

Aliyev NA^{1*} and Aliyev ZN²

¹Department of Psychiatry, Narcology of the Azerbaijan State Institute of Improvement of Doctors named after A. Aliyev, Baku, Azerbaijan

²Department of Psychiatry, Azerbaijan Medical University, Baku, Azerbaijan

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***Corresponding author:** Nadir A Aliyev, PhD, Professor, Department of Psychiatry and Addiction, Azerbaijan State Advanced Training Institute for Doctors named by A. Aliyev, Baku City, U Chagibekov Street, 46/50, F1 Baku PO, AZ0010, Azerbaijan Republic, Azerbaijan, E-mail: aliyevnadir@yahoo.com

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Research Article

Clinical, diagnostic and treatment of mental disorders as a component of epilepsy

Annotation

The main purpose of the paper presented was to describe mental disorders as a component of seizure during epilepsy. For this purpose, the article presents a phenomenological analysis of mental disorders in 180 patients with simple partial epileptic seizures. Recommendations were given on their importance and treatment for psychiatry.

Although many health problems, such as cancer or diabetes, do not combine with many disorders, they are called illness. The term “disorder” is not sufficiently clear to the public and reduces the seriousness of epilepsy. The International Bureau of ILAE and my epilepsy study consider epilepsy as a disease.

Epilepsy is one of the most common neuromuscular diseases in the world. A very interesting picture emerges when you look at the International Classification of Diseases (ICD-10) approved by the Ministry of Health of the Republic of Azerbaijan. Thus, according to the classification of the diseases of the nervous system belonged to class VI. In Class VI, a total of 15 rubles (epilepsy - G40.0-G40.9; G41. Epileptic status - G41.0-G41.9) were associated with violations of the nervous system related to epilepsy. Class 5 of the XBT-10 deals with mental and behavioral disorders. The number of epilepsy-related violations in this class is 17 rubles (F02.8x2; F06.02; F06.22; F06.3; F06.302; F06.312; F06.322; F06.332; F06.342; F06.352) F06.362; F06.372; F06.42; F06.62; F06.72; F06.812) In other words, the mental disorders that result from epilepsy are more than those in the class of nerve disorders. That is why epilepsy should be regarded as a neuropsychiatric developmental disorder.

Mental disorders during epilepsy can be classified into the following types of syndrome:

1. Psychiatric disorders such as seizures;
2. Mental disorders as a component of seizures;
3. Post-ecstatic psychiatric disorders;
4. Psychiatric disorders between seizures.

Introduction

It is well known that ILAE (International League Against Epilepsy) has prepared an official report on “practical clinical determination of epilepsy” [1]. In this report, ILAE aims to broaden the understanding of epilepsy according to epileptologist’s perceptions of epilepsy. This includes the time frame for determining the clinical status and diagnosis described below. Practical clinical diagnosis of epilepsy - epilepsy as a disease of the brain must correspond to any of the following conditions:

1. Epileptic seizures that occur in at least two non-provocative (or reflective) > 24-hour intervals.
2. Two non-provocative epileptic seizures during the last 10 years, according to the overall risk of non-provocative (or reflexive) epileptic seizures.
3. Diagnosis of epileptic syndrome.

Temporarily lowering of the tension limit does not apply to epilepsy.

Sometimes epilepsy was defined as a disorder or a group of disorders rather than illnesses. The reason for this was the combination of many different diseases and conditions in epilepsy itself. The term “infringement” indicates a short-term functional disorder. However, the term sickness (though not always) refers to a long-term disorder of function.

In addition, during epilepsy, mental disorders divide paroxysmal and permanent (permanent) mental disorders. Studies of systematic reviews show that people who suffer from epilepsy are 7.8 times more likely to suffer from psychosis than the normal population. The prevalence of psychosis in Temple epilepsy is 7%, 5.2% in the intertidal and 2% in the postictal [2].

On the one hand, the World Health Organization (WHO) adopted a resolution in 2015 “for the global burden of epilepsy and coordinating country-wide action on health, social services and public information” [3], on the other hand, the standardized classification of mental disorders. (XBT-10 and DSM V) do not allow detection of all mental disorders that occur during epilepsy.

