

EPILEPTIC PSYCHOSES – EVALUATION OF CLINICAL ASPECTS

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ABSTRACT

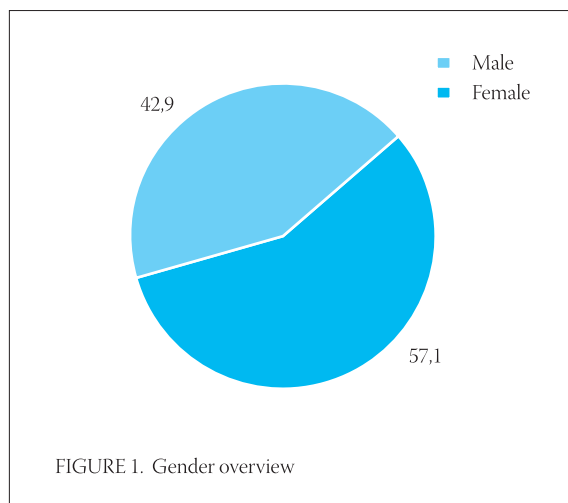
Epileptic psychoses as the most complex psychopathological phenomena represent unexplored states for prognosis. Clinical trials, conveyed in order to found risk factors still are not consistent in their conclusions. By this research results of all biological, clinical, psychological and social, as well as demographic factors will contribute to opportunity to find variables which could finally prevent these conditions. In this study we tried to evaluate clinical variables which could foresee manifestation of interictal and postictal psychosis.

This research study is epidemiological, clinical, retrospective and analytical. In total 567 patients were included in this study, which belonged to the diagnostic criteria F 06 according to ICD-10 classification, among which 14 patients with the diagnosed epileptic psychosis (06,8) were followed. All patients were hospitalized and evaluated at the Psychiatric Clinic in University of Sarajevo Clinics Centre, during time period between 01.01.2000 - 31.08.2006. Within baseline all relevant clinical and demographic variables were evaluated. Among patients most dominant form of behavior was expansive, with emphasized paranoid ideations and perception of auditory hallucinations. A correlation between intensive psychological trauma as an exacerbation factor and prolonged illness is determined, as well as between expression of psychotic symptoms and forced normalization by antiepileptic medications. Also is proven that among postictal psychosis more dominant are suicide attempts and aggressive behavior.

KEY WORDS: epileptic psychosis, schizophrenia, postictal and interictal psychosis, acute psychological stress

INTRODUCTION

Epileptic psychoses as the most complex psychopathological phenomena represent unexplored states for prognosis. Namely, most acceptable stand is that epileptic psychoses have multifactor cause, without predominant risk factor (1). Their incidence varies from 0,5% up to 10%. Some researches showed low incidence of epileptic psychoses (2). Clinical trials, conveyed in order to found risk factors still are not consistent in their conclusions, so research results of all biological, clinical, psycho-



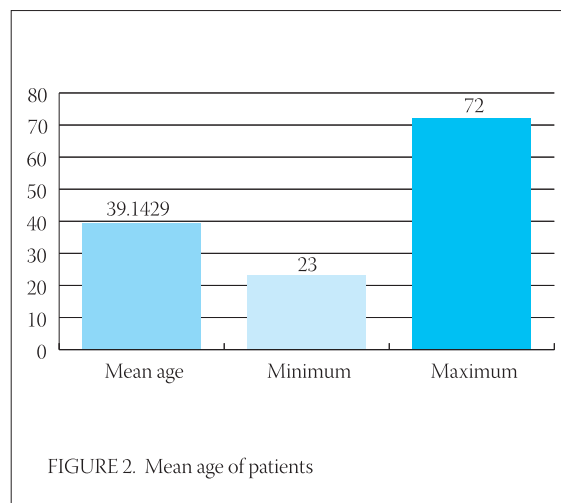
logical and social, as well as demographic factors will contribute to opportunity to find variables which could finally prevent these conditions. According to researches conducted among epilepsy patients most important predictive factors for occurrence of interictal psychosis are positive family history, epilepsy with early onset, complex-partial seizures or generalized epilepsy, and borderline intellectual development (3).

RESEARCH AIMS

1. To evaluate clinical variables that could be predictors of epileptic psychoses expression.
2. To evaluate demographic and clinical characteristics of epileptic psychoses patients hospitalized at the Psychiatric Clinic in Clinical Center of Sarajevo University in time period from 1st January 2000 until 31st August 2006.
3. To test correlation between first epileptic crisis and onset of epileptic psychosis.

