determining the shape and size of the gallbladder, deformations, congenital anomalies of its development, inflammatory changes and concrements.

The aim of the study was to evaluate the size, shape, condition of the walls and deformations of the gallbladder in children with syndrome of vegetative-vascular dysfunction using ultrasound and to determine the dependence of the revealed changes on the type of vegetative disorders.

Full clinic-paraclinic examination was carried out on 46 children with syndrome of vegetative-vascular dysfunction, aged 9 to 18 years. All the children were determined the type of vegetative-vascular dysfunction (vagotonic, sympathotonic and mixed). The initial vegetative tone was determined based on the deduction of vegetative index of Kerdo ((1 - DBP/HR) * 100, HR - heart rate, beats/min; DBP - diastolic blood pressure, mm Hg).

Vagotonia was detected in 10 children (21,7 ± 0,6 %), sympathicotonia was observed in 26 children (56,5 = 1,1%), p <0,01. Changes of gallbladder (increased in relation to age norm) were detected in 23 children (50,0 %) with syndrome of vegetative-vascular dysfunction. 20 children (43,5 %) had various deformities of the gallbladder: in the upper third (12 children), cervix and body (2 children), neck (7 children), S-shaped outlet (3 children). In 24 children (52,2 %) the walls of the gallbladder were not altered, in 22 (47,8 %) they were slightly compact, ≥ 2 mm thick- in 7 children (15,2 %). Anechoic content of organ was in 39 children (84,8 %), thick bile was detected in 5 children (10,9 %) and sediment – in 2 children (4.3%). Concrements were not found. Murphy's symptom was negative in all examined children. Among patients with syndrome of vegetative-vascular dysfunction who had symptoms of gallbladder dysfunction there were 4 children (17,4 ± 0,5 %) with eutonia, 5 children (21,7 = 0,6 %) with vagotonia, and 14 children (60,9 ± 1,1 %) with sympathicotonia, p<0,01. Detection of gallbladder dysfunctions, which often occur in children age, needs special attention in connection with the possibility of further transformation from functional into organic ones.

Consequently, gallbladder dysfunctions, according to ultrasound data, more often occurred in children with predominance of the sympathetic part of vegetative nervous system. Functional disorders of gallbladder in children with syndrome of vegetative-vascular dysfunction require mandatory detection, dynamic observation and differentiated approach to further treatment.

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ABILITIES OF LACTASE DEFICIENCY CORRECTION IN PRE-TERM BORN INFANTS

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Enteral nutrition support in prematurely born children remains an urgent task of neonatology in connection with the proven influence of the qualitative postnatal feeding on further morbidity and development. Taking into consideration the above mentioned data, this paper aims at evaluating the effectiveness of replacement enzyme therapy in lactase deficiency in the complex aftercare of premature newborns in the hospital. 26 pre-term infants were examined in the neonatal center of the Regional Children's Clinical Hospital in Chernivtsi.

Criteria for inclusion into the study were the following: prematurely born infants aged 2-3 weeks of life with reduced tolerance to food under conditions of stability. The criteria for assessing the effectiveness of the replacement therapy were: evaluation of clinical and laboratory indices according to the dynamics of the weight curve, signs of improving tolerance to food during two weeks, normalization of indices of scatological study, carbohydrates content and feces pH according to the Benedict`s test. Two clinical groups of observation have been formed. The first (I) group consisted of 13 premature newborns who received complex treatment with "Mamalak" replacement therapy for 2 weeks. The comparison groups were juxtaposed by sex and average weight at birth. The obtained data were analyzed by means of methods of variation statistics using "Statistica 6.0" program.

In the analysis of the peculiarities of the early neonatal period course, it was noted that the proportion of deeply premature infants (up to 32 weeks of gestation) in the I clinical group was 46.2% versus 38.5% (Pt>0.05) of cases in the second group of observation. The severe condition on admission to the hospital was observed in the I clinical group in 54% of cases compared with 15.5% of children (P<0.05) of the comparison group. Indications for the presence of perinatal central nervous system damage, neonatal jaundice occurred in both observation groups with the same frequency. More than half of the children in group I (53.8%) at the time of admission received partial parenteral nutrition versus each fourth child (23.0%), (Pφ<0.05) of the second group of observation.

The main complaints of the digestive system impairments were reduced tolerance to food, periodic distension, and child anxiety during feeding. In patients of the I clinical group, who received the "Mamalak" preparation for two weeks, the percentage of children whose single feeding rate did not reach 30 ml was reduced by almost four times: from 30.8% to 7.7%, and the proportion of patients with a single feeding rate more than 30 ml increased from 69.2% to 84.6%. In the II clinical observation group, the proportion of children with a single feeding rate of up to 30 ml decreased in this period almost twice from 38.5% to 15.4%, while the one where feeding rate exceeded 30 ml, remained stable (61.9-69.2% of cases). Despite the fact that in the I clinical group the proportion of infants with body weight less than 2000 g at the time of replacement therapy was slightly lower (46.1%) than in the II clinical group (61.5%), the use of "Mamalak" preparation in the complex treatment of patients of the I group showed a tendency to a faster weight gain. Analyzing the indices of scatological study according to the Benedict's test, it should be noted that among infants of the I clinical group feces pH less than 5.0 was noted in 46.1% of children, and in patients of the II group of comparison in 30,8% of cases. In the process of replacement enzyme therapy, we did not notice significant differences in the changes