Thus, timely detection of mental disorders during epilepsy and their adequate treatment are currently considered one of the most relevant and promising areas of psychiatry.

The purpose of this information is to identify mental disorders that occur in the background of mental clarity, which is a component of seizures during epileptic seizures.

Materials and Methods

350 people were examined at the Mental Health Center of the Ministry of Health of the Republic of Azerbaijan from 01.01.2015 to 10.01.2017. Of these, 50 were not included in this study because of the low threshold for irritation during electroencephalography (EEG) and no paroxysms. Of the other 300, 60%, i.e. 180 (EPILEPTIC BUTTONS - INTERNATIONAL EPILEPTIC LEAGUE- BEAL, 1981), are subjected to personal (local, focal) or other forms of motor disorders.

In accordance with the Helsinki Declaration of the World Medical Association “Recommendations for doctors engaged in biomedical research involving people”, adopted by the 18th World Medical Assembly (Finland, 1964, revised in Japan in 1975, Italy-1983, Hong Kong-1989, the South African Republic-1996, Edinburgh-2000); The Constitution of the Republic of Azerbaijan, the Law “On Psychiatric Assistance” (adopted on 12.06.2001, with amendments and additions -11.11.2011, Decisions of the Cabinet of Ministers of the Republic of Azerbaijan No. 83, dated April 30, 2010 “On Approval of the Rules for Conducting Scientific, Preclinical and Clinical studies of medicines” are established. The conditions of the conducted researches corresponded to the generally accepted norms of morality, the requirements of ethical and legal norms, as well as the rights, interests and personal dignity of the participants of the studies were observed.

- Conducted research is adequate to the topic of research work.
- There is no risk for the subject of research.
- Participants in the study were informed about the goals, methods, expected benefits of the study and associated with risk and inconvenience in the study.

- The subject’s informed consent about participation in the research was received.

The decision of the Ethical Committee at the Azerbaijan Psychiatric Association on the article of NA. Aliyev, Z.N. Aliyev “Clinical, diagnostic and treatment of mental disorders as a component of epilepsy”: In connection with compliance with its legislative requirements and regulatory documents is to approve the article by N.A. Aliyev, Z.N. Aliyev “Clinical, diagnostic and treatment of mental disorders as a component of epilepsy”. Patients were observed at the Mental Health Center of the Ministry of Health of the Republic of Azerbaijan. The study was conducted from 01.01.2015 to 10.01.2017.

The table shows the general characteristics of patients included in the study with percussion (focal, local) epileptic seizures.

Table: General characteristics of patients.

| Parsial (focal, local) epileptic seizures | Number |
|---|-------------|
| Number of patients | 180 |
| Gender, Female / Male | 120/60 |
| Average age (20-45) | 30.5±4.3 il |
| The duration of the disease | 10.0±2.2 il |
| Does not work | 80 |
| Reads and Works | 100 |
| Disabled | 55 |
| Frequency of seizures | Frequently |

Parsial epileptic seizures: According to this classification, epileptic seizures occur as a result of the hemisphere emptying of neurons located in a hemisphere. The mind is not broken during simple partial retention. In complex parsing, thinking is distorted. Simple and sophisticated handles may switch to secondary generalized wrinkles. Persistent seizures occur in 60% of epilepsy patients.

Simple parsial: In the former classifications, the simple generalizations of the second generalized grip as the predecessor of the grip were called “aura” (term Pelonosa), which also means “light wind”. Dostoevsky describes his condition before the second generalized irritability: “You - all healthy people have no doubts about what happiness means. Fortunately, we don’t have epileptic seizures. I don’t know, happiness, pleasure, seconds or hours or eternally, I will not change the joy that faith can give me”. Neurosurgeons and neurologists call it a sign. The epileptic cavity is located in the anterior center of the aura during the movement (the patient begins to run away) or the rotator (rotate around his axis), the epileptic septum in the visual aura (spark, glare, star in the eyes). Hearing occurs in the aura (noisy, crashing, and ringing in the ears) in the rear upper part of the hearth. In the auras of aroma, the hearth is located in the center of the scent in the cerebral cortex (the anterior hippocampus).

