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***BIOLOGICAL MARKERS IN  
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Collection of abstracts "**Biological Markers in Fundamental and Clinical Medicine**" (*official specialized scientific journal of The Czech Republic, registration number MK CR E 22955*) by the publishing center of The ESCBM provides its lanes for information materials in the field of scientific research of modern biological markers in clinical and experimental medicine, pharmacy, and fundamental biology. The collection publishes abstracts of scientific and practical conferences, seminars, symposia, dedicated to the study of molecular-biochemical and functional markers, playing a role in pathogenesis, diagnosis, prognosis, as well as assessing the monitoring of the treatment effectiveness for the various systems and organs diseases. **Among the priority topics of the journal there is the research of molecular mechanisms of diseases pathogenesis, the study of the structure and functions of peptides, nucleic acids, nucleotides, lipids and other biologically active components of body cells.**

The collection is intended for fast and systematic publication of abstracts, containing the results of author's research, reviews highlighting major developments in the field of biological markers, short messages, new experimental and clinical studies, which use biological markers, as well as proposing new principles and methods for the study of biological markers.

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CD3	63,0±0,63■	66,6±0,57	70,2±3,55
CD4	42,3±0,69	41,5±0,57	46,2±2,81
CD8	21,2±0,94	19,6±0,42	23,8±2,58
CD20	12,0±0,65	10,1±1,00	11,0±1,52

Analyzes of the lymphocyte subpopulations (Table 2) revealed significantly the lowest CD3 lymphocyte count in the 1 subgroup of patients where the EN drug had a stimulating effect. Analysis of the parameters of circulating immune complexes in the subgroups of patients revealed their highest content also in 1 subgroup of patients (419±26,5) in comparison with the 2 and subgroups (305±28,9; 163±43,9). This indicates the highest tonsillogenic toxicity in patients of subgroup 1.

Thus, the 1 subgroup of patients, where the stimulating effect of the drug EN on the NBT-test was revealed, was characterized by low level of T cell, highest rates of the CIC.

Conclusions:

- the EN preparation showed a multidirectional immunological effect;
- the EN preparation acted in a stimulating manner on low indices, on high indices - in a suppressive manner, on indices close to normal - did not have any modulating effect;
- the EN preparation can be used to modulate the preimmune resistance indices in patients with chronic tonsillitis.

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## USE OF BIOLOGICAL MARKERS FOR DETECTION OF THE ATYPICAL FLORA IN CHILDREN WITH RECURRENT BRONCHOPULMONARY DISEASES

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Pathology of the respiratory system is the leading in the structure of childhood diseases. Recurrent bronchopulmonary pathology in children remains difficult for differentiating and requires use of combination of methods. The similarity and recurrence of symptoms of bronchitis caused by different health problems underlines importance of biological markers. The aim of the research was to assess roel of biological markers for evaluation of the role of the atypical flora in the course of recurrent bronchopulmonary diseases in children.

**Materials and methods.** The study included 143 children who were admitted to the Zaporizhia Children's Multi-Profile Hospital due to recurrent bronchitis (3 and more episodes per year). Age of children ranged from 3 to 15 years. 77 patients were aged 3-7 years (53.8%), 66 patients - 7-15 years - (46.2%). The ratio of male and female was approximately equal: 77 and 66 people (53.8 and 46.2%). Blood samples were taken according to the standard procedure. Immunoglobulines were detected with ELISA method. Bronchial asthma was verified following GINA guidelines.

**Results:** Analyzis of the historical and clinical data showed that in 43.5% of cases bronchitis occurred on a background of acute respiratory viral infection. 31.8% of patients had verified bronchial asthma, 24.2% - congenital malformations of the bronchi and lungs and 0.5% - cystic fibrosis. It was revealed that in patients with bronchial asthma in 43% of cases specific antibodies IgA, IgM and IgG to *Cl. pneumoniae* and *M.pneumoniae* were detected. That indicated presence of the atypical infection which could play a role in the course of the disease. Patients with uncontrolled asthma showed a high incidence of serological markers. More often IgM were detected as to *Cl. pneumoniae*, as to *M.pneumoniae* compared to IgA. 65% of children had IgM ans only 25% - IgA to *Cl. pneumoniae* and 75% of children had IgM ans only 35% - IgA *M.pneumoniae*.

**Conclusions.** Results of the study showed that specific antibodies to *Cl. pneumoniae* and *M.pneumoniae* were detected in 43% of children with bronchial asthma, which was verified in 31.8% of patients with recurrent symptoms of bronchitis. IgM atibodies were elevated more often than IgA.

*Key words: children, IgM, recurrent bronchitis, bronchial asthma.*

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