## FUNGAL ALLERGY IN PATIENTS WITH MILD AND MODERATE ASTHMA: CLINICAL, FUNCTIONAL, ALLERGIC, LABORATORY FEATURES

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Abstract

The aim was to study clinical, functional, allergic and laboratory features in patients with mild and moderate asthma in the presence of fungal sensitization (positive skin tests to the mixture of household mold).

*Materials*. A prospective, open-label study was conducted using clinical, functional, allergic and laboratory examination in 106 asthma patients, mean age ( $52.7 \pm 1.2$ ) years: 72 patients with mild and moderate asthma with positive skin test to fungal mixed-allergens, the average papule size in prick tests ( $7.4 \pm 0.6$ ) mm, and 34 patients with negative prick-test (group 2), papule size ( $1.1 \pm 0.1$ ) mm. Allergological examination was carried out using prick-test with fungal mixt-allergens (mixture of household mold: *Aspergillus fumigatus, Aspergillus niger, Penicillium sp., Mucor sp., Rhizopus sp.*).

Results. The patients with mild and moderate asthma with positive skin test to the mixture of household mold had similar clinical characteristics (age, sex, severity, prescription, frequency of exacerbations). A worsening of symptoms in these patients mostly occurred in a damp room (88%). Distinctive features of patients with mild and moderate asthma with the presence of fungal sensitization were: higher values in pulmonary function test (FEV1, PEF, MEF 25-75), higher histamine and mite allergens skin sensitivity, sputum eosinophilia, higher total serum IqE (342,6  $\pm$  8,6) lu/ml.

Conclusion. In mild and moderate asthma patients with positive skin prick test to the mixture of household mold there was an advanced atopic condition, associated with higher pulmonary function test values, more active skin sensitivity to histamine, eosinophilia of sputum, higher level of total serum IqE.

**Key words:** asthma, fungal sensitization, clinical and laboratory features, prick-test with fungal allergens.

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