Thus, on the one hand, the aura represents a simple parsial fog (“isolated aura”) without disturbance of thought, and on the other hand may be a stage of secondary generalized

irritation. In this case, the feeling in the aura is remembered (no amnesia in the aura) until the loss of thinking. However, due to the short duration of the aura (only a few seconds, sometimes up to a fraction of a second), the patient cannot take precautions (deprived of the ability to protect from burns, burns, etc.). Simple movement handles are named after him as described by Jackson in the 1860s. In the Jackson limbs, the focal point is located in the anterior central wrist (usually the ankle sprain, then spreads to other mimic muscles, the tongue, the arm, the muscles in the body, that is, the muscles).

Simple partial vegetative-visceral seizures: Simple partial vegetative-visceral seizures are also known as diarrheal epilepsy. Main symptoms: fever, colds, tremors, bulimia or anorexia, respiratory disorders, tachycardia, elevated arterial pressure (AT), thirst, polyuria and pain symptoms (cardiac, epigastric and abdominal aegae).

Currently, simple partial vegetative and visceral seizures are classified into the following types:

Respiratory (hyperventilation) seizures: Main symptoms:

- 1) Exacerbation of breathing;
- 2) Paresthesia;
- 3) Tetanus (hand and foot).

The main manifestations of respiratory hypertension are respiratory insufficiency, difficulty breathing, painful, unpleasant breathing, short-term respiratory disorders (dyspnea). The patient feels shortness of breath, lack of perfect breathing, and arrhythmia of breathing movements. The patient may feel as though the air does not penetrate into the depths of the lungs, and the air is kept in the middle or upper third of the breast. Patients feel washing in the throat, preventing air passage, compression of air inside or outside, chest contamination, "shield", "valve" parts.

- Patients tend to breathe deeper through the arm, body, and neck muscles. If patients are able to breathe deeply, they will feel great relief. Patient's expressiveness is that they "fight for fresh air" and become "air maneuvers". Patients concentrate on breathing, monitor it with excitement, and "air bump" occurs "I can't breathe, but I can't breathe".

It is important to note that some patients do not understand hyperventilation and refer to this cardiologist as a cardiovascular pathology (cardiology, cardiac arrhythmias, and vascular dystonia).

Characteristics of cardiac seizures: Pain in the heart region, which is not characteristic for classical angina pectoris. This situation was first described by Da Costa (1871), who treated him as another component of the psychovegetative crisis. Heart pains come in a variety of shades - leaking, sinking, cutting, boring, compression, tension, throat and so on. Patients sometimes say, "My heart feels like a beating", "a hot nipple is injected into the left breast region" and "it is broken apart by chewing".

- **Heart rhythm disturbance syndrome:** Heart palpitations, heart rate frostbite, temporary pause, irregular heartbeat. These symptoms are even more pronounced when stretched. The heart beats 110-120 times per minute. This condition is accompanied by pain in the heart region, elevated IT levels, respiratory problems, cooling, lack of air, excitement and fear of death.
- **Vegetative regulation of AT is disrupted:** Increased blood pressure, decreased blood pressure and unstable AT syndrome.

Visceral (epigastric, abdominal) seizures: Weight, fatigue, burning, pain in the epigastric region, aerophagy (vomiting), vomiting, pallor of the skin, tachycardia or bradycardia, decrease in AT, "vomiting tension", imperative incision, abdominal pain. There is a palpable pain, swelling, meteorism. "Upper shield epileptic sensation" (Gastaut H, 1966), patients describe it as abdominal pain in the abdomen, yelling, nausea, neck compression, throat washing, sometimes accompanied by fainting. Patients note various senestopathies, which are conventionally called "abdominal psixalgiya".

The main symptoms of "abdominal psychology" are: 1) variability of pain intensity and localization; 2) unusual description of pain ("bite", "pierce", "twist", "turn"); 3) dissociation between "extreme" and "unbearable" pain with the patient's insufficient state. Sometimes patients have difficulty describing those feelings and there is a "fear in the abdomen". Upon completion of abdominal seizures, patients may experience acne, drowsiness, braking and posture.

