Decompensation of non-psychotic mental disorders after suffering COVID-19

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Abstract. On the example of the contingent of children and adolescents who applied for outpatient psychiatric care, the prevalence, diversity, nosological representation of mental disorders associated with the COVID-19 pandemic were studied.

Keywords: COVID-19, mental disorders, children, adolescents.

Introduction

The request for research on the problem of the association of the COVID-19 pandemic with mental disorders arose with the onset of the epidemic caused by the coronavirus SARS-CoV-2, since it was very quickly noted by experts that in the context of the COVID-19 outbreak, the introduction of social restrictive measures and the occurrence of unfavorable economic consequences of the incident, the frequency of mental disorders in adults [1-4] and children [5,6] increased. The epidemiology of COVID-associated mental disorders, their diversity and nosological representation, continue to be the subject of active discussion in the scientific community. At the same time, the impact on the mental health of children and adolescents of a complex of factors directly associated with the impact of the coronavirus itself is analyzed to a lesser extent in the literature, which makes such studies especially relevant.

Purpose of the study – to establish epidemiological indicators of the prevalence among children and adolescents of mental disorders associated with the outbreak of COVID-19, to obtain data on the nosological diversity of such mental disorders.

Material and methods

The data obtained were the result of a study, the material of which consisted of 35 patients 10-17 years old (22 boys - 62.8%, 13 girls - 37.2%), who received outpatient medical advice from district child and adolescent psychiatrists of one of the PND Moscow in links with non-psychotic

mental disorders. All of them consulted a local psychiatrist for worsening mental disorders associated with COVID-19 infection.

The study did not include patients with psychotic variants, as well as a grossly progressive course of the endogenous process, a pronounced defect of an organic nature, moderate and severe forms of mental retardation, current severe somato-neurological pathology not associated with COVID-19.

We analyzed the cases of such patients referring to the aggravation of mental disorders associated with the COVID-19 pandemic for the one-year period from March 1, 2020 to March 1, 2021.

Research methods: clinical-psychopathological, statistical.

Results and discussion

Initially present in the patients under discussion, psychopathological disorders were nosologically polymorphic, as well as clinically diverse - affective disorders, anxiety, obsessive phenomena, asthenic, psychopathic, including behavioral disorders, including mononeuroses characteristic of childhood.

The overwhelming majority of patients (28 - 80%) had a mild coronavirus infection, in the rest (7 - 20%) it was diagnosed as moderate, none of them had a severe degree of this infectious disease. At the time of the peak of the infection, accompanied by even a low subfebrile condition, mild manifestations of intoxication, the complaints of patients and their parents were concentrated mainly on their somatic state, while the existing mental disorders fade into the background. In the acute period of coronavirus disease, 14 patients with severe hyperthermia were routinely canceled the previously prescribed psychotropic therapy, another 21 doses of these drugs were halved, which did not entail significant deterioration of previously identified psychopathological disorders. In the postcoid period, the observed patients persisted for a long time (from 4 weeks to 4.5 months) asthenic disorders. For all patients, asthenia was a common psychopathological phenomenon, regardless of the clinical features of previously observed psychopathological disorders. Being a universal somatogenic reaction, asthenic syndrome in patients who have undergone coronavirus infection was present as an obligate syndrome accompanying an infectious disease, starting from its initial stages. Often it turned out to be noticeably heavier than the level of intoxication, discordant with thermometric indicators and other data on somatic status. At the initial stages of the disease, physical asthenia prevailed with complaints of severe weakness, malaise, decreased activity, fatigue at minimal exertion, loss of appetite, increased need for rest and sleep, various unpleasant bodily sensations (more often - dizziness, pain and heaviness in the limbs, cephalgia stress), as well as hyperesthetic phenomena. As patients recovered from COVID-19, normalized objective indicators of their somatic status, complete reduction of asthenia did not occur. After the advanced stage of an infectious disease passed, in contrast to the classical course of organic asthenia, long-term preservation of the components that make up the asthenic symptom complex was diagnosed - a very slow reverse development of manifestations of physical asthenia with prolonged preservation of lethargy, increased exhaustion, impaired motor activity, distortion of the sleep/wake cycle in combination with the stability of the symptoms of mental asthenia (absent-mindedness, difficulty concentrating voluntary attention, a decrease in the quality of mnestic functions, fatigue after minimal intellectual exertion, the phenomenon of irritable weakness, deviation of speech activity - its decrease, sometimes replaced by verbosity, some impoverishment of previous interests).

It is difficult to make a final judgment on how complete the resolution of asthenic disorders will be and on the duration of its existence. The fact is that the neurotropic potential of SARS-CoV-2 has not yet been sufficiently studied [7], its neurotoxic effect in some cases is beyond doubt, it is possible that it will often be about residual organic brain disorders due to infectious vascular encephalopathy, which makes the problem under discussion even more urgent.

In addition to the asthenic symptom complex, the examined patients showed deterioration / appearance of other psychopathological syndromes.

In 9 people (25.7%), an aggravation of obsessive disorders with an increase and complication of previously short-term and uncomplicated rituals that were not related to the plot of the pandemic was revealed. Eight patients (22.8%) developed hypochondriacal disorders with a desire for self-grasping, limiting activity, creating for themselves a special therapeutic and protective regime aimed at "the highest quality recovery" after a serious illness with a tendency to seek information about rehabilitation programs, a mood for then, to listen to your own somatic feelings. At the same time, the patients rejected the generally accepted and proven effective healthimproving methods, insisting on limiting their own physical activity due to the "non-standard" of their own body, references to weakness and inability to cope with stress. In 5 patients (14.3%), detailed phobic phenomena were recorded associated with fears of re-contracting COVID-19, becoming a carrier of coronavirus and infecting others, fear of forgetting protective equipment (mask and gloves) when leaving the house, it is not enough to carry out the treatment correctly hands and clothes. In 3 of them, it was about modified and expanded manifestations of pre-existing obsessive-phobic disorders with obsessive thoughts about possible infection with the SARS-CoV-2 virus, accompanied by complex phenomena such as rituals of washing and cleansing with numerous rechecks of the cleanliness of hands, face, spraying them and clothing with antiseptic agents, regular change of personal protective equipment and monitoring of compliance with all possible precautions and standards.

In 7 cases (20%), pronounced affective disorders were noted with a predominance of apato-adynamic symptoms, decreased mood, daily fluctuations, anhedonia, loss of previous interests (in communication, albeit virtual, posting selfies on the Internet, listening to music, watching video clips, computer games). In somewhat milder cases, depressive disorders were masked by psychopathic outbursts, tearfulness, irascibility, increased resentment, frequent "whims" with a quick change in the plot of discontent.

Conclusions

It was revealed that the decompensation of the state of children and adolescents with mental disorders during the COVID-19 pandemic was significantly affected by the infectious neurotoxic factor exerted by the SARS-CoV-2 virus. At the same time, it remains unidentified to the end whether we are talking about the actual toxic effect on the central nervous system of the waste products of the virus/its decay, multiple hematomas formed in the brain during the course of the disease, the effect of hypoxia, a complex of all these factors at the same time, some still remaining unknown impacts. Discussion of various aspects of COVID-associated disorders can help optimize care for these patients, create algorithms for its improvement.

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