

COMORBIDITY IN PATIENTS WITH BRONCHIAL ASTHMA AND RISKS OF SEVERE COVID-19 (A LITERATURE REVIEW)

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Abstract. Coronavirus disease (COVID-19) affects people of all ages and ethnic groups, men and women, and can lead to serious conditions such as pneumonia, acute respiratory distress syndrome, multiple organ failure, and even death. Patients with bronchial asthma (BA) do not have an increased risk of infection, severe COVID-19, and no increased risk of COVID-19 –related death in patients with well-controlled mild to moderate asthma. In the general population, in patients with comorbidities (diabetes mellitus, cardiovascular disease, chronic obstructive pulmonary disease (COPD), kidney disease, malignancy, obesity), COVID-19 has a more rapid progression and severe course.

The aim of this study was to study the characteristics of concomitant diseases in patients with BA as risk factors for COVID-19 according to literature sources. Patients with asthma have a higher incidence of comorbidities than the general population. In patients with asthma, the risk of detecting type I diabetes mellitus increases by 41 % compared with people without asthma, and type II diabetes, according to various estimates, from 21 to 37 %. The presence of asthma increases the risk of cardiovascular disease by 1.33 times, the presence of asthma also increases the risk of developing hypertension by 66 %, and the combination of asthma and hypertension can reach 75 % in patients with severe asthma. Up to 26 % of asthma patients have co-existing COPD. Adults with asthma have a 75 % higher risk of developing cancer compared to those without asthma. Patients with asthma may have an increased risk of developing chronic kidney disease — 6.26 % compared with 3.91 % in healthy individuals. The prevalence of obesity in patients with asthma ranges from 21.3 to 32.8 %, and in patients with severe asthma — 60 %. In general, the frequency of comorbid diseases in asthma can be 89 %, so the diagnosis of BA does not exclude a high risk of severe COVID-19 in asthma patients with comorbidities. Appropriate intake of prescribed basic therapy, especially inhaled corticosteroids, along with treatment of comorbid conditions, is recommended for all asthma patients during the COVID-19 pandemic.

Key words: bronchial asthma, comorbidity, COVID-19.