



FEATURES OF INTERFERON- γ PRODUCTION IN PATIENTS WITH BRONCHIAL ASTHMA

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Introduction: It is known that in bronchial asthma (BA), a violation of the functional activity of the Th-1 pool of lymphocytes and, as a consequence, suppression of cellular immunity contributes to the development of an allergic inflammatory process. Interferon- γ (IFN- γ), being the main product of Th-1 cells, plays a key role in the development of cellular immunity.

Purpose. The study of the level of serum IFN- γ in patients with AD was carried out.

Materials and methods. A study of spontaneous production of IFN- γ in peripheral blood serum was conducted in 45 patients with severe BA: 17 with allergic (ABA), 11 with non-allergic (NBA) and 17 patients with mixed BA (SBA), as well as 15 practically healthy individuals. The work used test systems for enzyme immunoassay “ELISA-IFN-gamma” (CJSC “Vector-Best”, Russia).

Results. Our studies revealed the presence of a significant decrease in the level of IFN- γ in the peripheral blood serum of patients with AD compared with healthy individuals (0.13 ± 0.01 pg/ml vs. 0.28 ± 0.07 pg/ml, $p < 0.05$). When comparing the level of IFN- γ in patients with various forms of BA, it was found that its lowest values were recorded in patients with ABA both in comparison with the control group ($p < 0.02$) and in comparison with the group of patients with NBA (0.23 ± 0.03 pg/ml; $p < 0.01$). In patients with SBA, IFN- γ is also significantly reduced compared to the control group (0.11 ± 0.015 pg/ml, $p < 0.05$). It should be noted that IFN- γ indicators in patients with NBA and ABA differ by almost three times. Consequently, the highest level of the studied parameter is observed in patients with NBA.

Conclusions: Thus, in bronchial asthma, the serum level of the proinflammatory cytokine IFN- γ reflects the degree of immune imbalance and characterizes the priority orientation of the formation of the immune response depending on the form of the disease.