

Optimization of Therapy for Relapse of Bipolar Affective Disorders against the Background of Covid-19

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Abstract: The clinical features of bipolar affective disorder are characterized by long-term dynamics that begin gradually in the form of phobic neurosis with panic attacks, followed by an increase in affective symptoms with the transition of symptoms to the level of general anxiety disorder and the spread of depressive symptoms against the background of Asthenic Syndrome with vegetative insufficiency due to complications or coronavirus infection.

Keywords: COVID-19, bipolar affective disorders, anxiety disorder, therapy.

Introduction. Neurotropism of the SARS-CoV-2 virus, already known in the early stages of the pandemic, predetermines the risk of developing infectious-induced psychiatric disorders in a number of patients with COVID-19. At the same time, initially against the background of the lockdown and uncertainty of the early stages of the pandemic in different countries of the world, research on various aspects of protective behavior at the state level [1-5] and individual individuals [6], including population stress reactions, is widespread. vaccine readiness [7,8]. A small number of publications noted an increase in the burden faced by health institutions of different profiles [9].

The health crisis associated with the unprecedented number of patients in need of help led to the practice of providing telemedicine services [10], the retraining of doctors of various specialties [11] and the dissemination of medical staff fatigue [12,13], and in some cases led to a sharp decline in specialized medical care [14]. This is probably due to the fact that neuropsychiatric disorders that occur against the background of COVID-19 are often polymorphic in nature, with a significant predominance of Affective and/or cognitive disorders [16,17].

Many studies studying covid-19 patient assistance algorithms have significant flaws in methodology in the context of the pandemic [18]. Thus, general practitioners, therapists, infectious disease specialists are often not adequately provided with the knowledge and skills to assist patients with long COVID neuropsychiatric complications [19]. Evidence-based data on the mental state of patients who had previously experienced acute SARS-CoV-2 infection

became available only in the later stages of the pandemic, as they required the collection of large amounts of clinical data [20,21,22]. Despite the removal of the Sarscov-2 virus from the body, the survival of residual symptoms as part of postcovid syndrome can be prolonged. Among them are affective and cognitive disorders that have a significant impact on the outcome of the disease [23,24].

The modern consensus on postcovid syndrome is that it is defined as a set of symptoms that occur during or after covid-19 infection that may be three months or more after recovery, unless it is possible to explain their presence with comorbid conditions [25,26].

It is very important to systematize the data obtained on the basis of numerous studies on the reliable number of patients with COVID-19 who need specialized medical care from psychiatrists and clinical psychologists. They allow planning for the effective allocation of limited health resources [27] and prevent the negative impact of mental illness on society through their operative and competent treatment [28]. The study of post-infection cognitive and affective symptoms associated with COVID-19, due to the possibility of their regeneration, is also of particular scientific and clinical importance.

Until now, it is not possible to accurately assess the specificity of neuropsychiatric diseases found in patients with COVID-19 for SARS-CoV-2 infection [35]. Evidence for the similarity of long-term consequences of COVID-19 and other respiratory infections is strong [36]. This study does not reinforce evidence given the understanding of the causal relationship between affective and cognitive disorders observed in patients in the post-infection period and the pathophysiology of covid-19, including the biopsychosocial origin of psychiatric disorders. Thus, complaints about cognitive activity may be related to the severity of Affective Disorders [37]. It is known that the population's level of anxiety and depression has a widespread growth trend during the pandemic [4], including a large proportion of respondents before they became infected with COVID-19 [38]. The design of the study allows a reliable assessment based on the collection of a large number of empirical data of systematic reviews about the expected aid needs of medical service consumers associated with affective and cognitive disorders in the post-covid-19 infectious period.

In the subpopulation of patients of mainly mature age (IU \ u003d 55-57 years), the prevalence of Affective Disorders in the postcovid period was 23% (frequency of anxiety disorders 28.5%, depressive disorders 18.3%) and various cognitive disorders 22% (including memory disorders 32%, attention 22%). The manifestation of neuropsychiatric symptoms prevails in the first three months after the recovery of COVID-19, and the decrease in the spread of individual symptoms over the next 3-6 months is uneven, with a prolonged period of attention disorders.

