## МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»



# МАТЕРІАЛИ

### 104-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ 06, 08, 13 лютого 2023 року

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**The aim of the study** was to study the structure of thyroid pathology among children aged 0-18 years with type 1 diabetes mellitus (T1DM), who were in-patients at the Regional Children's Clinical Hospital in Chernivtsi during 2020-2021.

**Material and methods.** 27 children with type 1 DM living in Chernivtsi region with thyroid pathology (15 girls (55.6%) and 12 boys (44.4%)) were examined. The average age of patients was  $9.62\pm4.45$  years.

**Results.** On average, the weight of the subjects at birth was 3304 g, height - 51 cm. Breastfeeding was carried out up to  $9.6\pm1.9$  months. Prevention of rickets was carried out in all children up to  $8.8\pm1.5$  months. All children were prevented from having iodine deficiency by adding iodized salt to food.

When studying genealogy, heredity was burdened in 16 children (59%). According to the duration of the disease, children with type 1 diabetes mellitus were divided into four groups: those who have been ill for one year - 3 children (11.1%), from one to two years - 6 children (22.2%), two to four years - 12 children (44.5%), more than 10 years - 6 children (22.2%). According to the level of glycemic control, all the subjects were divided into subgroups: with optimal glycemic control - 10 (37%), suboptimal - 8 (29.7%), with the high risk for life - 9 children (33.3%).

In 20 patients, diffuse non-toxic goiter of IA stage (74%) was detected, in six children hypertrophic form of autoimmune thyroiditis (22.2%) and in one child uninodular goiter (3.8%) were diagnosed. Autoimmune thyroiditis occurred in these patients already because of diabetes mellitus. In two patients it occurred three years after the detection of type 1 diabetes, and in four - after four years of the disease. Diffuse non-toxic goiter was diagnosed at the first diagnosis of type 1 diabetes in 13 patients (48.1%), and in seven (25.9%) - within 2-4 years after the onset of the disease. Nodular goiter was diagnosed in a child who has been suffering from type 1 diabetes for more than four years.

All children underwent analysis of serum TSH, T3 free and T4 free levels, the results of which were normal. To confirm the diagnosis of autoimmune thyroiditis, an analysis for antibodies to thyroid peroxidase in the blood serum was performed and the latter was found to be 3-4 times above the norm. Ultrasound of the thyroid gland was performed in all patients. In children with diffuse non-toxic goiter ultrasonography showed diffuse enlargement of the gland without changes in echogenicity. In autoimmune thyroiditis, the ultrasound picture was typical for this pathology, that is, with altered echogenicity, the presence of echo+ and echo- signals on the background of thyroid enlargement. In a child with uninodular goiter, a nodule was detected in the right lobe of the thyroid gland with a diameter of  $0.8 \text{ cm}^3$  against the background of diffuse enlargement of the latter.

**Conclusions**. Among the examined patients, 74.0% had diffuse non-toxic goiter of IA stage (74%), 22.2% of children had hypertrophic form of autoimmune thyroiditis and one patient had uninodular goiter. Autoimmune thyroiditis occurred in these patients already on the background of diabetes mellitus. Diffuse non-toxic goiter was diagnosed at the first detection of type 1 diabetes in 48.1% of children, and in 25.9% - within 2-4 years after the onset of the disease. All children were in a state of euthyroidism.

#### Sazhyn S.I. CLINICAL AND ANAMNESTIC RISK FACTORS ASSOCIATED WITH LONG-TERM HOSPITALIZATION IN PRESCHOOL AGE PATIENTS WITH COVID-19

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**Introduction.** For more than 2,5 years humanity has been living in the conditions of a pandemic caused by the new coronavirus infection - COVID-19, the consequences of which are more than 600 million infected and more than 6,5 million deaths from complications caused by the new strain of the coronavirus called SARS-CoV-2. The relevance of solving medical, social, economic and other problems related to the SARS-CoV-2 pandemic is reflected in a large number of scientific works devoted to the epidemiology, pathogenesis and treatment of the coronavirus disease.

