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БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»

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Конференція внесена до Реєстру заходів безперервного професійного розвитку, які проводитимуться у 2023 році №5500074

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overall (Neha A. Patel, 2020), further studies revealed a risk of SARS (B.Cristophers et al, 2022), encephalitis (L. Urso et al., 2022) and other complications, especially in children with comorbidities.

The aim of the study. Thus the aim of the work was to analyze the features of the clinical manifestation and adjunct results in children with COVID-19 infection in the Chernivtsi region during the first year of the pandemic.

Materials and methods. Two hundred and sixty-three clinical cases of COVID-19 in hospitalized children of Chernivtsi region (Ukraine) for the period from March 2020 to March 2021 were analyzed. The peculiarities of the clinical course, symptoms, and laboratory data of children in the early and later periods of the pandemic were assessed. Clinical observations of the peculiarities of COVID-19 cases in the population of Chernivtsi region during the initial 12 months of the pandemic indicate persistent maintenance of children's incidence of coronavirus disease, which is observed throughout Ukraine. In particular, during the last six months, the proportion of sick children to the total number of patients fluctuated between 3.6% and 5.8%, which – evaluated against the background of an overall increase in the incidence of COVID-19 – showed an increase in morbidity in children and may be explained to some extent by the transient mutations of the SARS-CoV-2 virus. There is also a certain phenotypic difference between coronavirus disease at the beginning of the COVID-19 pandemic in Ukraine and today. The variable nature of this life-threatening disease, the progressive spread of infection in the pediatric population, and the recent appearance of more severe cases of COVID-19, require careful analysis of clinical and epidemiological characteristics of this pathology, taking into account the period when it occurred.

Results. The cohorts of patients during all periods of the pandemic were dominated by patients with a moderate course of the disease, though the frequency of severe cases compared to the beginning of the pandemic in the 1st quarter of 2021 increased almost fourfold. At the same time, there was a significant decrease in the number of patients with mild coronavirus disease compared to the initial observation period, which, in our opinion, reflected better sorting of patients and management of mild cases in outpatient settings. Clinical and epidemiological analysis of the frequency of severe cases of COVID-19 in hospitalized children showed a probable increase in their share in the 1st quarter of 2021 compared to the previous periods of the COVID-19 pandemic: relative to the 2nd quarter of 2020, with an odds ratio (4.7% CI: 1.86–12.02), RR – 1.8, absolute risk (AR) – 34.5%, relative to the 3rd quarter of 2020 – OR = 3.7 (95% CI: 1.56–8.76), RR = 1.7, AR = 30.1, relative to the 4th quarter of 2020 – OR = 2.0 (95% CI: 0.94–4.05), RR = 1.35, AR = 16.4.

During over a year of the COVID-19 pandemic, the Chernivtsi region was one of the "anti-leaders" in coronavirus morbidity and mortality, with the proportion of children with COVID-19 exhibiting a growing tendency. Dynamic analysis of the features of the course of COVID-19 in children showed phenotypic deviations of the disease with insensitivity to the prescribed treatment of nonspecific symptoms of the nervous system and gastrointestinal tract, decreasing duration and severity of fever, and increasing incidence of pneumonia (OR = 2.7) and multisystem inflammatory syndrome (OR = 6.5).

Conclusions. Thus, during the 1st year of the pandemic, the clinical course of COVID-19 in children showed phenotypic deviations with a tendency for an increased incidence of severe forms of the disease, resistant to the prescribed treatment.

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IS IT POSSIBLE TO PREDICT THE DEVELOPMENT OF BRONCHIAL ASTHMA IN NEWBORNS?

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Introduction. Asthma is a complex respiratory disease characterized by inflammation and reversible obstruction of the airways that can lead to diverse symptoms such as wheeze, breathlessness, chest tightness, and cough. Asthma affects approximately 350 million people from

all age groups worldwide and causes around 350,000 deaths per year. Approximately 45% of infants have one episode of wheezing in their first year of life, and about 20% have recurrent wheezing.

The aim of the study. Considering this fact the objective of our scientific study was to find predict factors to prevent the development of asthma in children.

Materials and methods. To achieve this purpose we have conducted our study following the task: Afind some predict factors in infants which can show about the develop bronchial asthma in future life. We carried out retrospective observation children who at an early age received inpatient treatment for the first episodes of bronchial obstruction in the Chernivtsi Regional Children's Clinical Hospital. The results were analyzed by methods of variation statistics 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).

Results. Since in 91.9±1.8 % of patients from the group of children examined by us the age of mothers was 18-35 years, fathers - 18-50 years, it is possible it was assumed that the influence of this factor on the prognosis of bronchial obstruction in these children was insignificant.

In the cohort of our patients, the first children in the family prevailed (86.8%), and only 11.4% of patients were born as the third or fourth child in the family ($P\varphi<0.01$).

We found that if both parents suffer from an atopic form of asthma, allergic rhinitis/conjunctivitis and/or atopic dermatitis, the risk of developing an allergic disease in a child is 4 times higher than in children whose parents do not have allergic diseases. The risk of bronchial asthma is maximum if the parents are affected by the same target organ (bronchopulmonary system), and reaches 60-80% in such families. If only one parent or sibling suffers from allergic pathology, the risk for the child increases 2 times.

Among the children examined by us, patients whose body weight at birth exceeded 3500 g prevailed (58.2±4.8%), while children with a birth weight of less than 2500 g were noted only in (2.8±1.6%) cases ($P<0.01$). Excess body weight at birth was associated with the risk of AD 3.17 (95% CI 0.98-10.1). In normal birth weight children, the risk of allergies was adversely link with birth weight, as higher birth weights had a higher risk for diseases.

At the same time, 84.9±3.4 % patients were breastfed until 6 months, whereas only 11.2±3.1% of patients were artificially fed ($P<0.01$). Indicators of the diagnostic value of the presence of breast-feeding for the development of asthma in schoolchildren compared to artificial feeding were characterized by high sensitivity and specificity: 84.9% (95%CI 76.3-91.3) and 88.8% (95%CI 80.8-94.2). 83.9±3.6% patients did not get sick, or suffered isolated childhood infectious diseases, and only in 13.2±3.3% cases ($P<0.05$) a high infectious index was registered (more than 3 infectious diseases in the anamnesis).

Conclusions. If both parents suffer from an atopic form of asthma, allergic rhinitis/conjunctivitis and/or atopic dermatitis, the risk of developing an allergic disease in a child is 4 times higher than in children whose parents do not have allergic diseases. Indicators of the diagnostic value of the presence of breast-feeding for the development of asthma in schoolchildren compared to artificial feeding were characterized by high sensitivity and specificity: 84.9% (95%CI 76.3-91.3) and 88.8% (95%CI 80.8-94.2).

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THYROID GLAND PATHOLOGY IN CHILDREN WITH TYPE 1 DIABETES MELLITUS

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Introduction. Diabetes mellitus and thyroid diseases are two of the most common endocrine disorders in pediatric clinical practice, as metabolic disorders, insulin and thyroid hormone levels can affect each other.