

FACTORS OF DIFFERENCES IN REMOTE CATAMNESIS OF PATIENTS WITH PARANOID SCHIZOPHRENIA

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Summary

Clinical-dynamic, social-adaptive characteristics of schizophrenia patients with law-abiding and criminal behavior in later life were analyzed on the basis of examining their long-term catamnesis; comparative system analysis (taking into account the dynamics of the leading syndrome, personal and situational characteristics) of remote catamnesis of the specified contingent was carried out. Two opposing trends in the course of the disease were revealed: the tendency to weakening or to the stop of the progredience with stabilization of condition and reduction of psychopathological symptoms and the tendency to preservation the activity and progredience of schizophrenic process. The obtained results of the research may contribute to perfecting the prognostic criteria of the dynamics of the disease and preventive health and social activities.

Key words: paranoid [schizophrenia](#), elder age group, socially positive and asocial criminal behaviour.

Relevance of research basing on various aspects of mental pathology in later life is conditioned by a number of reasons: the tendency in the recent 30 years to a steady increase in the proportion of older and elderly persons in the population of economically developed countries, including Russia [1, 6, 8]. Aging of population inevitably extends to the population of mental patients, in particular those ill with schizophrenia. "Accumulation" of patients ill with schizophrenia of the age 50 and older has been happening for more than 20 years [5, 11, 13]. According to the data of WHO, during 15 years the number of patients ill with schizophrenia in the world increased by 30% and makes 45 million people (or 0,8-1%), the number of new cases per year is 4,5 million people. According to the data of A.A. Churkin, N.A. Tvorogova (2009), the incidence of schizophrenia in Russia in 2008 made 404,2 per 100 thousand of population.

Clinical features of paranoid schizophrenia at remote stages were studied by many psychiatrists [5, 9, 13]. However, domestic clinical and epidemiological studies in gerontopsychiatry [3, 15], in addition to obvious rarity, were carried out during a period of relative socio-economic stability. Epidemiological studies of M.E. Kuznets [9] showed an increase in frequency of committing socially dangerous acts by mental patients over 50 years. According to research findings of B.V. Shostakovich [12], socio-economic changes in Russia over the recent 15 years have led to a marked increase in crime among mental patients, which further underlines the relevance of the work.

However, most clinical follow-up studies do not cover the entire life of patients ill with schizophrenia, they were performed on relatively small samples, and mainly reflected the

patterns of clinical course of the disease in the mid-twentieth century, i.e. before the advent of a new generation of antipsychotics, which significantly increased therapeutic options and changed the quality of patients' life.

Pathomorphosis of mental illnesses [16] also determines the informativeness of a long-term catamnesis in the study of schizophrenia, including old age. Recently, the long-term catamnesis of patients with paranoid schizophrenia has almost never been studied. In a single study of J. Modestin et al. (2003) it was established that grave finite states are formed only in 1/3 of schizophrenic patients with a confirmed follow-up diagnosis; in 50% of cases observed the course of the disease was remitting and in 15% there was a practical recovery. Such conditions were defined by F.V. Kondratiev as "new health".

A preliminary review of the literature showed that the system analysis of data about the long-term catamnesis of patients with paranoid schizophrenia was not conducted. Therefore, it seems urgent to study predictors of favorable and unfavorable outcomes of the disease, the dynamics of productive and negative disturbances at a late stage of the disease, their effects on social functioning, as well as the public danger of schizophrenic patients of older age groups, which may contribute to the improvement of prognostic criteria and preventive medical and social activities.

Research aimed at the selection of the complex of factors contributing to the criminal activity of paranoid schizophrenia patients of the older age groups, as well as at the optimization possibilities of forensic psychiatric assessment are single [1, 2, 11]. At the same time, as it is known, psychogenic disorders (forensic investigatory situation) in elderly psychiatric patients, including those ill with schizophrenia, can significantly complicate the diagnostic and expert decision.

The purpose of this study is comparative system analysis of remote catamnesis (20-30 years) of paranoid schizophrenia patients of the older age groups who committed and did not commit socially dangerous acts (SDA) as the basis for improving the forensic psychiatric assessment and prevention of wrongful conduct in a specified contingent.

Material (object) of research

58 men of older age groups (50 years and older) with a diagnosis of « a continuously flowing paranoid schizophrenia ». The average duration of catamnesis was 37,7 years and more. All the examined were divided into two groups: Group 1 - patients who committed socially dangerous acts (SDA) at the age of more than 50 years and who passed an in-patient forensic psychiatric examination in the State Research Center of Judiciary and Social Psychiatry named after V.P. Serbsky in the period from 2005 to 2010 (28 persons; 48,3%) Group 2 - patients who did not commit crimes and who reside in psychoneurological nursing home (PNI) № 12 of the city of Moscow (30 persons; 51.7%). The age of patients in both groups at the time of the examination ranged from 50 to 73 years (the average age was 58, 9 years).