MATERIALS AND METHODS

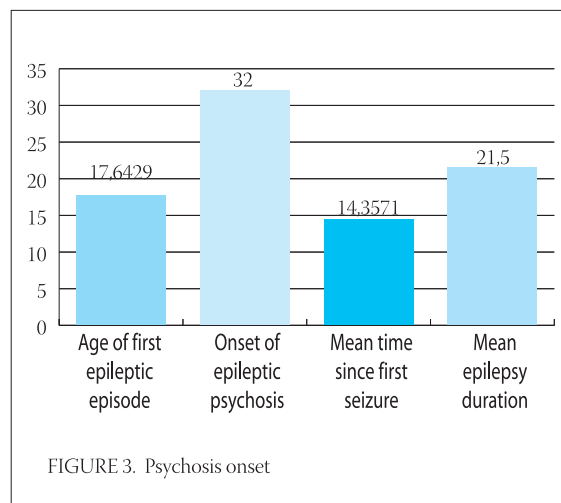
This research study is epidemiological, clinical, retrospective and analytical. It comprised six years period: since 1st January 2000 until 31st August 2006. Sample: Among 567 patients with diagnosis from group Fo6, according to ICD -10 classifications, 14 patients that belonged to diagnostic group of epileptic psychoses (F 06,8), were followed during this period. Research place: Psychiatric Clinic in Clinical Center of Sarajevo University in period since January 1ST, 2000 until August 3RD, 2006. Research instruments: Patients protocols from the Psychiatric Clinic, medical history of patients with epileptic psychosis treated during six years period,



EEG findings done before and during the treatment, questionnaire with wide spectrum of questions (demographic, social and economic data, family and personal history, epileptic seizures and current status of epileptic psychosis), questionnaire on leading psychopathological manifestations of epileptic psychosis, type of seizures, as well as list of stress events.

RESULTS

In this research study more dominant were females (57,1%), without statistical significance (Figure 1). Average age of patients was 39,1 years, with equal percentage of grammar and high school education (35,7%)(Figure 2). Time period between first epileptic crises and manifestation of epileptic psychosis is 14,3 years, with mean epilepsy duration 21,5 years (Figure 3, Table 1). Complex partial seizure as type of epilepsy was significantly dominant (71,4%)(Figure 4), as well as interictal type of epileptic psychosis (Figure 5). We have determined correlation between intensive psychological trauma as an exacerbation factor and prolonged duration of illness, as well as correlation be-



	Psychosis - onset (years)			
	Age of first epileptic episode	Onset of epileptic psychosis	Mean time from first seizure until psychosis onset	Mean epilepsy duration
N	14	14	14	14
Mean	17,6429	32	14,3571	21,5
Standard error of mean	2,63035	3,657	3,50448	3,69846
Standard deviation	9,84188	13,68323	13,11257	13,83835
Minimum	0	17	1	4
Maximum	39	64	46	54

TABLE 1. Onset of psychosis

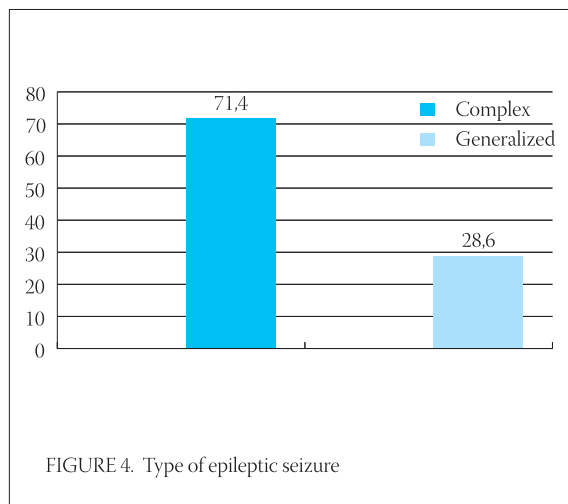


FIGURE 4. Type of epileptic seizure

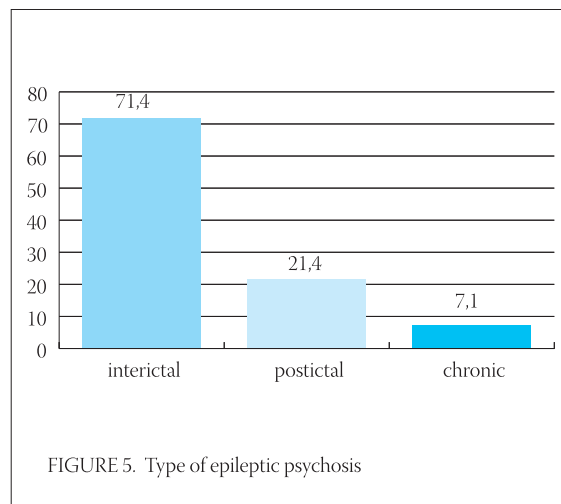


FIGURE 5. Type of epileptic psychosis

tween expression of psychotic symptoms and forced EEG normalization by use of antiepileptic medications. Acute psychological stress exposure was found in majority of cases (71,4%) (Figure 6), with diversity of stress events (Table 2). Manifestation of psychosis in psychiatric sense was also evaluated and founding were as followed: most dominant was expansive type of behavior (78,6%), with paranoid ideas (42,9%) and auditory hallucinations (42,9%) (Figure 7). It is also proven that among postictal psychosis, suicide attempts were more dominant (21,4%) as well as aggressive type of behavior.

