

MODERN METHODS OF DIAGNOSING DEPRESSIVE DISORDERS IN NEUROTIC AND AFFECTIVE DISORDERS

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Abstract. *In modern psychiatric literature, it is argued that the diagnosis of adaptation disorders is one of the most controversial nosological forms in the structure of neurotic pathology. This is primarily due to the insufficient development of the concept of anxiety and depressive disorders in modern psychopathology. In this regard, the development of new approaches to the diagnosis of depression in neurotic pathology is one of the urgent tasks of psychiatry.*

Keywords: *depressive disorders, diagnostics, neurotic pathology, Affective Disorders.*

Introduction. Depression is a psychopathological phenomenon characterized by a pessimistic assessment of oneself and its position in the surrounding reality, inhibition of intellectual and motor activity, a decrease in motives and pathologically reduced mood (hypothymia) with somatovegetative disorders [1-3]. The concept of depression covers a wide range of psychopathological manifestations that differ both in the typological structure and in the duration and severity of Affective Disorders. The specificity of the clinical picture of depressions also affects the nosological affiliation of mental pathology [4-7].

Depressive conditions are among the most common among mental disorders and have stable growth in the population. According to WHO (2006), as of 2020, depression is ranked number one in the world, surpassing cardiovascular disease. Currently, up to 20% of the population of developed countries suffer from them. Among patients in the Polyclinic network, about 60% identify depressive disorders of varying degrees [8-11].

It is known that depressive disorders are observed not only in affective disorders, but also in a number of other diseases: reactions to severe stress and adaptation disorders, symptomatic depressions, disorders due to degenerative-dystrophic and atrophic processes of the brain, pathology of addiction, etc. the clinical polymorphism of the manifestation of Affective Disorders often makes it difficult to form a diagnosis, especially by specialists from the General Medical Network [12-16]. At the same time, the nosological connection determines the peculiarities of therapeutic tactics: the need to choose methods for treating mental disorders, as well as when there is an underlying disease that is the etiopathogenetic basis of depressive disorders [17-22].

In this regard, the differential diagnosis of Affective Disorders is of particular importance in the depressive episode (as a manifestation of endogenous mental pathology) and adaptation disorders.

In this case, depending on the nosological relationship, the volume of pharmacotherapy, as well as the direction of psychotherapeutic work, is determined. Thus, the issues of studying the

features of psychopathological diseases and their timely effective diagnosis in depressive disorders of various etiologies are of particular importance [23-26].

But, despite the significant period of study, there is no single point of view in modern Russian literature that can be taken as the basis for the classification of Affective and primarily depressive disorders [27-30].

Thus, in a study devoted to the study of the phenomenology of Affective Disorders, it was proposed to use three "basic" parameters as the basis for the classification of Affective Disorder syndromes: affective Polar, the structure and severity of the syndrome [31-35]. Accordingly, a typical depressive syndrome involves an equally expressed triad of compulsive symptoms: impaired emotion (longing), willpower (hypobulia), and slowing down of the associative process. At the same time, the leader among them is the emotional component [36-40].

The purpose of the study: was to investigate various approaches to diagnosing depressive disorders in neurotic and Affective Disorders.

Materials and methods. In the ethological part of the study, 85 men and 38 women with schizophrenia spectrum disorders (median age $33,2 \pm 11$ years) were examined. In the biochemical part of the study, 20 patients (sample 2) with moderate-weight depressive episode (de) (F32,1), 20 long-term depressive reaction (F43,21) and 25 short-term mixed anxiety and depressive reaction (F43,22) were examined.

The serotonin concentration of platelets was determined by serotonin Elisa reactive bundles using a set of "Steroidif - cortisol" reagents, an enzyme-coupled solid-phase immunosorbent analysis (Elisa) method using the cortisol-Elisa method.

