

SUMY STATE UNIVERSITY  
MEDICAL INSTITUTE



**BIOMEDICAL  
PERSPECTIVES**

**II**

**ABSTRACT BOOK**

*International Scientific Conference  
of Students, Postgraduates and Young Scientists*

(Sumy, October 20-22, 2020)

Sumy  
Sumy State University  
2020

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
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Biomedical Perspectives II: Abstract book of International Scientific Conference of Students, Postgraduates and Young Scientists, Sumy, October 20-22, 2020.  
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**ANALYSIS OF THE STATE OF THE IMMUNE STATUS IN CHILDREN WITH  
ACUTE OBSTRUCTIVE BRONCHITIS ON BACKGROUND OF  
THYMOMEGALY**

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**Introduction.** The problem of acute obstructive bronchitis is one of the most pressing in pediatrics, which is associated with high morbidity, severe course, frequent complications, transition to recurrent form and bronchial asthma, and even fatal consequences. Various disorders are registered in the immune status of children with obstructive bronchitis. The presence of immunodeficiency in children with obstructive bronchitis is sometimes associated with thymic dysfunction, especially thymomegaly.

**Aim.** Was to study the state of the cellular link of immunity in young children with acute obstructive bronchitis against the background of thymomegaly.

**Materials and methods.** We examined 86 children (1-3 years old) with acute obstructive bronchitis. The content of CD3 +, CD4 +, CD8 +, CD16 +, CD21 + was determined by immunofluorescence with monoclonal antibodies in the blood serum.

**Results.** We found a significant decrease of the concentration of CD3 +, CD4 + and CD8+ decreased and an increase of the level of CD16 + and CD21 +, ( $p < 0.01$ ) in children with obstructive bronchitis and thymomegaly compared with healthy children.

**Conclusion.** It was found that the change in the parameters of the cellular component of immunity in the presence of concomitant thymomegaly was characterized by a significant decrease of content of CD3 +, CD4 +, CD8 + and an increase in B-lymphocyte subpopulations.

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