

CURRENT ISSUES OF BRONCHIAL ASTHMA 2021: WORLD ASTHMA DAY AND THE IMPACT OF THE COVID-19 PANDEMIC

G. L. Gumeniuk^{1,2}, V. I. Ignatieva¹, S. G. Opimakh¹

¹ SO “Yanovskyi National institute of phthisiology and pulmonology NAMS of Ukraine”, Kyiv, Ukraine

² Shupyk National Healthcare University of Ukraine, Kyiv, Ukraine

Abstract. This year's World Asthma Day has the theme “Uncovering Asthma Misconceptions”. This position calls for action and action to clarify common myths and misconceptions about asthma that prevent asthma sufferers from receiving optimal benefits from major success in treating the condition. According to GINA experts, the most common mistakes in the world about asthma are as follows: 1. Myth: asthma is a childhood disease; people “outgrow” it as they age. True: asthma can occur at any age. 2. Myth: Asthma is an infectious disease. Truth: asthma is not contagious disease. 3. Myth: People with asthma should not exercise. Truth: When asthma is well controlled, individuals with asthma can exercise and achieve high performance in sports. 4. Myth: asthma can only be controlled with high doses of steroids. Truth: Most often, asthma is controlled with low doses of inhaled steroids. To a large extent, these theses refer to one of the most important challenges of our time — the management of patients with bronchial asthma in the context of the COVID-19 pandemic. Patients with asthma have a lower susceptibility to COVID-19, a less severe course, and a lower risk of hospitalizations due to COVID-19. Allergic asthma or its eosinophilic phenotype, intake of inhaled corticosteroids (ICS) have a positive effect on the course of the COVID-19 disease, since in such patients the lower expression level of ACE 2 receptors in the upper and lower respiratory tract, which are input receptors for SARS-CoV-2 virus. ICS such as budesonide or ciclesonide are capable of inhibiting the replication of genomic SARS-CoV-2 RNA due to the influence of viral endonuclease NSP15 and TMPRSS2 (transmembrane serine protease 2), a protease involved in viral entry into the cell. Some ICS (including budesonide) reduce or block SARS-CoV-2 replication *in vitro*. Experts from international asthma groups note that in the face of the COVID-19 pandemic, asthma patients should continue to take basic therapy, including corticosteroids. And in current studies, ICS budesonide in COVID-19 patients reduces the risk of hospitalization or emergency care by 91 % and significantly improves clinical recovery.

Key words: bronchial asthma, COVID-19, inhaled corticosteroids, World Asthma Day.

Galyna L. Gumeniuk

Shupyk National Healthcare University of Ukraine

Doctor of medicine, Professor of phthisiology and pulmonology department,

SO “Yanovskyi National institute of phthisiology and pulmonology NAMS of Ukraine”,

Senior researcher of treatment, diagnosis, and clinical pharmacology of lung disease department,

10, M. Amosova str., 03038, Kyiv, Ukraine, gumenuk@ifp.kiev.ua; pulmggl@gmail.com

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