In both groups the main clinical and social parameters for the period attributable to the onset of the disease, the ones during the first 10 years of schizophrenic process course and the ones to the period of follow-up study in 2005-2010 were compared. For standardization of the data received, a card- questionnaire was drawn up in which signs including passport data, clinical and dynamic characteristics, personality-adaptive characteristics and social-situational characteristics were recorded. In the analysis of the material the concept of system interrelation of the syndrome - the personality - the situation, developed F.V. Kondratiev (1984-1996) was used.

Methods of research

Clinico-psychopathological method, clinical catamnesis method, clinical-dynamic method, clinical and statistical method.

Research results

In both groups the patients were brought up mostly in two-parent families. In Group 1 hereditary load of different types of psychopathologies and alcoholism (55% of patients) was

observed more frequently, which affected the nature of intra-family atmosphere, life and upbringing of the patient. Upbringing in these families was carried out in the environment of constant psychologic traumatic experience, which contributed to the formation of misconception of the norm of interpersonal communication, to easiness of aggression induction in conflict situations, to antisocial social circle. In about 80% of patients of the group a pathologic character of premorbid personality structure dominated by emotionally unstable, antisocial, and schizoid types was identified. In Group 2, the structure of premorbid personality of schizoid type dominated or accentuation of personality was lacking. Later under the influence of the painful process there happened intensification and distortion of existing characterological features, development of features that earlier were not inherent. In both groups the patients had predominantly secondary and specialized secondary education (Group 1 - 86.6%; Group 2 - 60%). However, in Group 2, 30% of patients had undergraduate and higher education. More often the patients of Group 2 (70%) didn't serve in the Army, they were either given an early discharge from military service (10%) in connection with psychopathology detection (50%), somatic pathology detection (25%), studying in institutions of higher education (25%). Patients in Group 1 were mainly engaged in unskilled labor (73.3%), many of them experienced decrease in labor adaptation. In most cases material problems (66.7%) and average material well-being were noted. In Group 2, patients whose main source of livelihood before entering the psychoneurological nursing home (PNH) was a disability pension, mainly of mental illness pension of the 2 group (70%), prevailed. Most of the patients in Group 1 had no disability (64.3%), 26.8% of patients were given the second group of disability and 7.1% - the third group of disability. The average age of disability registration was the age of 33 years, but even after that many of the patients continued to make some money working as unskilled laborers or as casual workers. The average age of labour activity discontinuance was 39.4 years (in Group 1 - 42, 2 years). 80% of Group 2 patients were found to be legally incapable (the average age - 53,3 years). Family and living conditions of patients in both groups were relatively satisfactory. Most of the patients in Group 2 lived with relatives (60%). Only part of patients were married and lived with their families (Group 1 - 26.7%, Group 2 - 20%). However, relations with relatives and spouses often had a hostile character, mutual understanding was lacking, the family atmosphere was characterized by tension and conflict relations, violence, alienation. In Group 1 patients were more often single (40%), persons without fixed place of residence made 20%. Most of those in Group 1 in their past had several convictions (40%), served their term or were held criminally liable. It is noteworthy that during forensic psychiatric examinations 42.9% of patients were recognized as "sane" and an approximately equal number of patients were sent for compulsory medical treatment with the diagnosis of schizophrenia (45.5%). Patients of Group 1 led more often an anti-social lifestyle, abused alcohol (66.7%), abused psychoactive substances (33.3%), they had a psychiatrist record due to dependency syndrome, they were treated in addiction clinics.

Duration of the endogenous process on the average in Group 1 made 32.8 years, which is significantly smaller than in Group 2 - 42.5 years. The onset of the disease in patients of Group 2 more often referred to puberty (70%), whereas in Group 1 it happened more frequently at the age of 19-25 (46.7%). All patients of Group 2 were registered previously by a psychiatrist (the average age of putting on record was 21.8 years), but they attended a psychoneurological nursing home mostly under compulsion of relatives, they received irregularly maintenance therapy with the formation of short, unstable remission. In Group 1 only 33.3% of examined patients were observed by psychiatrists, 13% were on the books of a narcologist, of whom 28.6% attended a psychoneurological nursing home. The main reason for registration in psychoneurological nursing home in both groups was acute psychotic state.

All patients of Group 2 were previously admitted to psychiatric hospitals, while in Group 1 only half of the patients (52.3%) were previously treated. The average age at the moment of the first hospitalization in Group 1 was slightly higher - 28.3 years. At this, the leading syndrome in

patients of Group 2 was hallucinatory-paranoid syndrome (40%), in Group 1 psychopathy-like syndrome, paranoid-hallucinatory syndrome and the syndrome of mental automatism (each made 20%) were detected with the same frequency. During the first 10 years the examined patients of Group 2 were hospitalized each year in psychiatric hospitals (70%), while patients of Group 1 – only 1-3 times. The hallucinatory-paranoid syndrome with varying degrees of intensity (70%) prevailed in the clinical picture in most patients of Group 2 during this period. In Group 1 the same syndrome (40%), and the expanded Kandinsky - Clerambault syndrome were revealed (33,3%). Hallucinatory-paranoid syndrome in both groups was characterized by various delusions and auditory hallucinations, accompanied by emotional depletion, typical for schizophrenia thinking disorders, decrease in motivation to work.

