Emotional Volitional Defect—Quintessence of Schizophrenia

Leonchuk SL and Leonchuk SS

The State Financed Institution, Kurgan Regional Neuro-Psychiatric Hospital, Kurgan, Russia

Corresponding author: Sergey L Leonchuk
leon4yk@mail.ru

Received: March 25, 2017; Accepted: April 18, 2017; Published: April 24, 2017

Abstract

There is no single understanding of the reasons and internal essence of schizophrenia now. The general concept of schizophrenia is absent. In article the view of schizophrenia as process of formation specific emotional-volitional defect which is an adaptive form of functioning of nervous mentality in the conditions of pathology is suggested. Clinical options and severity emotional-volitional defect, its dynamics are allocated that is necessary for expertise of incapacity and in judicial-psychiatric practice. Emotional-volitional defect is primary and reflects the nature of schizophrenia. Increasing the depth of the Emotional-Volitional Defect (EVD) is a criterion for the progress of the endogenous process.

Keywords: Schizophrenia; Emotional-Volitional Defect (EVD); Adaptation

Introduction

The organism is a unified whole, the system capable to keep constancy of the internal environment by means of homeostasis mechanisms. Constancy of the internal environment of an organism is the moment of integrity and independence of an organism of an ecosystem which dictates its organization through natural selection [1].

The organism as system is formed through reflection of internal requirement and the reciprocal start of processes of self-control directed to satisfaction of this need that results in constancy of the internal environment, a homeostasis and preservation of system as a whole. Activity of all systems of an organism is directed to satisfaction of the dominating need and survival of an organism.

Development of emotions goes from the reflex ring, functional systems and the centers of regulation of a homeostasis working by the principle of feedback [2]. Emotions as mentality form reflect the need of an organism for substance, energy and information necessary for preservation of a homeostasis; emotions also bear a power charge of self-control and a goal-setting. Emotions are connected with volitional processes evolutionarily–genetically on the "incentive-reaction" type and make with them a uniform complex of reactivity of an organism. Emotions are the backbone factor uniting organism elements in a whole and through an acceptor of action it is targeted its behavior on realization of a need and survival. Temperament is a power characteristic of reactivity of an organism.

Under the influence of a need emotions generate formation of cognitive functions of a brain and intelligence. With development of intelligence the behavior of an organism as a system is more and more mediated from a dominant of a need and becomes complicated.

"I" am a clot of needs and the related inclinations. Awareness of the needs and inclinations – understanding of the "I". The general concept of schizophrenia is absent [3].

Discussion

Schizophrenia is the adaptive ability of the nervous psyche to pass to a low but more stable energy level of its functioning in conditions of blockade of satisfaction of the dominant need and associated with it neuropsychic overstrain with the aim of preserving the homeostasis of the nervous structure [4]. The biological meaning of schizophrenia as a disease is the adaptive formation through the psychic shift, the state of chaos, the acute psychotic disorder of a specific Emotional-Volitional Defect (EVD) that determines the economical energy level of the functioning of the nervous psyche in conditions of pathology.

Formation of EVD is the quintessence of schizophrenia. The reverse transition from the EVD to the initial level of functioning of the nervous psyche is impossible because of the increase in its entropy according to the 2nd Law of Thermodynamics and the laws of synergetics. From the standpoint of synergetics,
in schizophrenia the organism undergoes bifurcation in its ontogenetic development and being in the field of action of the attractor irreversibly falls to an energetically low but more stable level of its functioning with the creation of adaptive dissipative structures and an increase in entropy [5,6]. The presence of productive mental disorders in schizophrenia is not specific and reflects the general patterns of the functioning of the nervous psyche in conditions of pathologys [7].

Types of schizophrenia

Types of flow are a reflection of the nature of movement, dynamics, and the progression of the endogenous process. The severity of the process does not always indicate its malignancy, more often on the contrary. In my opinion, criteria of progredience which includes malignance are:

1. The severity of the EVD.
2. The speed of the formation of the EVD.
3. Resistance of the endogenous process to therapy (indirectly).

Change of progredience of the endogenous process is possible only for the worse according to the 2nd law of thermodynamics. Sluggish, low progredient course of the disease may go to malignant, but not vice versa.