The pictopoligraphic research method is based on the technology of automatic documentation of the actions of the subject and ensures that psychodiagnostic studies are carried out on a tablet with a special graphic touch, which allows you to obtain profiles (EIZ) of semantic-emotional significance based on the analysis of the psychomotor indicators of the subject when performing the research scenario. In addition to the standard test results.

The material for this part of the work is adaptation disorders according to the ICD-10 criteria (ra) (F43,2), the results of the study of 18 military personnel with an average de of 18 and an average de of 20 with donosological forms of psychological reactions (DFPR) (sample 3). In addition to the clinical-psychopathological method, Hamilton scales (Hamilton Rating Scale for depression, HDRS) and anxiety (Hamilton anxiety rating scale, HARS) and anxiety and depression hospital scale (Hospital Anxiety and depression scale, HADS) were used to assess depression. Patients with Ra and moderate de were also provided with a psychophysiological stress test (NPCF by an Mtdm doctor) for the reactor agro-industrial complex. Video and audio materials approved for healthy military personnel have been used as stress stimuli.

The reference stress stimulus was electrical stimulation of the back surface of the wrist. During the procedure, heart rate (HR), galvanic skin reaction (Kgr), photoplethysmogram, respiratory recursion were measured.

The study of the morphofunctional properties of the brain was transferred to 302 patients with depressive disorders of reactive (F43), endogenous (F20, F25, F31–33) and organic (F06.3) Genesis (sample 4), who performed positron emission tomography (PET) and MRI in various structural and functional neuroimaging regimes: voxel morphometry (VBM), diffusion-tensor imaging (DTI), functional MRI (fMRI) and magnetic resonance spectroscopy. With FMRI, 20 people with opioid addiction syndrome (in the case of opioid poisoning and remission up to 1

month, the average age of patients is $28,3 \pm 3,7$ years, the experience of addiction is more than 9 years) and 18 healthy individuals (control group) were examined.

PET was performed on ECAT Exact 47, Ecat Exact HR± and Biograph (Siemens, Germany) tomographs, MRI scans on a Magnetom Symphony (Siemens, Germany) scan with magnetic field induction of 1,5 Tesla.

Statistical data processing was carried out in the software environment using Statistical Parametric Mapping 12 and fmrib's Diffusion Toolbox protocol. The results of the study were compared with clinical and psychometric (HDRS) case assessment data. The differences were considered statistically significant- $r < 0,05$.

Results and their discussion. During the study, no reliable differences were found between the severity of depressive disorder assessment by a mental health physician (HRDS scale) in depressive episodic patients, the patient's self-assessment (HADS), and the severity of an objective indicator of semantic-emotional significance. All three assessments showed a clear level of depression. Also, Paul Chen had a strong positive correlation relationship between these indicators ($p < 0,05$).

In the group of individuals with adaptation disorders, reliable differences between the patients' self-assessment of the severity of depressive disorders and the objective indicator of the semantic-emotional significance of HADS questions, as well as the psychiatrist's assessment and the objective indicator of the semantic-emotional significance of questions, have not been identified. It should be noted that the results of medical (hrds scale) and subjective assessment (HADS) differed in the degree of trend, but there were no significant differences ($p > 0,05$). A positive correlation relationship was also established between the assessment by a psychiatrist and the self-assessment of patients with severe depressive symptoms ($R = 0,72$, $p < 0,05$). All three assessments corresponded to the average level of depression.

Special attention is paid to the neurophysiological objectification of psychopathological diseases when observing the mental health of military personnel. Thus, in the process of comparing the severity of Affective Disorders with the results of subjective (HADS) and objective (Hamilton's psychometric expert on depression and anxiety measures), these indicators were found to be comparable in groups of patients with ra and de.

At the same time, they did not differ from people with DFPR, as in subjective assessment, or found statistically significant differences in Group level (in expert assessment), which makes it difficult to interpret individual values one by one and does not allow for accurate identification the diagnostic limit for these scales.

