might think of them if they were to have a seizure in public (28,30). Inevitably, this may lead to social isolation and participation restriction in the community.

In this study, there was a significant difference in LSAS-Anxiety and Avoidance Subscales scores between the patient and the control groups ($p < 0.001$) which showed that anxiety and avoidance are the important factors affecting life of patients with epilepsy. To our knowledge, this is the first clinical study used LSAS in patients with epilepsy.

Self-esteem is the most important part of the ego, which is also the most important factor contributing to psychosocial well-being (30). The most important determinants of self-esteem are (1) what we think of ourselves, as a reflection of what the people we care about think of us; (2) how we evaluate ourselves in comparison to other people; and (3) our ability to reach a positive outcome concerning issues that are important to us (30). Literature survey reveals contradictory data regarding the correlation between epilepsy and self-esteem (31,32,33). Gauffin et al. studied self-esteem, and sense of coherence in a group of young adults with epilepsy and compared the results with those obtained five years earlier (34). The authors found that there was a decline in both sense of coherence and self-esteem overtime in young adults with epilepsy. On the other hand Lee et al. reported that epilepsy in general has little impact on overall self-esteem

Table 1. Demographic features of patient group and the control group

		Control Group		Epilepsy Group		
Age		32.16±7.99		29.66±11.31		t=1.56 p=0.121
Gender	Female	36	59.00%	88	66.70%	χ^2 : 1.06
	Male	25	41.00%	44	33.30%	p=0.303
	Single	23	37.70%	66	50.80%	χ^2 : 2.85
Marrital Status	Married	38	62.30%	64	49.20%	p=0.092
Education (Years)		10.97±3.75		9.29±4.04		t=2.74 p=0.007

Table 2. Scores of BDI, LSAS and Cooper-Smith SES in patients with epilepsy compared with the control group

	Control Group	Epilepsy Group	t	p
BDI	9.02±7.38	19.27±11.89	-6.20	0.0001
LSAS-Anxiety	38.93±8.87	49.32±15	-5.01	0.0001
LSAS-Avoidance	37.8±9.16	46.71±15	-4.28	0.0001
Coopersmith SES	49.85±15.23	44±7.76	-6.01	0.0001

BDI: Beck Depression Inventory BDI, LSAS: Liebowitz Social Anxiety Scale, SES: Self-Esteem Scale

Table 3. The relationship between BDI, LSAS, Coopersmith SES scores and gender

	Female (n=88)	Male (n=44)	t	p
BDI	20.41±12.04	16.98±11.37	1.57	0.118
LSAS-Anxiety	49.19±14.88	49.57±15.4	-0.14	0.893
LSAS-Avoidance	47.97±15.13	44.2±14.57	1.36	0.175
Coopersmith SES	51.84±15.82	45.86±13.25	2.16	0.033

BDI: Beck Depression Inventory, LSAS: Liebowitz Social Anxiety Scale, SES: Self-Esteem Scale.

Table 4. Relation between the presence of GTCS and BDI, LSAS, Coopersmith SES scores

	GTCS (-) n=52	GTCS (+) n=80	t	p
BDI	18.64±12.61	19.65±11.49	-0.47	0.639
LSAS-Anxiety	49.92±15.69	48.95±14.65	0.36	0.720
LSAS-Avoidance	47.96±14.45	45.95±15.36	0.75	0.458
Coopersmith SES	50.4±13.52	49.51±16.25	0.32	0.747

BDI: Beck Depression Inventory, LSAS: Liebowitz Social Anxiety Scale, SES: Self-Esteem Scale

Table 5. The relations between age, educational status, the duration of the disease, frequency of seizures in the patient group with the scores of Beck Depression Inventory (BDI), Liebowitz Social Anxiety Scale (LSAS) and Coopersmith Self-Esteem scale

		Age	Educational Status	Duration of disease (Years)	Frequency of seizures (per year)
BDI	R	-0.032	-0.277	0.079	0.071
	p	0.717	0.001	0.369	0.419
LSAS-Anxiety	R	-0.086	-0.009	-0.008	0.004
	p	0.327	0.917	0.925	0.960
LSAS-Avoidance	R	-0.025	-0.196	0.061	0.034
	p	0.775	0.025	0.488	0.701
Coopersmith Self-Esteem scale	R	0.034	-0.249	0.139	0.016
	p	0.696	0.004	0.113	0.860

in adolescents (28,33). In this study, we used CSEI and found a statistically significant difference between the patients and controls ($p < 0.001$) indicating the decreased level of self-esteem in our patients.

Another major finding of our study was the presence of significant depressive symptoms in patients compared with the controls. Total scores for BDI were 19.27 ± 11.89 and 9.02 ± 7 in patients and controls, respectively. Although depression is the most common comorbid psychiatric disorder in patients with epilepsy unfortunately it is underrecognized and not properly treated (35). Behavioural disorders are probably the most common and important complications in epilepsy. Patients with a poor response to treatment, depression happens to be the major factor that impairs quality of life than seizure frequency (28,36). Several pathogenic mechanisms are shared by depression and epilepsy such as, abnormal central nervous system (CNS) activity of several neurotransmitters, particularly serotonin, norepinephrine, dopamine, GABA, and glutamate; structural changes, presenting as atrophy of temporal and frontal-lobe structures; functional abnormalities and abnormal function of the hypothalamic-pituitary-adrenal axis (37). Kanner stated that depression in epileptic patients increases suicidality risk and has a negative impact on quality of life and also has an impact on costs and use of medical services (37,38,39,40). Therefore, depression must be carefully identified and treated in patients with epilepsy (41).

We also assessed the relationship of variables such as age, the duration of the disease, frequency of seizures, and types of seizures with BDI, LSAS and CSEI scores in the patient group, however, we did not find a significant relationship (Table 5). Gauffin et al. studied self-esteem in epilepsy and they found a correlation between seizure frequency and self-esteem: higher seizure frequency correlated with lower self-esteem (34). Intractable epilepsy, defined as seizures at least every month, was correlated with the lowest self-esteem scores. In this study, although seizure type or frequency was not correlated with the BDI, LSAS or CSEI scores, we suggest that the risk factors such as unpredictable nature of seizures or risk of trauma may lead to depression, lower self-esteem or social phobia in patients with epilepsy. In this study, we found no difference in LSAS, BDI and CSEI scores between genders.

In conclusion, our results showed that social phobia, lower self-esteem and depression are important comorbid conditions in epileptic patients. Eventhough patients with epilepsy should be viewed as someone who are at risk of facing cognitive difficulties, behavioral disorders, depression, suicide, and also sudden death, psychiatric and psychological disorders are usually underrecognized and undertreated in people with epilepsy (42). Therefore, it is very important to identify and treat the psychiatric comorbid conditions in epilepsy because of their significant burden on patients' quality of life.

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