Isolation in the ICD-10 episodic type of schizophrenia with a stable defect raises doubts because it contradicts the basic biological concept of schizophrenia as an adaptive shift a protective transition of the functioning of the nervous psyche to a pathological, energetically lower but more stable level of activity and homeostasis. EVD is an adaptive form of functioning of the nervous psyche in conditions of pathologys. Every attack of schizophrenia should increase the severity of the EVD. Hardly, with a stable defect, we can talk about acquired circular psychosis in the absence of affectivity in the clinic. Probably, here it is a question of various variants of decompensation of the EVD, and not about a schizophrenic episode as a progredient process [8]. The phase of decompensation of EVD as a phase of pseudo-psychopathology dynamics must be differentiated with an episode of schizophrenia: In case of decompensation of pseudopsychopath there is no autochthonism, a qualitative expansion of the clinical picture, an increase in the depth of the EVD, in contrast to the progredient process. In addition, decompensation of pseudopsychopath is more often associated with social stress, exogeny and somatogeny. The isolation of the remitting type of schizophrenia in ICD-10 is also controversial for the same reasons. Most likely, here we are talking about a separate nosological unit as it happened when schizophrenia was separated from schizoaffective psychosis.

Clinical forms of schizophrenia. Clinical forms are clinical frames, expression of qualitative originality, and specificity of the response of the nervous psyche to harm determined by the hereditary program of protective reactions. The change of one clinical form to another in one patient is not possible because the clinical forms reflect the diversity of the available genotypes. The attribution of all schizotypic forms to low-progredient processes is a methodological error. Low reactivity of the nervous psyche, absence of the severity of the process, inadequacy of the clinical picture cannot be a criterion for the progression of schizophrenia. Schizotypic forms often impoverish mental life of the patient, profound personal shift, autism, apatoabulous defect, social disadaptation and disability. Conversely, the unfolding of the clinical picture, the severity of the process does not always lead to disability, the patients work for a long time; they are socially adapted and seem safe.

The presence of affective disorders in the clinic of the endogenous process indicates the presence of affective mechanisms for the protection of the nervous psyche. Weak, depleted nerve cells are susceptible to depressive retardation, which protects them from destruction.

In this situation, the use of antidepressants can remove affective protection and make it heavier [9].

Outcomes of schizophrenia

The outcome of a schizophrenic episode is a neuropsychic defect. A defect of the nervous psyche is a combination of deficit symptoms of personality disintegration, persistent prolapse or splitting of neuropsychic functions [10]. Split (dissociation) of neuro-psychic functions is the equivalent of their loss. Neuropsychic defect is irreversible but it is capable of compensation [8].

Components of the neuropsychic defect in schizophrenia can be distinguished:

1. Emotional-volitional defect
2. Cognitive disorders-lack of criticism for the disease at an early stage of the disease, dissociative (formal) disorders of thinking, memory and attention.

The specific for schizophrenia is an emotional-volitional defect which is primary and reflects the nature of schizophrenia. Increasing the depth of the EVD is a criterion for the progress of the endogenous process [7].

Cognitive frustration in schizophrenia is secondary; it extrapolates the loss and dissociation of the emotional-volitional sphere into cognitive functions with a decrease in their motivational component and goal-setting [11].

As I suppose, types of emotional-volitional defect in schizophrenia include: (1) Asthenic; (2) Psychopathy-like; (3) Autistic; (4) Apatoabulous; (5) Dissociative; (6) Para-organic-occurs in children and adolescents against the background of neuropsychic dysontogenesis.

The types of EVD reflect variants of the dominant negative statics of the patient. The main thing in the EVD clinic is the energy defect [12,13]. Isolation of psychotic types of a defect is a methodological mistake since they postulate the types of remission, dynamics and not the negative statics of the patient. The use of insulin co-metabolism and electroconvulsive therapy, toxic doses of neuroleptics can cause to develop a psycho-organic syndrome.
Evidence of emotional-volitional defect in schizophrenia. The separation of the severity levels of the EVD in ICD-10 is not available although it is necessary to address issues at the expertise of incapacity and forensic psychiatric practice. The most severe are apatoabulic and dissociative types of EVD which determine the bottom, the final state of the pathological process. They have under themselves an anatomical and physiological basis: atrophy of the anterior sections of the limbic system and the frontal parts of the brain [14].

The severity of the EVD reflects the degree of progression of the process. Each attack of the disease increases the severity of the EVD.

Active therapy with antipsychotics has little effect on the outcome of the episode of schizophrenia. The beginning of the process of formation of the EVD cannot be stopped according to the 2 Law of Thermodynamics and the laws of synergetics since the system has already passed the bifurcation point in its development [5].

