(regression coefficient 0.494) (1 – repeated episode of the disease; 2 – the first episode of the disease); X5 – hepcidin (regression coefficient 0.00534).

The patient should be included in the group of patients who are highly likely to develop inflammatory anemia if the calculated value of "p" ≥ 0.5. The probability of the manifestation of anemia of inflammation is low in the case when the value of "p" < 0.5.

The classification ability of the model was determined based on the data of the training sample and was 74.8%. The sensitivity of the model was 78.3%, and the specificity was 80.5%. The results of the Omnibus Test confirmed the statistical significance of this model ($\chi 2 = 32.325$; df = 5; p = 0.015). The coefficient of predictive categorical validity of the test was r = 0.52. The diagnostic significance of the obtained mathematical model was determined by conducting ROC analysis. The logistic regression equation is represented by the Area Under Curve. The area of the ROC curve that corresponded to our mathematical model was equal to 0.846. The Gini index was 69.2%. The obtained results indicate that this model is qualitative ("good quality").

Conclusions. Determination of the risk factors for the development of anemia of inflammation in children with acute inflammatory bacterial diseases of the respiratory organs, using the results of the proposed logistic regression equation, make it possible to predict the probability of its manifestation. The obtained results of the study are important for determining the therapeutic and preventive tactics for a specific patient in order to prevent the occurrence and/or progression of anemia of inflammation.

THE STATE OF ACID-BASE BALANCE OF THE ORAL CAVITY OF PATIENTS USING TOBACCO-HEATING SYSTEMS

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Introduction. Smoking is one of the most urgent problems of today and remains the cause of the development of severe general somatic diseases. However, despite this, new and not yet fully studied methods of smoking are gaining considerable popularity, especially among young people.

The aim of the study: to determine the acid-base state of the oral cavity based on the indicators of the rate of saliva secretion and the pH of the oral fluid in people who use tobacco-heating systems.

Materials and methods: 28 men aged 18-45 years were examined. The main group consisted of 14 people who use the tobacco heating system for smoking, the control group – 14 practically healthy people without harmful habits. Examinees of both groups do not have chronic pathologies and dental diseases.

The rate of salivation without prior stimulation was assessed after spitting the mixed saliva by patients into graduated test tubes within 5 min. Before the study, in all patients professional oral hygiene was performed.

Determination of pH values of the oral fluid was carried out using universal indicator paper manufactured by Lachema (Czech Republic) based on its color change, and compared with the diagnostic scale.

Statistical processing of the research results was carried out using Microsoft Excel and the Statistica 9.0 application program package.

Results: The average statistical value of the salivary rate indicator in the main group (0.39 ± 0.14 ml/min) was significantly lower ($p<0.05$) than in the control group (0.77 ± 0.13 ml/min). This indicates the presence of pronounced hyposalivation in examinees of the main group and coincides with the literature data, which show the detected changes in the rate of secretion under the influence of nicotine during tobacco smoking.

The pH value of the oral fluid in the main group of examinees, according to the results of our examinations, differed in the control group with a high degree of reliability of the difference (99%) and was 5.9 ± 0.19 and 6.7 ± 0.22, respectively.

Conclusions:

1. The obtained low pH values of unstimulated mixed saliva indicate the presence of acidosis, probably due to the high activity of acid-producing microorganisms against the background of reduced salivation.

2. The use of tobacco heating systems by patients can definitely be considered as a negative factor that lowers the pH of the oral fluid and the rate of saliva secretion, which can contribute to the deterioration of oral hygiene and provoke the development of dental diseases.