At the same time, the pictopoligraphic study found the most obvious differences between the values of the EIZ index in individuals with DFPR, on the one hand, de and ra, on the other: in the first, it did not exceed almost 2 relative units due to the minimum severity of sympaticotonic reactions, but, on the contrary, with de and ra, on the contrary, the EIZ values

These data show prospects for using eiz as a specific cognitive biomarker of Affective pathology that examines the subjective significance of complaints. The biochemical part of the study involved comparing psychometric and neuroendocrine indicators. Thus, examination of individuals in sample 2 using HADS found no significant differences in anxiety and depression levels in patients in the three groups ($p > 0,05$). Cortisol levels in people with short-term ra turned out to be much lower ($p < 0,05$) compared to those with de and long-term depressive reactions

($258,6 \pm 23,7$ nmol/L, $360,5 \pm 42,7$ nmol/L and $401,9 \pm 21,3$ nmol/L, respectively), with no significant differences in cortisol concentration between them.

In the first group of patients, the serotonin content of platelets ($324,7 \pm 43,1$ ng/billion Cl.) approached the lower range of reference values, with the third group of participants in the upper range ($753,5 \pm 63,3$ ng/billion Cl.) and in the second group-in the middle range of reference values ($539,7 \pm 74,7$ ng/billion Cl.).

Thus, the use of neuroendocrine marker data allows, on the one hand, to study the causal mechanisms of mental disorders in the diagnosis of depressive disorders with a superficially similar phenomenological picture, on the other hand, to assess the pathophysiological consequences and severity of mental pathology, which helps to better understand the pathogenetic mechanisms of Affective Disorders and predict the development of.

Stress-test data from patients with various depressive pathogenesis showed that in patients with endogenous depression, the reactive response to stress stimulus was more pronounced, manifested by a decrease in heart rate and kgr (before and after stress stimulus Kgr: $0,27 \pm 0,13\%$ and $-0,14 \pm 0,09\%$ respectively; stress stimulus before and after heart rate: $1,79 \pm 0,68$ mmhgr and $-0,93 \pm 0,46$ mmhgr). In addition, patients with endogenous depression took longer for the above indicators to return to the background ($24,7 \pm 4,3$ s and $15,5 \pm 6,1$ s, respectively).

The results of a study of neuroimaging signs of depressive disorders in sample 4 showed that in endogenous depression in pet, the metabolic rate in caudate nucleus heads was 20-40% above normal in moderate depression (up to 25 points in HDRS) and more than 40% - severe (over 26 points in HDRs) (compared to $p < 0,05$ control group), which was not observed in reactive depression.

Conclusions. Thus, the results of objective (psychometric medical, pictopoligraphic) and subjective assessments of the severity of depressive disorders were appropriate in patients with adaptation disorders and depressive episodes. The use of the pictopoligraphic method (an indicator of semantic-emotional significance) in the diagnosis of depressive disorders makes it possible to increase the accuracy of diagnostic conclusions.

Devoted to the phenomenological properties of depressive episode and Affective Disorders in the RA, it testifies to the uncertainty of views on the characteristics of psychopathological disorders of the affective (in particular, depressive) circle. In this regard, further study of the issues of phenomenology of anxiety and depressive manifestations of diseases described above will help to increase the accuracy of diagnostic conclusions, prescribe adequate treatment and reduce the time of hospitalization of these patients.

The practical implementation of the described approaches allows us to personalize the provision of medical and psychological assistance to military personnel, improve the quality of early diagnosis of mental disorders, addictive and suicidal behavior, which means the effectiveness of all psychophylaxis work in the troops.

At the same time, the further prospects for the objectification and prognosis of mental disorders in military personnel are determined not only in the listed areas, but also by interdisciplinary efforts on the problems of both combat and non-combat pathology in the field of Neurogenetic, neurobiological (in a broad sense) and neurophysiological research. means of solving the problems of pure organizational and clinical diagnostics of Information Technology in conditions of time, power and power limits.

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