The average age of patients in Group 1 at the time of wrong-doing was 56,4 years. By the character of socially dangerous act crimes against persons (50%) (murders, infliction of bodily harm of varying severity) ($p < 0,05$), of which 80% was directed at persons of the nearest neighborhood and relatives, statistically dominated. Most often the offenses were committed by negative personal mechanisms and were situationally provoked (46,4%), rarer by productive-psychotic mechanisms with delusional motivation (21,4%), with paraphrenic delusion – in 33,3% of cases. In 53,3% of the patients signs of an active process, a psychotic stage of the disease were noted which determined specific criminality of the patients. However in 33,3% of the examined patients we revealed reduction of productive symptomatology with delirium fragmentation, directed at specific individuals, the loss of affective saturation, disactualization, delusional ideas encapsulation, manifestations of schizophrenic defect highlighted in the clinical presentation. All the examined were recognized insane by the court in relation to their alleged acts and they were administered a compulsory treatment in a specialized mental hospital (60%) and in a general type mental hospital (20%).

The average age of Group 2 patients at registration in the psychoneurological nursing home (PNHI) was 51,8 years, more often the patients were placed into a nursing home because of unwillingness of relatives and friends to exercise proper care and supervision of patients, because of contentious relations between them (40%); 30% of patients, living alone, ran into difficulties in household use and needed help. 10% of patients were registered in the psychoneurological nursing home (PNH) by their own free will, “not to disturb close people”. The average length of stay in a psychoneurological nursing home (PNI) was 10.9 years. During the stay in the psychoneurological nursing home (PNI) in most patients older than 50 years exacerbations of schizophrenic process were not noted. Their mental state was characterized by the manifestation of mental automatism syndrome (40%), affective-delusional syndrome (20%), and asthenic-depressive syndrome (20%). In 60% of cases reduction of productive symptomatology with the absence of further complications was noted, age-specific themes of psychopathological symptoms appeared (ideas of material and moral damage, jealousy, petty sabotage), which were aimed at individuals of immediate environment; fragmentary, lacking in affective saturation delusions of grandeur, of a particular value with hyperthymic background mood were revealed. In general delusions determined the patients' behavior to a lesser extent. The majority of the patients (60%) did not seek any activity; in 20% of the examined patients the state of deep defect was noted. However in 30% of patients their behavior became more organized, they became more active, more sociable, part of the patients began to get involved in work processes within the psychoneurological nursing home (PNH), to participate in public events (in sports competitions, lessons with a teacher, psychologist, to attend cultural events).

The results obtained comparing the clinical and social characteristics of two groups of schizophrenic patients with long-term catamnesis largely coincide with those of other studies cited in justifying the actuality of the work [1, 4, 5, 9, 10, 13]. The behavior of elderly patients with the selected psychopathology, as decades ago, mainly depends on a complex of factors: clinical dynamics and phenomenological registration of the condition, on the response to therapy, its adequacy as well as microsocial situation. In a number of cases staying at

psychoneurological nursing home (PNH) eliminates a number of conflicts that are meaningful to patients and ensures optimal monitoring and treatment. With continued research material processing using the Fisher test and Spearman's rank correlation is planned.

Conclusions:

1. In later life schizophrenia does not in all cases take unfavorable course - along with the processes of malignant course, with rapid onset of hallucinatory-paranoid syndromes and paraphrenia, cases with relatively slow progredience of the process, with long-term neurosis-like or psychopathy-like stage with a relatively shallow positive and negative disorders are observed.
2. Paranoid schizophrenia in later life with a relatively favorable course is characterized by a rare hereditary load of ascent and in the generation of patients, by the prevalence in the premorbid of schizoid and hysterical character traits with hypersthenicity, monotonous activity, narrow-mindedness, but also with productive and even creative activity in one-way direction, as well as by relatively scarce productive symptomatology (more often in the form of reduced paranoid syndrome), with minor perceptual disturbances.
3. In later life, after a long-term course of paranoid schizophrenia subjective and objective amelioration of the condition is possible with objective and subjective improvement of life quality, with a decrease in the relevance of productive symptomatology, but with no involution of schizophrenic defect symptoms.

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Manifestation of HRT on the Holter ECG monitoring

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The aim of the research is to investigate the manifestation of heart rate turbulence on the Holter ECG monitoring.

The patients with different diagnoses who were directed to the Holter ECG monitoring at the department of functional diagnosis by the doctors of cardiology clinical advisory department of RH № 1-NCM were examined.

During the Holter ECG monitoring the heart rate turbulence was registered among the patients with cardiovascular diseases, type 2 diabetes. It was registered more often among men, non-indigenous residents of Yakutia.

Keywords: heart rate turbulence.

The method of electrocardiography over the years is a universal way to analyze the electrical activity of the heart. Surface ECG in 12 conventional leads, the Holter ECG monitoring are noninvasive techniques that can provide data on the presence of myocardial electrical instability, including the frequency and types of arrhythmias, conduction of heart, alternation of T wave, dispersion QT interval, late ventricular potentials, as well as the imbalance in the autonomic nervous system, revealed by heart rate variability.

The evaluation of turbulence of the heart contractions frequency is another method in variability and baroreflex sensitivity.