**The aim of the study.** To analyze the frequency of typical symptoms and assess risk factors associated with long-term hospitalization for infection caused by the SARS-CoV-2 in preschool children in order to improve prediction of disease severity and duration.

**Material and methods.** On the base of the Chernivtsi Regional Children Clinical Hospital were examined 54 pre-school age patients hospitalized with laboratory confirmed diagnosis COVID-19.The average age of patients was  $4,8\pm0,2$  years, the percentage of boys and girls reached 51,8% and 48,2%, respectively, most of the hospitalized children lived in rural areas (72,2%). Depending on the inpatient treatment duration two clinical groups were formed. The first (I) group included 25 patients who were hospitalized for less than 10 days, the second (II) clinical group consisted of 29 children of preschool age with a term of hospitalization of 10 or more days. There were no significant differences in age, sex, place of residence in the clinical groups. The impact of risk factors was assessed by attributable risk (AR), relative risk (RR), odds ratio (OR) and their 95% confidence intervals (CI).

**Results.** It was established that at the outpatient stage the frequency of hyperthermia in patients of the first clinical group probably occurred more often ( $76,0\pm8,5$  versus  $51,7\pm9,3$ , P<0.05). At the same time, among preschoolers of the II clinical group complaints of muscle and joint pain were registered significantly more often ( $34,5\pm8,8$  versus  $12,0\pm6,5$ , P<0.05). The duration of cough until hospitalization was 2,7 and 4,3 (P<0.05) days in I and II clinical groups. The frequency and duration of symptoms such as weakness, loss of appetite, headache, nasal congestion, sore throat, dyspnea, nausea, vomiting, diarrhea, abdominal pain were not significantly different.

During inpatient treatment, the duration of weakness (3.4 and 4.9 days) and cough (3.9 and 6.4 days) was noted significantly more often among patients of II clinical group (P < 0.05).

The following clinical and anamnestic factors of longer hospitalization were identified: two or more children in the family with AR – 40,4%, RR – 2,5 (95% CI 1,3-4,7), OR – 5,6 (95% CI 1,7-18,0); hospitalization after 5 days from the onset of the disease (AR – 15,0%, RR – 1,2 (95% CI 0,5-2,9), OR – 2,4 (95% CI 0,6-8,9); body temperature on the disease onset  $<38,0^{\circ}$ C (AR – 17,4%, RR – 1,3 (95% CI 0,7-2,7), OR – 2,2 (95% CI 0,7-7,3); myalgia/ arthralgia at the outpatient stage with AR – 19,0%, RR – 1,3 (95% CI 0,6-3,5), OR – 3,3 (95% CI 0,8-13,9).

**Conclusions.** Among preschool children infected with SARS-CoV-2, hospitalization did not depend on gender and age, but three times more often occurred in residents of rural areas. Clinical manifestations of COVID-19 in preschool children were multi-symptomatic with the following signs predominating: weakness, increased body temperature, loss of appetite, nasal congestion, cough. The risks factors associated with long-term inpatient treatment in preschool age patients were: large family, late hospitalization (after 5 days from the onset of symptoms), normal or subfebrile body temperature, complaints of muscle and joint pain at the disease onset.

#### Sorokman T.V. THE COURSE OF ATOPIC DERMATITIS IN CHILDREN AGAINST THE BACKGROUND OF H.PYLORI INFECTION

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**Introduction**. In recent years, allergies have taken a leading place in the list of the most common diseases. At the 29th Congress of the European Academy of Allergology and Clinical Immunology, it was noted that the greatest increase in the incidence of allergies is observed in the pediatric population. It is assumed that with atopic dermatitis, the mucous membrane of the stomach and gastrointestinal tract, being sensitized since childhood, creates favorable conditions for the vital activity of *H.pylori*, which disrupts digestion processes and is an additional factor of sensitization.

The aim of the study was to analyze the course of atopic dermatitis (AD) in children against the background of *H.pylori* infection.

**Material and methods.** A comprehensive clinical and laboratory-instrumental examination of 28 children with atopic dermatitis against the background of *H.pylori* infection, aged from 5 to 15 years, was carried out.