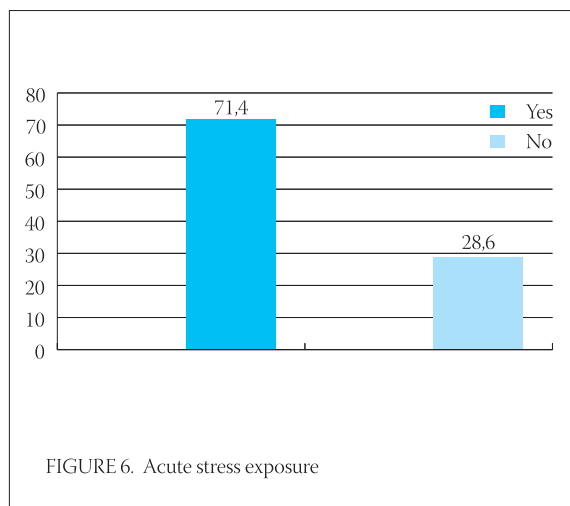
DISCUSSION

Majority of clinical trials showed that incidence of epileptic psychoses varies from 0,5% to 10 % (4). In our research most important predictors for the occurrence of interictal psychosis are positive family history, epilepsy with early onset, domination of complex-partial seizures, as well as generalized, and borderline intellectual potential, which correlates with recent research by other authors (3). Our research confirmed that only 21,4% of patients attempted suicide, which is in correlation with some other research results (5) which prove that focused aggressive and auto destructive behavior are not the main features of epileptic psychosis. This research also indicated that age period when clinical symptoms of epileptic psychosis are expressed is 14,3 years, while Trim-

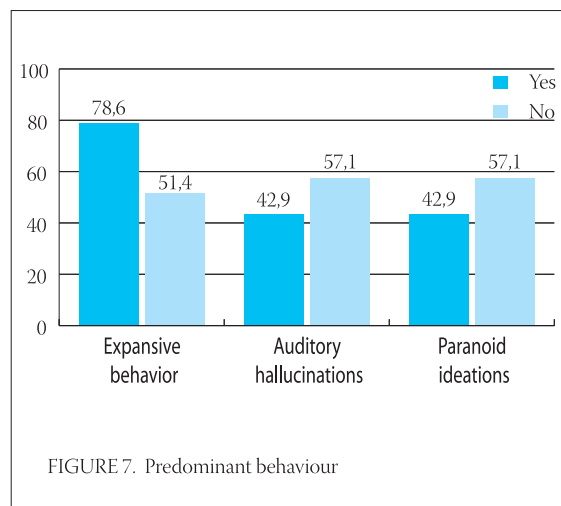
ble onset result was 15 years (6). In this study we have classified risk factors for development of epileptic psychosis with inclusion of psychosocial factors (disturbed family relations, lack of interpersonal relations, social isolation, and professional failure), with special attention given to the acute stressful situations related to war and post-war period, which means that 71,4% of patients had previous vulnerability, which precede epileptic psychosis. Within this research study a correlation between intensive psychological trauma as an exacerbation factor and onset of epileptic psychosis is proven (Figure 6). Results of this study indicated that stress events are mainly related to death of family member, blast syndrome or eviction (Table 2). Similar results were obtained in some European studies (7). According to

Type of stressful event	N	%
Without exposure to stress	4	28,6
Buried in trench for four days	1	7,1
Patients mother attacked by mental patient	1	7,1
Injured by landmine	1	7,1
Perdition of brothers and father	1	7,1
Perdition of brother	2	14,3
Scared by ox	1	7,1
Divorce, eviction	1	7,1
Divorce, wounded	1	7,1
Sister's marriage	1	7,1
Total	14	100

TABLE 2. Type of stressful event



Landolt special attention should be given to epileptic psychoses which occurred within forced normalization of EEG by application of antiepileptic therapy, which is proven in our study in two cases, by application of several antiepileptic medications. Within our study expansive type of behavior with emphasized paranoid ideas and auditory hallucinations caused compulsory treatment at the Clinic (Figure 7). According to other researches (8) eight patients in a group with epileptic psychoses and postictal, and 7



chronic, while in our sample there is only one patient with chronic type (7,1%), with the majority suffering from interictal psychosis (71,4%) which correlated with the general population surveys (9). Among patients with interictal psychoses there were no negative symptoms which would be one of the main features of schizophrenia type of psychosis, while some other investigators (10) prove that yet 50% of epilepsy patients with psychosis can be false diagnosed as schizophrenia similar psychosis or schizophrenia.

CONCLUSION

Within this research study a correlation between intensive psychological trauma as an exacerbation factor and onset of epileptic psychosis is proven. Risk factors for expression of epileptic psychosis are determined as psychosocial (disturbed family relations, lack of interpersonal relationships, social isolation, professional failure), while special emphasis is made on acute stress situations related to war and post-war period. Also is proven correlation between expression of psychotic symptoms and forced EEG normalization by use of multiple antiepileptic medications simultaneously.

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