



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 $14,33 \pm 0.73$ 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 $10.25 \pm 0.55\%$, $p < 0.05$, in contrast to the results of group I, in which there was an upward trend - $14.73 \pm 0.78\%$, $p < 0.05$). The lymphocyte content decreased correspondingly to an increase in the severity of the condition - in the I group to $24.44 \pm 1.32\%$, in the II group - to $23.56 \pm 1.16\%$, with an indicator in Group III $28.75 \pm 1.50\%$, $p < 0.05$. The number of monocytes in the newborns of the control group under a satisfactory condition was $3.97 \pm 0.19\%$, in average severity of the condition - $3.41 \pm 0.17\%$, at severe perinatal pathology the indicator decrease was revealed to $2.44 \pm 0.13\%$, $p < 0.05$. 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



surveyed children, HP-associated gastritis is characterized by severe infiltration of polymorphonuclear leukocytes own plate and mostly pit epithelium. Dystrophic and even necrotic epithelial changes that precede infiltration prevail at Pylori gastritis. White blood cells infiltrate already damaged, epithelium gastritis not associated with HP in 10 surveyed children, the inflammatory infiltration of the epithelium is much more pronounced than in their own plate. The results suggest that the magnitude of infection increases parallel degree of morphological changes, which necessitates a compulsory morphological study of the mucous membrane of the stomach and duodenum in case of chronic gastroduodenal pathology in children. Endoscopic study allows to detect even small changes of the structure of gastric and duodenal mucous membrane and in its various parts which are difficult to reach, accessible to X-ray cardiac, subcardiac regions of the stomach, pyloric channel and postbulbar part of duodenum, to take biopsy material of mucous membrane of the ulcers boundary zone, and the ulcer itself as well as mucosa that looks intact, for morphological and other investigations.

Thus, morphological study of diseases in pyloroduodenal zone in children nowadays remains the "gold standard" in diagnostics of the pathology of digestive tract.

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GLYCATED HEMOGLOBIN LEVEL IN CHILDREN WITH DIABETES MELLITUS TYPE I IN CHERNIVTSI REGION

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Diabetes mellitus (DM) is an etiologically heterogeneous group of metabolic diseases characterized by chronic hyperglycemia due to impaired secretion or action of insulin, or a combination of these disorders. In diabetes, there is a disruption of carbohydrate, fat and protein metabolism due to a breakdown of insulin effect on the target tissue.

Over the past decades, an epidemic of diabetes mellitus (DM) has been observed in the world, which is one of the most important problems of modern medicine. Diabetes mellitus takes the third place in terms of early disability and mortality in the advanced world.

In Ukraine, the incidence rate of diabetes among children 0-17 years old increased by 45% - from 0.11 in 2010 to 0.16 in 2016 per 1000 population. Among children 0-6 years old, the prevalence rate increased by 57% and in the age group of 7-14 - only by 15%. It is predicted that by 2025 the incidence of diabetes in Ukraine will reach 10.8% (in Europe as a whole - 9.1%).

The aim of our study is to study the levels of glycated hemoglobin as an indicator of glycemic control depending on age.

The analysis of the level of glycated hemoglobin in 186 children with type I diabetes mellitus, who are registered in the Chernivtsi region has been conducted. All children were divided into three groups depending on age: group 1 - 0-6 years old (40 children), group 2 - 7-14 years old (84 children) and group 3 - 15-18 years old (62 children). Four subgroups were distinguished in each group depending on the level of glycemic control (ideal level (glycated hemoglobin (HbA1c) up to 6.0%), optimal (HbA1c 6.05-7.5%) and suboptimal (HbA1c 7.6-9, 0%) level, and the level of glycemic control with a high risk to life (HbA1c more than 9.0%) according to the protocol No. 254 of the Ministry of Health of Ukraine dated 04/27/2006).

Among all children, the ideal level of glycemic control was observed in 15 children (8.0%), optimal in 51 children (27.4%), suboptimal in 64 children (34.4%) and with a high risk for life in 56 children (30.2%).

In patients of the first group, the HbA1c level averaged 7.43%. Of these, the ideal level of glycemic control was observed in three children, the optimal in 17, the suboptimal in 14, and life high-risk indicators were found in 6 patients.

Patients in the second age group had an average HbA1 level of 8.27%. Of these, the ideal level of glycemic control was observed in eight children, the optimal in 22, suboptimal in 32, and life high-risk indicators were found in 22 patients.