Orgastikik seizures: most commonly seen in women. The lower abdomen is characterized by a warm feeling, an irreversible sexual tendency, and an increase in passive sexual arousal, accumulation of the uterus, spacing and muscles. Captures are accompanied by positive experiences ("happiness", "joy", "happiness", "pleasure").

Vascular seizures are characterized by hyperemia of the face, thirst, polyuria, tachycardia, sweating, bulimia or anorexia, elevated AT and appetite. Vegetative seizures with the advantage of thermoregulation disorders are divided into several types: 1) Paroxysmal hyperthermia (temperature crisis), increased body temperature 39-40°C, headache, redness, and feeling of internal tension. Fatigue and fatigue for some time after the temperature drops; 2) frostbite, hyperkinesias - sudden frost-vibration is observed by the pylomotor reaction ("gas skin"); 3) "bloating" syndrome, the feeling of "coldness" throughout the body or in individual parts. At this time the temperature is subfebrile or in the periphery. Vegetative symptoms manifest itself as disorders of AT, pulse instability, sweating and hyperventilation.

Criteria of vegetative epileptic seizures:

- Low or nonexistent provocation factors in their formation.
- Short-term (no more than 5-10 minutes).

- Stiffness during seizures.
- Serial seizures.
- Postparoxysmal complications and loss of environmental awareness.
- Joint observation with other epileptic seizures.
- Photographically the same vegetation capture, that is, every new capture is the same as the previous one.
- EEG changes for epilepsy (hypersynchronous discharge, bilateral high-amplitude activity, slower peak wave complex, etc.).

Simple partial of mental disorders, which include dismnestic, ideological, emotional, affective, illusory and hallucinations.

Dismnestic seizures: These include the phenomena “seen”, “already heard”, “already passed” (deja vu, deja entendu, deja vecu). Deja vu is epileptic, that is, paroxysmal, with a clear copy of previous seizures. When the seizure is over, there is a feeling of weakness, fatigue and drowsiness. Deja vu epileptic seizures are associated with the location of the amygdala-hippocampus, however, when the foci are located to the right, the phenomenon is seen 3-9 times more than the left.

Ideator seizures: These eclipses form a time alien, forced thoughts (about death, eternity, read) and cannot be freed from them. Patients describe them as “alien thoughts”, “double thoughts”, “stagnation of thoughts”, “speech retardation”, “speech paralysis”, “spontaneity of feeling”, “thoughts at an unbelievable speed”. They should be distinguished from schizophrenia (“spurgeon”, “mentism”). The idle retainers are located in the epileptic furnace or deep in the groove.

Emotional-affective seizures: Patients experience feelings of self-guilt, feelings of death, the end of the world, accompanied by unprovoked, paroxysmal fears, which they either escape or hide. In some cases, positive emotions (“happiness”, “happiness”, “happiness”, etc.) are also observed. In emotional-affective seizures, epileptic hemorrhage occurs when most limbic systems are present.

Illusion seizures: These phenomenological phenomena refer to violations of psychosensory synthesis rather than illusions. It is divided into the following types:

- **Metamorphopsia seizures:** Metamorphopsia is characterized by sudden changes in the shape of the surrounding objects and their constant motion. This phenomenon is called “optical storm”. The epileptic hearth is located at the junction of the temple and sinciput lobes.
- **Body scheme disorders and autopsychial depersonalization paroxysms:** Disorders of the “body scheme” are observed (somatopsychical-depersonalization). In some cases it is accompanied

by fantasy and triviality (the hands and arms are separated from the body and grow in the size of the room). Autopsychial depersonalization paroxysms are characterized by the fact that “Me” is a fence between her and the environment (her face is alien to her, sometimes with the feeling of being autometamorphous and transforming into another human being).

Paroxysms of derivation are characterized by:

- The environment is unrealistic.
- loss of perception.
- The environment is faded.
- Memory of things.
- The environment is inexplicable.
- Lose the inner meaning of the environment.
- The environment is perceived as a space.
- A “non-real” impression of the environment arises.
- The epileptic hearth is located on the upper jaw.

Hallucinatory handles: Hallucinatory seizures occur in the form of sneezing, appetite, vision, hearing and complex hallucinations.

Finally, we consider it advisable to make three clinical observations.

