

VARIANTS AND FACTORS OF CATATONIC SYNDROME PATHOMORPHOSIS IN THE STRUCTURE OF ENDOGENOUS CATATONIA

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Abstract

Urgency. Pathomorphosis of mental pathology leads to polymorphism or dissociation of its clinical manifestations, and, as a result, to difficulties in identification and differential diagnosis of individual psychopathological forms. **Design.** In order to establish the basic characteristics, variants and factors of the endogenic catatonia pathomorphism in schizophrenia patients, 144 individuals were examined. In the patients under examination the elements of endogenous catatonia were in the structure of various clinical forms of schizophrenia. **Results.** On the basis of a comparative analysis of the clinical and psychopathological characteristics of the catatonic syndrome in two ten - year periods pool of factors of endogenous catatonia pathomorphism, its structural and dynamic deviations were established. **Conclusions.** The main characteristics and tendencies of endogenous catatonia pathomorphism are determined. Four groups of catatonic syndrome pathomorphosis factors are identified and systematized: pharmacogenic, toxic, alternative, involutory. Two vectors of pathomorphosis were systematized: functional (pharmacogenic and toxic groups) and morphological (alternative and involutory groups).

Key words: pathomorphism, endogenic catatonia, factors of catatonic syndrome.

Urgency. Pathomorphosis of mental pathology leads to polymorphism or dissociation of its clinical manifestations and, as a consequence, complications in the identification and differential diagnosis of individual psychopathological forms.

To adapt the diagnostic methodology to the clinical realities of the present, identify the directions and factors of pathomorphosis of the psycho-pathological forms, analyze the prevalence of the latter and create more perfect diagnostic algorithms, differential criteria and appropriate therapeutic standards [10] could solve this problem.

The analysis of the data on the prevalence and representations of catatonia semiotic content in the framework of the main diagnostic systems and psychiatric schools, taking into account the specificity of their conceptual platforms and thesauri, allowed to establish that there is a direct relationship between these positions, that is, the rates of catatonic transmission depend on the clinical content of the notion "catatonia," which varies widely from endogenous to organic and psychogenic (dissociative spectrum and physically induced states) of registers [1, 4 - 9].

To form catatonia of different genesis typology, it is necessary to identify the main characteristics and leading trends of endogenous catatonia (EC) pathomorphosis. Establishment and a clear nomination of pathomorphosis' traits specific only for EC is the obligatory condition for the development of criteria for delimitation of latter from other disorders of the catatonic spectrum within the framework of establishing a protocol for EC differential diagnosis [2, 3, 10].

The objective: to establish the basic characteristics, variants and factors of EC pathomorphosis in the patients with of schizophrenia-like psychopathology.

Materials and methods. 144 patients (the main group - MG) with elements of EC (syndrome or syndrome) in the structure of different clinical forms of schizophrenia were examined on the basis of the Regional Psychiatric Clinic (Zaporizhzhya). At the stage of the analysis of catatonic syndrome pathomorphosis in all MG patients an actual mental condition was determined; the results of the examination were compared and combined with the data of previous hospitalizations (the depth of the analysis of archival data was 10 years);

Results. A thorough clinical and anamnestic study of the life and diseases history of all groups patients was conducted; the data obtained were used to reconstruct and analyze the structural-dynamic characteristics of the catatonic spectrum of psychopathology with various disorders.

On the basis of a comparative analysis of the clinical and psychopathological characteristics of the catatonic syndrome in two periods in the chronological interval of 10

years, a pool of factors of the endogenous catatonic system pathomorphosis, its structural and dynamic deviations, which may arise under the process of its diagnosis, was established. Based on the data obtained, the main characteristics and leading tendencies of EC pathomorphosis were established.

Characteristics of EC pathomorphosis:

1) EC pathomorphosis is a multi-vector one and consists of:

- true pathomorphosis - changes in the psychopathological filling of the catatonic syndrome, the impoverishment of its external manifestations;

- therapeutic pathomorphosis - deviations and masking catatonia's semiotics due to the influence of antipsychotics;

- pseudopathomorphosis - discrepancies in the interpretation of the term "EC" and the scope of its clinical content, which does not allow to establish with sufficient accuracy the list of psychopathological manifestations inherent to the syndrome under study itself. It should be noted that the characteristic of the pseudopathomorphosis is the preservation of neuroleptic therapy modus.