As of 2020, 280 million people (3.8 percent of the Earth's population) suffer from depression [39], as well as 301 million in 2019 with anxiety disorder [40]. According to the same estimates, about a third of this population (i.e. 93-100 million people) need specialized medical care due to the moderate or severe severity of the disorder [41]. In contrast, the simultaneous manifestation of depression in modern society in 1994-2014 was even higher, accounting for 7.2% of the population, and annual representation reached 10.8% [42]. It can be assumed that the existing Mental Health Organization in the world is adapted to these indicators.

The current pandemic situation is characterized by the fact that in a short period of time, health systems are exposed to extraordinarily large flows of patients in need of medical care, including, as shown above, a large percentage of patients in psychiatric care. Given the prevalence of Affective Disorders in the post-infectious period and the data that more than 550 million people (6.9% of the Earth's population) are infected with COVID-19 [43] in the world by the beginning of July 2022, about 126 million people (1.6% of the population) experience or face already developed Affective Disorders.. their manifestation is localized at an interval of 2 years of the active growth phase of the disease with COVID-19. Only this would increase the need for psychiatric care by 1.2 times in later years (by 15-22% compared to data from Lim et al. [42]).

For the existing system of organizing psychiatric health care, such a load level is a difficult task to implement: even in the pre-pandemic period, the lack of adequate psychiatric support measures for the patient was detected in 63.2-86.3% of cases [44]. This assessment was confirmed by already published data on the coverage of patients with depression with the necessary psychiatric care in 2020-2021. Specialized aid shortages have been found in more cases than in pre-pandemic cases (8-33% coverage, 67-92% deficit, respectively) [45]. This condition is associated with an increase in disability, suicide, psychosomatic diseases, the prevention of which is the widespread introduction of methods for the diagnosis of screening for Affective Disorders to primary care, teaching general practitioners methods of identifying and directing patients with mental disorders.

In order to concentrate limited specialized medical resources, in accordance with the principles of echelonization and gradual transfer of care, it is necessary to introduce brigade approaches to the provision of services to infectious patients, involving psychiatrists and clinical psychologists to control the most severe clinical cases. Strategies like these were discussed long before the pandemic [46]. According to the data obtained, acute variants of Postinfective affective disorders occur in 13.5-16.3% of cases, where irritating symptoms are common. Most likely, in these cases, the competence of the general practitioner can be enhanced by the involvement of Psychiatrists and clinical psychologists, in which there is a corresponding decrease in the clinical load on non-basic complaints of the patient.

An additional, more complex factor to account for the need for psychiatric care is cognitive impairment identified in post-infection patients with COVID-19. The resilience of observed cognitive symptoms, and most importantly, their long-term conversion to dementia in post-infectious patients of different ages, is currently not sufficiently studied: the period of observation of patients in their risk group is limited by the duration of the pandemic. However, neuropsychiatric disorders along with minor cognitive dysfunctions [47,48] can serve as a predisposing factor to dementia in 14-18% of cases, according to the most conservative estimates [49, 48]. Once again, according to the World Health Organization in 2021, 55 million people in the world suffer from dementia, with an annual detection of new cases of 10 million [50]. The results of the study indicate that about 121 million patients who recovered after COVID-19 will be at risk of developing cognitive symptoms into dementia. Thus, in the phase of active continuation of the pandemic between 2 years, 17-22 million new cases of dementia can lead to an overload of Health Systems [55-60].

Taking into account most cases of irreversible intellectual disorders in the advanced dementia stage, the most effective prevention strategies here will be active screening and preventive interventions in New broad risk groups. As with clinically confirmed diagnosis of dementia, the expansion of the volume of specialized care is important in the preminent stages – non-pharmacological (lifestyle-level interventions, cognitive training) and pharmacological [61-65].

