Considering this fact the objective of our scientific study was to rate indicators of cellular parts of the immune system in school-age children for verification severe phenotype of asthma and improve outcomes.

To achieve this purpose we have conducted our study following the two main tasks: to compare the content of T-helper cells (CD_4) children's in both clinical groups; to compare the content of T- killer/suppressor blood (CD_8) children's in both clinical groups.

60 school-age children with asthma in the remission period were comprehensively examined in the Pulmonology Department of Chernivtsi Regional Children's Clinical Hospital.

Over the course of the disease the patients were divided into two clinical groups. The first (I) clinical group consisted of 30 patients who had been registered severe asthma. The second (II) clinical group formed 30 patients, which was defined moderately severe asthma. For the main clinical features group were not differ.

All children performed immunological blood test II - III levels. The content of T-helper cells (CD_4) and T- killer/suppressor blood (CD_8) were determined by immunofluorescence using a set of monoclonal antibodies.

The results were analyzed by methods of variation statistics using statistical software StatSoft Statistica v5.0 and clinical epidemiology to the definition sensitivity (Se) and specificity (Sp) test, as well as the absolute (AR), relative (RR) and risk odds ratio (OR) indicating the 95% confidence interval (95% CI).

Most children with severe asthma recorded decreased relative content of T-lymphocyte function is associated with helper/inductor. Thus, the content of CD_4 cells less than 26,0% determined in 82,7% of children first clinical group and in 75% of subjects ($P>0,05$) the second. Thus the sensitivity of determination of the above mentioned relative content of CD_4 in the peripheral blood of pupils with severe asthma was 82,7% (95% CI 73,7-89,5) and specificity - only 25,0% (95% CI 16,8-34,6), with odds ratios of 1,5 (95% CI 0,8-3,1).

Elevated levels of CD_8 lymphocytes in peripheral blood (more than 14,0%) was determined in 69,5% of children with severe asthma phenotype, and only 37,5% of II group ($R\varphi<0,05$). Indicators of the diagnostic value of higher concentrations of T-lymphocytes in peripheral blood in detecting severe asthma phenotype relatively medium- severe disease course were as follows: sensitivity – 69,5% (95% CI 59,4-78,3), specificity – 62,5% (95% CI 52,2-71,9). Elevated to the above index content CD_8 lymphocytes in the peripheral blood associated with risk of having severe asthma phenotypes: the absolute risk – 0,3, the relative risk was equal to 1,9 (95% CI 1,4-2,6) with odds ratios – 3,79 (95% CI 2,1-6,7).

Thus, given the low likelihood ratio performance of cellular parts of the immune system in children, they are not appropriate for use on their own verification of the phenotype of severe asthma. Relative content of cytotoxic suppressor which was more then 14,0% was associated with risk of having a severe asthma phenotype with sensitivity of 69,5% and specificity of 62,5%, while the odds ratio – 3,79.

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ANALYSIS OF GENERAL CLINICAL BLOOD INDICATORS IN NEWBORNS WITH IMPAIRED FUNCTIONAL STATE OF THE CARDIOVASCULAR SYSTEM

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Nonspecific clinical symptomatology of the functional state disorders of the cardiovascular system can occur in a significant part of the pathology of the newborns, stipulating the necessity of its early diagnostics.

The aim of the study was to study the diagnostic information content of a set of indicators for a general blood test for the early diagnostics of posthypoxic myocardial damage in the newborns.

182 children were examined. Group I consisted of full-term newborns with a general state of moderate severity (65); Group II - newborns with a serious condition (57). The control (III group) were 60 relatively healthy newborns.

In the groups of the newborns under observation, indicators of the level of the red blood cells, hemoglobin, hematocrit and platelets did not significantly differ from each other, that may indicate the preservation of their functions in the presence of impaired functional state of the cardiovascular system. The leukocyte level increased in accordance with the increasing severity of perinatal pathology: in group II - up to 20.50 ± 1.09 g / l, in group I - up to 18.08 ± 1.02 g / l, in group III - up to 14, 33 ± 0.73 g / l, $p < 0.05$. An increase of the leukocytes' level already in the first day of life testified to the negative effect of the birth stress on the body of the newborns in severe perinatal pathology. The number of stab neutrophils significantly differed between groups II and III (21.78 ± 1.17 and 10.25 ± 0.55%, $p < 0.05$, in contrast to the results of group I, in which there was an upward trend - 14.73 ± 0.78%, $p < 0.05$. The lymphocyte content decreased correspondingly to an increase in the severity of the condition - in the I group to 24.44 ± 1.32%, in the II group - to 23.56 ± 1.16%, with an indicator in Group III 28.75 ± 1.50%, $p < 0.05$. The number of monocytes in the newborns of the control group under a satisfactory condition was 3.97 ± 0.19%, in average severity of the condition - 3.41 ± 0.17%, at severe perinatal pathology the indicator decrease was revealed to 2.44 ± 0.13%, $p < 0.05$. The obtained data may indicate that in group II infants there is a decrease in the function of the monocytic-macrophage immunity.

Thus, the indicators of the general blood test are diagnostically informative and can be used for early detection of the functional state disorders of the cardiovascular system in the newborns with perinatal pathology.

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DIAGNOSTIC ACCURACY WITH THE PYLORODUODENAL PATHOLOGY IN CHILDREN

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The diseases of the pyloroduodenal area are the most common digestive diseases in children and make up 59-68% of children's gastroduodenal pathologies. The infectious factor is considered by many authors to be a specific risk factor for the formation of gastroduodenal diseases in children. Chronic gastritis and duodenitis are accompanied by series of successive changes that may lead to the formation of stomach cancer and duodenum cancer in older age. Study of cell renewal helps understand that the breach will lead to hyperplasia, atrophy, metaplasia, dysplasia, and development of tumor. Therefore, patients suffering from the pathology of the pyloroduodenal region need a special attention during diagnostic measures.

The aim of research was to explore and analyze morphological changes of gastric mucosa and duodenal bulb in chronic diseases in pyloroduodenal zone in children.

We examined 72 children aged from 7 to 18 years with the diagnosis of chronic gastritis or gastroduodenitis. General clinical endoscopic examination with mandatory fence biopsies, determining acid-forming and secretory function of the stomach was conducted according to protocols. Morphological conclusion was made in accordance with the Sydney-Houston classification of chronic gastritis and domestic diagnostic criteria approved by the Ministry of Health of Ukraine. To determine the nature and depth of the lesion of the gastric mucosa and duodenal bulb we conducted a morphological study of modified fragments, most areas of the mucous membrane of the body, antrum and duodenal bulb held 57 children with chronic gastroduodenal pathology.

Helicobacter Pylori (HP) - was found in 45 (62.5%) children with severe disease ($p < 0.05$). In 21 (29.17%) children HP was not found. From the total number of infected atrophic gastritis moderately associated with HP, was diagnosed in 6 children. Gastritis and superficial gastritis with initial atrophy was found in 18 children with Hp-associated gastroduodenal pathology. In 28