

FEATURES OF THE CORONAVIRUS DISEASE (COVID-19) IN PATIENTS WITH ASTHMA (LITERATURE REVIEW)

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Abstract. The article provides an overview of modern literary data on features and characteristics of the coronavirus disease (COVID-19) in patients with asthma. Epidemiological data on the prevalence of asthma patients among the general population of patients with COVID-19 in different regions of the world (China, South Korea, the United States of America, European countries, South American countries) are presented. Differences in asthma patients infected with the SARS-CoV-2 virus depending on gender and ethnic factors were analyzed. The pathogenetic immune and non-immune risk factors of SARS-CoV-2 virus infection in patients with asthma were analyzed. It has been shown that the presence of asthma is not a separate risk factor for increased infection or a more severe course of the COVID-19. At the same time, it has been proven that there are certain features of the course and development of severe long-term consequences of the COVID-19 depending on the asthma phenotype (Th2-low and Th2-high). Thus, more severe consequences of COVID-19 are usually observed in patients with non-allergic asthma, which may be caused by the features of the pathogenesis of the disease, as well as the age characteristics of this phenotype and comorbidity with other diseases. The issue of the impact of basic and biological asthma therapy on the risk of infection, the severity of the course and mortality from the COVID-19 is considered separately. It has been shown that inhaled corticosteroids not only have an anti-inflammatory effect but can also have a direct antiviral effect on the SARS-CoV-2 virus. Therefore, therapy with inhaled corticosteroids and biologics is reasonably safe and effective and should not be discontinued during treatment for the COVID-19.

Key words: asthma, coronavirus disease COVID-19, risk factors.