2) EC pathomorphosis occurs at the level of different registers and modifies psychopathological phenomena of different mental fields;

3) EC pathomorphosis is monodirectional, that is, it is realized only by one vector of pathoplastic modification.

The main tendencies of EC pathomorphosis are:

1) Permanent leveling of EC pathomorphosis manifestations in the hospital environment by contamination and aberration of pathognomy for EC semiotics, and elimination of catatonic syndrome from routine diagnostic protocol.

This takes place, first of all, due to the legislative modality of therapy, which implies the mandatory administration of antipsychotics. On the basis of this it can be stated that neuroleptics "eliminate" the catatonic spectrum of disorders from the routine diagnosis of schizophrenia due to the double effect:

- specifically directed neurometabolic effect of antipsychotics for the resolution of metabolic collapse, which is at the heart of the catatonic stupor, so the leveling of catatonic semiotics occurs already in the initial period of hospitalization;

- masking of the catatonic syndrome structural elements artificially caused by neurolepsy through its catatonic-apatetic manifestations, which greatly complicates the differential diagnosis of endogenous genesis catatonia;

2) a significant decrease of the catatonic syndrome diagnostic frequency among the

population of patients with various forms of schizophrenia.

It should be noted that the use of traditional diagnostic algorithms does not allow to determine the affiliation of individual symptoms or symptomocomplexes in the structure of the catatonic syndrome to the semiotic scope of the catatonic form of schizophrenia, and to differentiate them from similar manifestations of the broad spectrum of clinically similar psychopathological, neuropathological and somatic disorders of different nosological distinctive features.

This tendency is accompanied by a decrease in the frequency of schizophrenia's catatonic forms diagnosis (F 20.2) and the formation of incomplete and mixed forms of catatonic syndrome within disorders of schizophrenic spectrum:

- catatonic paranoid syndrome;
- catatonic-hebephrenic syndrome;
- pfpofhebephrenia.

3) impregnation by microcatatonic symptoms of other psychopathological forms of endogenous register. Most often, in the limits of this tendency, the layering of cordiality, mutism, negativism, passive conquering, echo phenomena, phenomena of auto- and heteroaggression, linguistic stereotypes and pathological fixation of the sight (related to the most frequently recorded microcatatonic symptoms) on the traditional semiotics of endogenous spectrum nosogenes beyond the range of schizophrenic spectrum disorders are observed.

Thus, based on the detailed analysis and comparison of the psychopathological content of the catatonic syndrome and its deviations in the ten years time interval, the main characteristics and trends of pathomorphosis of EC were established.

The analysis of pathomorphism factors, which are predictors of EC pathomorphosis, revealed two main vectors that implement the modification of the structural-dynamic characteristics of the catatonic syndrome (Table 1), namely:

1. *Functional vector* that implements pathoplastic modification of catatonic syndrome at the neuro-metabolic level and is not connected with organic damage of the central nervous system. The following group composition of the factors of the pathomorphism of a functional vector is established:

- pharmacogenic group of pathomorphosis factors (reflects the spectrum of effects of psychopharmacotherapy, implementing a pathoplastic modification of structural and dynamic characteristics of catatonic syndrome);
- toxic group of factors of pathomorphosis (reflects the pathoplastic modification of

structural-dynamic characteristics of catatonic syndrome of intoxication and dysmetabolic genesis);

2. *Morphological vector* that implements pathoplastic modification of catatonic syndrome on the cerebro-organic level. The following group composition of the pathomorphic factors of the morphological vector is established:

- an alternative group of factors of pathomorphosis (reflects the pathological effects leading to the modification of the structural and dynamic characteristics of catatonic syndrome, based on organic lesions of the morphological substrate);

- involutinal group of factors of pathomorphism (reflects involutinal-atrophic pathoplastic effects implementing the modification of structural-dynamic characteristics of catatonic syndrome).