It should be noted that the greatest need to affect neuropsychiatric symptoms in the post-infectious period was identified in patients from the moment of recovery from COVID-19 to three months. For more than 6 months, the frequency of violations decreases, attention violations are maintained longer. This information will be useful in calculating the composition of clinical groups to help General Practitioners and therapists, rehabilitologists, psychiatrists and psychologists at different stages of the postcovid period.

The purpose of this study to study the clinical and dynamic characteristics of the course of Bipolar Affective Disorders against the background of covid-19 and improve treatment.

Research materials and methods: an outpatient follow-up and clinical study of 17 patients with bipolar affective disorder (bar), in which the debut or recurrence of depressive and manic phases precedes, timely or immediate covid-19. The age of patients ranges from 25 to 56 years ($34\pm 5,2$). Among patients, women (12:5) dominated compared to men. In the premorbid, patients were characterized by psychasthenic, asthenic and hysterical accentuation types.

Research results. A study of the nature of stressors has shown that the diagnosis of coronavirus infection (nozogenia), fear of covid infection (covitophobia), fear of PCR testing, possible negative or catastrophic results, poor prognosis of the identified disease, fear of disability and material incompetence.

The disease began with leading anxiety and neurotic disorders corresponding to phobic neurosis with panic attacks, and then moved to general anxiety disorder (Gad) against the background of Asthenic Syndrome due to a past coronavirus infection. The course of the disease (bar) was characterized by the predominance of depressive symptoms over manic ones (14:3). The 4th (23,5%) mild, 9th (53,0%) moderate, and 4th (23,5%) severe course of infection have been reported.

Asymptomatic course of coronavirus infection in patients with Bar has not been recorded. The clinical picture of the depressive phases is consistent with the prevalence of anxiety radical and motor anxiety with mixed depression: 9 – (64,3%), 3 - 21,4% depression with sensitochondria syndrome in atypical depression and obsessive phenomena in 2 – 14,3% of patients.bar against the background of coronavirus infection. Clinical features of manic phases coincided with inefficient mania (3-17.6%). All patients of the bar with a depression pole retained objective criteria for endogenous depression, for example, pathological circadian rhythm (daily dependence of mood), vegetative symptoms expressed by weight loss from the initial weight to 5% in a month, instability of pulse and blood pressure indicators.

Suicide risk: (9-53%), including patients with suicidal ideation (6-42,8%) and suicide attempts (3-21,4%).

When carrying out the study, no data shift (publication, geographical, excluded studies, etc.), heterogeneity analysis of the results were carried out — this does not allow the presented analysis to fully meet the criteria for a systematic review. When obtaining information, only the information contained in the author's presentation of the systematic analyzes included in the review was used. The study was based on the assumption that the information provided in the systematic reviews was accurate and that possible uncertainties had negligible impact on conclusions about the amount of mental health care for COVID-19 patients. The assessment indicators presented in the study have an error, since they are less common, but do not take into account the additional risks that require special treatment of psychiatric syndromes and diseases that occur against the background of COVID-19: posttraumatic disorder, bipolar affective disorder, acute psychotic disorders. It should be borne in mind that there were differences in the tools used to diagnose affective and cognitive disorders: the problem is the variety of psychodiagnostic methods or the complete absence of validation of clinical interview data on a scale.

Thus, in modern literature, it is impossible to confidently talk about the only criteria for assessing the severity and prevalence of mental disorders in the postcovid period. It should also be borne in mind that the information presented mainly reflects the prevalence of neuropsychiatric disorders in the postcovid period in patients of mature age. Population data combined with yet unknown frequencies of young and middle-aged neuropsychiatric complications may differ significantly from those analyzed based on the above literature.