in this index, which may be due to the short-term use of the "Mamalak" preparation and the anatomical and physiological characteristics of prematurely born infants. At the same time, we have traced a clear tendency to the decrease in the concentration of carbohydrates in feces almost three times against the background of the replacement enzyme therapy. Therefore, the percentage of infants whose concentration of carbohydrates in feces exceeded 0.6% has decreased from 84.5% to 30.7% (Δ 53.8%) in the I group versus the trend from 61.4% to 38.3 % (Δ 23%) in the comparison group. To sum it up, we can state that the obtained results prove the effectiveness of the early use of replacement enzyme therapy in the feeding of pre-term born infants with reduced tolerance to food in the hospital.

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THE ROLE OF MEDICOGENETIC CONSULTATION AT PRADER–WILLI SYNDROME

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Prader-Willie's syndrome (PWS) is the most common cause of genetically predisposed high-grade obesity in children over one year old. The syndrome is also characterized by a delay in psycho-verbal and sexual development. Its population frequency is 1:10 000. Prader-Willie's syndrome occurs as a result of disorders in the PWS-AS area function: a) in 70 % of cases – as a result of deletion in the 15 parentage chromosome; b) in 20 % – in the absence of the 15 parentage chromosome in the child's cells or its replacement with a duplicated maternal chromosome (the phenomenon of one-childhood dysosomy); c) in 5 % – due to the deactivation of a structurally normal part of the PWS-AS of the parent chromosome in the fetus as a result of methylation. Similar changes in the allelic region of the 15 chromosome of maternal origin lead to Angelman syndrome, that's why Prader-Willie's syndrome is included in the group of diseases caused by genomic imprinting.

The purpose of the work was to assess the role of medical-genetic counseling in diagnosis of Prader-Willie's syndrome.

Patients with Prader-Willie's syndrome require multidisciplinary, differential, according to the age of the child, monitoring of the state of the main organs and systems, especially nervous and endocrine ones. The diagnosis is verified by a molecular-genetic study of the 15th chromosome pair. For the period of 2000-2016, 15 children (0-18 years old) with a suspicion of Prader-Willie's syndrome presented for medical-genetic counseling: 5 (33,33 %) of them were diagnosed syndromologically (including Lviv MGC), in 3 (20,0 %) of them the diagnosis was confirmed cytogenetically. 7 (46,7 %) families refused to follow up the verification of Prader-Willie's syndrome and as disabled children are observing by psychiatrists and/or neurologists.

Parents of children with Prader-Willie's syndrome are advised to undergo a genetic test before planning the next pregnancy, as there is a risk that the next child may be born with the same syndrome. The probability of a sick child is less than 1 % if it has a gene deletion or unipolar dysemia. If the child has a mutation in a region that is characterized by the phenomenon of imprinting, the probability increases to 50 %. The risk of recurrence, if one of the parents has a balanced translocation, depends on the nature of the translocation, but may reach 25 %; in contrast, all patients with unbalanced translocation, described to date, had a chromosomal reorganization.

Taking into account the foregoing, the medical-genetic counseling of such families is of particular importance, namely the prenatal testing of Prader-Willie's syndrome.

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A CASE-CONTROL STUDY OF THE IL-1B GENE (C-511T) AND IL-4 GENE (C-590T) SINGLE NUCLEOTIDE POLYMORPHISM IN CHILDREN WITH CHRONIC SINUSITIS *Department of Pediatric Surgery and Otolaryngology*

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The mutations of the genes coding the components of the immune response may be the basis of the development of chronic inflammatory processes of the upper respiratory airways. The genetically determined balance between cytokines production influences the force and direction of the inflammatory response.

The aim of the study was to evaluate the association between the single nucleotide polymorphism (SGP) of the IL-1β gene (C-511T) and the IL-4 gene (C-590T) with the development of chronic sinusitis (CS) in children.

We examined 100 children with CS and 35 children of the control group (CG). All children were genotyped for the IL-1β (C-511T) SGP and the IL-4 (C-590T) SGP by polymerase chain reaction and restriction analysis.

There were no differences between CS and CG in the distribution of C-allele of the IL-1β SGP. Significantly higher frequency of the T-allele of the IL-4 SGP was revealed in CS-children (43,5% vs. 24,3% in healthy controls, $p<0,05$). The CC-genotype of the IL-1β dominated in the CS-children (46% vs. 22,9% in CG, odds ratio – 2,9; CI 1,2-6,9, $p<0,05$) as well as domination of the CT-genotype (65% vs. 42,9% in CG, odds ratio – 2,5; CI 1,1-5,4, $p<0,05$) and TT-genotype (11% vs. 2,9% in CG, odds ratio – 4,2; CI 0,5-33,8, $p<0,05$) of the Il-4 SGP was revealed in CS-patients.

The carriers of the T-allele of the IL-4 (C-590T) SGP and of the CC-genotype of the IL-1β (C-511T) SGP had increased risk of the development of chronic sinusitis.