ASTHMA IN PATIENTS WITH BRONCHIECTASIS: FEATURES OF THE PHENOTYPE

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Abstract. Nowadays due to the wide availability of computed tomography, bronchiectasis (BE) is increasingly being diagnosed in patients with pulmonary diseases. The characteristics of this group of patients include high rate of comorbidity and heterogeneity of clinical and laboratory characteristics. *The aim of the study* was to determine the prevalence of asthma (A) among patients with BE in the Dnipro region and to determine the clinical and laboratory features of this patients' population. *Materials and methods.* 71 patients with confirmed BE in the stable phase were examined: the number of exacerbations for the previous year, the pulmonary function tests, bacteriological examination of sputum, the level of total immunoglobulin (Ig) E in sera, specific IgE to *Aspergillus fumigatus* (*AF*), specific IgG4 to *AF* were determined; the amount of eosinophils in the peripheral blood was calculated. Patients were divided into two groups,

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depending on the presence or absence of A. *Results*. It was found that the prevalence of A among patients with BE is 17 %; eosinophilic type of inflammation isn't specific for most patients with A in combination with BE and the determination of the total IgE level is not informative. However, it is appropriate in such patients to determine the IgG4 specific to *AF*, which will allow timely prevent the development of allergic bronchopulmonary aspergillosis. These patients have lower respiratory function indicators and more frequent exacerbations of BE. The microbiological spectrum of sputum in patients with BE and the combination of A with BE is not significantly different. *Pseudomonas aeruginosa* (*PA*) and *Haemophilus influenzae* are dominant in these patients in the Dnipro region. Patients with BE, and especially with concomitant A, require regular sputum examination for the microbiota to ensure timely eradication therapy for *PA* sputum colonization.

Key words: bronchiectasis, asthma, microbiota, allergic bronchopulmonary aspergillosis, *Pseudomonas aeruginosa.*

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