The state of the COVID-19 pandemic is a challenge for modern society in the humanitarian, economic, scientific and indisputable medical aspects. Over the past two years, reliable data has been collected on the association for the development of mental disorders in the period after COVID-19 infection. The dimensions of emerging risk groups in which patients need or soon need psychiatric, psychotherapeutic or psychological support in relation to affective and/or cognitive disorders are compared in previous years of data on momentary and annual pain in mental disorders. These data indicate the need to expand and optimize specialized medical care algorithms in the field of psychiatry and medical psychology.

Treatment and medical rehabilitation of kn patients with COVID-19 includes the complex correction of existing dysmetabolic diseases, vascular risk factors, treatment of depression, the use of specific anti-dement drugs, neurotrophic and neurotransmitter drugs, and drug-free therapy. Specific strategies for prescribing KN pharmacotherapy in patients with COVID-19 have not yet been developed.

It is advisable to prescribe to such patients drugs that have a neuroprotective effect, improve the rheological properties of the blood and reduce endothelial damage to the vessels of the brain. Rational treatment of patients with COVID-19 and with kn also includes prevention of re-infection, correction of cardiovascular diseases that negatively affect cognitive function, and Prevention of stroke. Patients with dementia before Covid-19 infection should continue to take antidement medications.

Mild to moderate kn treatment has two main objectives:

- 1) secondary prevention of dementia, slowing the development of kn, which includes the impact of dementia on correctable risk factors;
- 2) reduce the severity of existing violations in order to improve the quality of life of patients and their relatives.

Exercise therapy is aimed at activating proprioception, emotional perception, and restoring skeletal muscle functions. The program of individual exercises is determined taking into account individual tolerance and the stratification of risks associated with the comorbid condition. During exercise therapy, monitoring of load tolerance is carried out: remote ECG, measurement of saturation, determination of the vital capacity of the lungs, as well as control of vegetative reactions (postural hypotension, miscarriage).

Conducting cognitive training in older people (the level of reliability of recommendation a) helps to improve indicators of mobility and functional activity. Extensive interventions, including short-term memory and attention training, exercise, and nutrition, are the most effective.

Studies of the effects of different types of psychotherapeutic interventions have shown their selective effectiveness, indicating different mechanisms of therapeutic change. Cognitive behavioral therapy is more effective in preventing physical (muscle) tension, hypochondrial behavior (seeking confidence), Prevention (symptoms-related limitations), catastrophization, emotional regulation, social competence, activity, occupational reintegration, relapse. Psychodynamic interventions are recommended to be used at a long stage of therapy to correct the neurotic Organization of the individual, identify and develop developmental disorders, conflicting personal relationships (conflicts).

Based on the biopsychosocial paradigm, psychotherapy increases the patient's responsibility towards the disease, unlike medications that contribute to passivity, support a somatocentric picture of the disease, and cause side effects.

When determining therapeutic tactics, it is necessary to associate the duration, intensity of treatment, its specific components with the clinical features and duration of the disease, comorbid pathology. The combination of the individual and group format of psychotherapy increases its effectiveness.

A necessary element in the management of patients with dementia is activities aimed at supporting and training relatives and patient caregivers. Conducting schools allows the patient to develop flexible strategies, increase motivation and accelerate the return to the initial psycho-emotional state.

The results of recent studies using functional neuroimaging techniques show the role of dopaminergic deficiency in the formation of cognitive dysfunction. These data can provide the basis for the use of dopaminergic drugs both for significant severity of physiological age-related changes in cognitive function and in older people with pathological moderate cognitive

impairment syndrome (Ukr). The efficacy of piribedyl dopamine receptor agonist in Ukr syndrome has been demonstrated in a recent controlled clinical trial.

Conclusion. We found that there is clinical patomorphosis during Bipolar Affective Disorders against the background of covid-19. The clinical features of bipolar affective disorder are characterized by long-term dynamics that begin gradually in the form of phobic neurosis with panic attacks, followed by an increase in affective symptoms with the transition of symptoms to the level of general anxiety disorder and the spread of depressive symptoms against the background of Asthenic Syndrome with vegetative insufficiency due to complications or coronavirus infection.

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