Clinical observation 1: Patient GA, 20 years old girl. Heredity is not aggravated by a mental disorder. He did not have any serious illness until he was 18 years old. The family has one sister and one brother. After finishing 11 classes. Initially, the shop worked as a seller. But he was out of work because of his illness. At the age of 18, for the first time, she said, laughing and crying in the form of a 2-3-minute grip was reported. At this time his mind was not broken. The patient had been diagnosed with bipolar affective disorder in several foreign countries, schizophrenia-like psychosis, and depressive episodes, but the treatment against these diseases had no effect. Magnetic resonance imaging (MRI) does not reveal any pathology. In the EEG, the paroxysmal centers of the complex surface are observed. The patient was diagnosed with “Emotional-Affective Seizures” and was given depot-chrono 500 mg morning and evening. After 2-3 weeks, the “emotional-affective seizures” disappeared.

Clinical observation 2: Patient E.T. 28 years old. His mother and sister suffered from a biopsy effective disorder. The higher is the consolation. He is single and works as an electrical engineer. Over the last year, he complains of sleepless nights, lack of breathing, complications of breathing movements, painful, unpleasant breathing, sluggishness, in short, respiratory rhythms. The patient says that the air does not penetrate into the depths of the lungs, the air is stored in the upper third of the breast, compressing the air inside or outside,

the “chest”, “shield”, “valve” parts of the chest. Although the patient referred to various specialists, there was no positive change. For the past 6 months, he has been diagnosed with bronchial hanging at the Pulmonary Institute. But there is no positive result. No pathology is detected in the MRI. The EEG has a complex set of paroxysmal centers. We were diagnosed with “Respiratory (hyperventilation) seizures” and were given 200 mg of carbamazepine an hour before noon, with no seizures starting the following night.

Clinical observation 3: Patient MI, 30 years old. She has been sick for the last 10 years. Complaints of hearing and visual hallucinations that last 10 to 20 minutes in the background of clear thinking. No pathology is detected in the MRI. The EEG has a complex set of paroxysmal centers. The patient has been treated with psychotropic medication for the diagnosis of schizophrenia for almost 10 years, with no positive effects. Group II is disabled with the diagnosis of schizophrenia. The diagnosis of hallucinatory seizures was made and carbamazepine and lamotrigine were prescribed. Subsequent observations and catamnestic data showed that the hallucinations in the patient had disappeared after 1 month and continue to take prescribed anticonvulsants.

It should be noted that treatment of mental disorders as a component of epilepsy should be continued for as long as in epilepsy.

Final Conclusion

The results of the research show that diagnoses of mental disorders in simple parsing are often not properly identified. These patients are diagnosed with schizophrenia, various affective disorders, and somatic neurological diagnoses that the resulting therapy does not produce any positive results. It is important to note that simple parsing detects psychotropic substances in the treatment of modern mental disorders, which further aggravate the patient’s condition, which is why antipsychotics cannot be prescribed. The authors’ experience proves that the most effective drugs for the treatment of severe mental disorders are valproate derivatives, lamotrigine, carbamazepine, and levothyroacetam.

Recommandations

1. The diagnosis of mental disorders as a component of epilepsy is often not properly defined. At the same time, mental disorders should always be taken into account in the form of seizures, depression, drowsiness and other clinical symptoms mentioned above.
2. Pathology is often not detected in MRT in mental disorders as a component of epilepsy. The EEG has a complex set of paroxysmal centers.
3. Simple partial seizures are psychotropic ineffective in treating modern mental disorders, which are the most

effective drugs for the treatment of severe mental disorders, including valproate derivatives, lamotrigine, carbamazepine, and levothyroacetam.

Author disclosure information

The authors declare that the article is submitted on behalf of all authors. None of the material in the article has been previously published in any form and none of the material is currently under consideration for publication elsewhere than in the cover letter to the editor. Authors declare no financial and personal relationships with other people or organizations that could not have an effect on this work. All authors contribute to and have approved the final article. The authors declare no conflicts of interest. No sponsor provided funding for this study. The Mental Health Center of the Ministry of Health of the Republic of Azerbaijan provides outpatient unit, material for clinical and neuro-psychological assessments.

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