Table 1

Vectors and factors of pathomorphosis of endogenous catatonic syndrome

| <i>functional vector</i> | | <i>morphological vector</i> | | <i>pathoplastic type of EC syndrome modification</i> |
|--------------------------|--------------|-----------------------------|--------------------|--|
| <i>pharmacodynamic</i> | <i>Toxic</i> | <i>alternative</i> | <i>involutinal</i> | |
| + | - | - | - | Pharmacogenic |
| - | + | - | - | Toxic |
| - | - | + | - | Alternative |
| - | - | - | + | Involutinal |
| + | + | - | - | Functional |
| - | - | + | + | Morphological |
| + | - | + | - | Pharmacogenic-alternating |
| - | + | - | + | Toxico-involutinal |
| - | + | + | - | Toxico-alternating |
| + | - | - | + | Pharmacogenic-involutinal |
| + | + | + | - | Functional-alternating |
| + | + | - | + | Functional-involutinal |
| + | - | + | + | Pharmacogenic-morphological |
| - | + | + | + | Toxico-morphological |
| + | + | + | + | Functional-morphological |

In the context of catatonic syndrome pathomorphism, the structuring of its factors is based on the contextual variability of the four groups of factors identified during the study.

1. Pharmacogenic group (100% of patients) is determined by inclusion in the continuum of catatonic syndrome pathoplastic modification, the effects of conventional neuroleptic drugs use in the context of psychomotor and behavioral disorders of the catatonic spectrum treatment.

2. Toxic group (16.67% of patients) is determined by the displacement of the spectrum of routine infectious, intoxication (with the exception of psychopharmacological) and somatogenic (dysmetabolic) factors of pathomorphosis, due to environmental fluctuations, increased efficiency of sanitary and preventive medicine, etc.

3. The alternating group (39.58% of patients) is determined by the shift of the CNS cumulative morphological damage of structure and dynamics. The variability of pathomorphism factors in this group is determined by the change in the nature of health hazards distribution with the tendency of cerebro-vascular and cerebro- ischemic lesions domination.

4. The involutorial group (23.61% of patients) is determined by the general, medically determined, tendency to increased life expectancy and, accordingly, increased representation in catatonic syndrome pathoplastic modification factors of natural involution and cerebro- atrophic processes typical for senile period ontogenesis.

Taking into account the specificity of the formation of the contingent under study (patients of psychiatric hospital permanently receiving congruent psychopharmacotherapeutic treatment), all of them had a pharmacogenic group in the structure of pathomorphic factors of the catatonic syndrome, therefore, the types of pathomorphisms that do not include the pathomorphic factors of this group were studied in the initial period of exacerbation or manifestation of EC before the onset of neuroleptic-therapy.

Conclusions

I. The main characteristics and trends of pathomorphism of endogenous catatonia are determined. The first ones include: 1. pathomorphosis of the endogenous catatonia is multi-vectoral and consists of the true, therapeutic and pseudo - pathomorphosis; 2. pathomorphosis of endogenous catatonia occurs at the level of different registers; 3. pathomorphosis of endogenous catatonia is monodirected to the other: 3a. permanent leveling of its manifestations in the hospital environment and the elimination of catatonic syndrome from the routine diagnostic protocol, first of all due to the legislative therapeutic modality, which allows to state that the antipsychotics "eliminate " catatonic spectrum of disorders from

routine diagnosis of schizophrenia due to the double effect: specifically directed neuro-metabolic action already in the initial period of hospitalization and disguise of the structural elements of catatonic syndrome artificially caused by neuroleptia via its catatono-apatetic manifestations; 3b. a significant reduction of catatonic syndrome diagnostic prevalence in the population of patients with various forms of schizophrenia, and the formation of incomplete and mixed forms of catatonic syndrome (catatonic-paranoid, catatonic-hebephrenic syndrome; pfpofhebephrenia); 3c. impregnation with microcatatonic symptoms other psychopathological forms of endogenous Register.

II. 4 groups of catatonic syndrome pathomorphosis factors have been identified and systematized: pharmacogenic, toxic, alternating, involuntional. They were systematized in 2 vectors of pathomorphosis: functional (pharmacogenic and toxic group) and morphological (alternative and involuntional groups).

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