In my opinion, degrees of gravity can be distinguished:

**Light EVD:** Observed traits of asthenia, decrease in gracility, regression of energy potential, hypobulosis, microcatalyst, autism, weakening of motivation and goal-setting of thinking. Criticism to the disease is absent which indicates the presence of defective depersonalization of the patient already at the beginning of the disease. Patients are subapted in society. Work capacity is limited. Corresponds to 3 groups of disability.

**Medium-level EVD:** There are signs of apatoabulic defect, ambivalence, autism, dissociation of thinking, secondary catatonia, and defective depersonalization. Criticism to the disease is absent. Patients are maladaptive in society, disabled and work in occupational therapy workshop. Corresponds to 2 groups of disability.

**Expressed EVD:** Disintegration, interment of mental activity, the final state. Patients need care. Corresponds to 1 group of disability.

Dynamics of emotional-volitional defect in schizophrenia.

1. The growth of EVD reflects the progress of the endogenous process.
2. Stability of EVD reflects the stoppage, the outcome of an attack of schizophrenia, the formation of a pathological balance, homeostasis on a deficit energy level.

The conditional term of stabilization or sustainable compensation of EVD can be taken 3-5 years.

Compensation phase of EVD: The features of EVD are smoothed out, the patients' behavior is orderly, they are included in the labor processes, and they are sub adapted in the family, society.

Decompensation phase of EVD: Asthenia, neurotic complaints, affect swings, sub psychotic symptoms, protrusion of features of EVD, behavioral disorders, alcoholism, social disadaptation and degradation are observed.

The dynamics of persistent EVD is the dynamics of pseudopsychopathy with the phases of compensation and decompensation. The phase of pseudopsychopathy decompensation must be differentiated with the exacerbation of the endogenous process: When pseudopsychopathy is decompensated there is no autochthonism, a qualitative expansion of the clinical picture of the disease, an increase in negative symptoms in contrast to the current process. Decompensation of pseudopsychopathy is more often associated with social stress, exogeny and somatogeny. In the phases of the dynamics of pseudo-psychopathy, the patient does not need antipsychotics since there is no progression of the endogenous process. He needs to be restored by the hospital environment, symptomatic treatment and psychotherapy.

**Conclusion**

Schizophrenia is a disease of adaptation associated with the transition of neuropsychic activity to a lower but stable energy level, with the formation of a specific emotional and volitional defect in conditions of blockade of satisfying the dominant need and associated neuropsychic overstrain that is aimed at preserving homeostasis of nervous structure. Emotional-volitional defect is primary and reflects the nature of schizophrenia. Increasing the depth of the EVD is a criterion for the progress of the endogenous process. Cognitive disorders in schizophrenia are secondary; they extrapolate apatoabulic defect and dissociation of the emotional-volitional sphere into cognitive functions with loss of their motivational component and goal setting. Apatoabulic defect leads to the cessation of cognitive processes, dissociative emotional-volitional defect leads to their dissociation. Absence of criticism towards the disease already at the beginning of the illness indicates the patient has a defective depersonalization.
References

1 Cannon WB (1929) Organization for physiological homeostasis. Physiol Rev 9: 399-431.
2 Anokhin PK (1980) Key questions of the theory of functional systems. Moskva: Nauka p: 196.
3 Tiganov AS (1999) Manual on psychiatry. Moskva p: 712.
4 Bekhtereva NP (1972) The principles of functional organization of the human brain. Vestnik AMN USSR 9: 43-49.
5 Knyaseva EN, Kurdiumov SP (1994) The laws of evolution and self-organization of complex systems. Moskva: Nauka p: 236.
6 Haken H (1996) Principles of brain function. Springer-Verlag Berlin Heidelberg p: 350.
7 Kraepelin E (1899) Psychiatry. A textbook for students and physicians.
8 Melekhov DE (1963) Clinical bases of disability prognosis in schizophrenia. Moskva: Meditsyna p: 197.
9 Leonchuk SL (2013) Evolutional biological concept of depression as a state of nonspecific protection–anabiosys. Academic Magazine "Western Siberia" 1: 38-42.
10 Smolensky AG (1949) Essays of the pathophysiology of higher nervous activity. Moskva p: 46.
11 Fursov BB (2012) The problem of motivation and its disorders in schizophrenia. Soc Clin Psychiatry 4: 91-100.
12 Conrad K (1958) The Beginning of schizophrenia. Stuttgart p: 165.
13 Huber G, Gross G, Schuttler R, Linz M (1980) Longitudinal studies of schizophrenic patients. Schizophr Bull 6: 23-27.
14 Kaplan HI, Sadock BJ (2002) Clinical psychiatry: from synopsis of psychiatry. Williams and Wilkins 2: 528.