

# CURRENT VIEWS ON THE ROLE OF THE PRO-INFLAMMATORY CYTOKINE IL-26 IN THE DEVELOPMENT AND CLINICAL COURSE OF BRONCHIAL ASTHMA ASSOCIATED WITH OBESITY AND TREATMENT STRATEGY

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**Abstract.** In Ukraine and the world, the incidence of bronchial asthma (BA) and obesity among children and adults is simultaneously increasing, which is a serious problem of public health and health care management. Modern research links both diseases.

**The aim:** To analyze the pathogenetic relationship between BA and obesity, to formulate a clinical understanding, the pathophysiology of asthma and obesity phenotypes, the impact and effectiveness of strategies for the treatment of obesity and obesity in combination with BA.

**Materials and methods.** Analytical review of scientific publications by topic was performed using the databases of scientific libraries, search engines Google Scholar, Pub Med, Science Direct, etc.

**Results.** To date, various hypotheses have been proposed to explain the association between obesity and asthma, such as a general genetic predisposition, impaired body development, altered respiratory mechanics, the presence of a systemic inflammatory process, and an increased prevalence of comorbidities in this cohort of patients. Patients with obesity and BA have more symptoms, a more severe course of BA, insufficient effectiveness of standard treatment, progressive deterioration of the quality of life. Despite more than a decade of research into the association between these diseases, the exact mechanisms underlying the interaction between obesity and asthma remain largely unclear and require further study. Understanding the mechanism of the association between obesity and asthma may lead to the development of new effective therapeutic strategies for the treatment of this sensitive population.

**Conclusions.** The prevalence of the disease, the economic costs of treatment and its ineffectiveness require further scientific research in this direction. It is necessary to determine the role of new biomarkers, including IL-26, in the development and clinical course of BA in combination with obesity and to improve the effectiveness of treatment of such patients.

**Key words:** bronchial asthma, obesity, systemic inflammation, endotypes, cytokines, biomarkers, IL-26.