

hospitalization is needed, the health care team should be aware so as to modulate management, particularly in children with type 1 diabetes mellitus and hypoglycemia. The current recommended drugs for the treatment of severe COVID-19, dexamethasone, and remdesivir, may cause hyperglycemia, an adverse effect that doctors should keep in mind when caring for patients with diabetes mellitus and COVID-19. Adverse impact on glycaemic control and lifestyle was seen mostly in some groups of pediatric patients (pubertal adolescent boys), while other researchers have shown that glycemic control during the coronavirus lockdown can be adequately achieved and be comparable to the pre-lockdown period in children with type 1 diabetes mellitus. In an Indian study, no strong evidence to suggest higher mortality rates in children with type 1 diabetes mellitus in comparison with their healthy peers was shown but poor outcomes and more deaths were recorded in diabetic adults after the second wave of COVID-19 infection. However British researchers have shown that the direct comparison of longitudinal data from before and during the first COVID-19 wave clearly demonstrated the increased severity of presentation of newly diagnosed type 1 diabetes in children in the context of high circulating COVID-19 cases in the community. This may be indirectly due to the delayed presentation or directly due to the emerging complex relationship between SARS-CoV-2 infection and glucose metabolism or diabetes pathogenesis. There are few reports presenting patients with multisystem inflammatory syndrome in children (MIS-C) associated with COVID-19 and new onset diabetes. Pediatric outcomes and prognosis in case of COVID-19 and diabetes mellitus association seem to be similar to their non-diabetic-peers and consistently milder than adults with diabetes. Patients with diabetes mellitus are at a high risk of poor prognosis with COVID-19 and vaccination should be prioritized for them.

New-onset diabetes and severe metabolic diabetic complications have been observed in children during the COVID-19 pandemic.

Buryniuk-Hloviak H.P.

**PECULIARITIES OF BRONCHIAL ASTHMA COURSE DEPENDING ON THE
FUNCTION OF THE PARATHYROID GLANDS IN PATIENTS WITH VARIOUS
AMOUNT OF BASIC THERAPY BY MEANS OF INHALATION
GLUCOCORTICOSTEROIDS**

*Department of Pediatrics and Children Infectious Diseases
Bukovinian State Medical University*

Bronchial asthma (BA) remains the most widely spread disease of the respiratory system in spite of other diseases modern medicine deals with, and it can deteriorate the quality of life of patients. A leading role in the treatment of the disease belongs to inhalation glucocorticosteroids (iGCS), though the issue of their safe administration still remains important.

Objective of our research was to study peculiarities of bronchial asthma course depending on the function of the parathyroid glands in patients with various amount of basic therapy including iGCS. 72 children suffering from persisting bronchial asthma (pBA) were examined comprehensively on the base of Chernivtsi Regional Children's Clinical Hospital. An average concentration of the parathyroid hormone (PTH) in the blood serum of children was $22,68 \pm 5,58$ pg/ml, which was within the normal limits (according to the producer's figures the norm is 10,4-66,5 pg/ml). Meanwhile, distribution of the indices obtained enabled to determine that 32,2% of patients had zero value, 20,0% of them did not reach the lower limit of the norm, 8,9% - had indices higher than that of the upper limit, and only 38,9% were within the normal range. PTH concentration in the blood serum of patients with uncontrolled pBA was found to differ reliably ($11,08 \pm 4,5$ pg/ml) from that of the patients with a controlled course of the disease – $51,5 \pm 3,5$ pg/ml ($Pt < 0,05$), which was indicative of an inconsiderable tendency (within the normal values) to decrease the function of the parathyroid glands with an uncontrolled course of BA.

Considering this tendency, two groups of comparison were formed for the study of peculiarities of persisting BA in patients depending on parathyroid hormone concentration in the blood serum. group included 32 patients with PTH concentration in the blood serum higher than 10,0 pg/ml, and – 40 children suffering from pBA with lower values indicative of the parathyroid

function. Clinical-instrumental peculiarities of asthma course were studied considering the norm of PTH in the blood serum within the range of 10,4-66,5 pg/ml (according to the producers' figures).

Natural changes of PTH content in the blood serum of patients depending on the doses of iGCS were not found except the range of high doses. Thus, in case of a low concentration of PTH in the blood serum children received therapy with low and average doses of iGCS: OR = 3,6 (95%CI 1,9 - 6,6), OR = 2,0 (95%CI 1,6 - 2,5), $r = 0,31$. High doses to certain extent might promote osteoporosis development and calcium remove from the bones, which in its turn stimulated synthesis of the parathyroid hormone.

Therefore, a conclusion can be drawn that 52.2% of schoolchildren suffering from bronchial asthma do not have normal values of the parathyroid hormone in the blood serum, and in case of an uncontrolled course of bronchial asthma its concentration 5 times decreases and correlates with the period of administration of systemic GCS during BA attacks ($R=0,72$). Patients with parathyroid hormone concentration in the blood lower than that of the norm require 2,5 times less commonly high doses of iGCS with underlying disorders of the ventilation function (Hensler index less than 70,0%) of the respiratory passages (OR=5,4).

Haras M.N.

NEONATAL COVID-19 AS A NEW EXPERIENCE IN THE PANDEMIC ERA

*Department of Pediatrics and Children Infectious Diseases
Bukovinian State Medical University*

Biologically plausible routes of perinatal SARS-CoV-2 transmission include transplacental, contact with infected secretions during delivery and with respiratory droplets after delivery, and breast milk. Low rates of virus positivity in relevant biological specimens suggest that perinatal transmission is uncommon, but accumulating evidence indicates that some neonates who are born to mothers with SARS-CoV-2 do obtain positive test results for the virus.

The purpose of the study was to analyze the peculiarities of coronavirus disease COVID-19 in the neonatal period on the example of 2 clinical cases. The newborn full-term girl was under inpatient observation from the 4th to the 17th days of life. The girl was born from SARS-CoV2 positive and COVID-19 respiratory symptomatic mother (by RT-PCR). The child's grandmother was the first member, who suffered from pneumonia caused by SARS-CoV2, who was the source of novel coronavirus infection in the family. Immediately after birth, nasal and oral swabs were taken, the result gRT-PCR RNA-SARS-CoV-2 was positive. During the observation, the child was breastfed and showed signs of physiological adaptation of the newborn without health abnormalities. Cells blood count (CBC) was within normal ranges, also C-reactive protein (CRP) level didn't elevate. Another full-term breastfed newborn was hospitalized with mild respiratory symptoms (coryza, dry cough and pharyngitis) and low-grade fever on the 24th day of life (2nd day of disease onset). The child's mother had the same symptoms. Swabs' results of both mother and newborn (gRT-PCR RNA-SARS-CoV-2) were positive. CBC and CRP levels were within normal ranges. All symptoms were reduced in 5 days. In both cases, the mothers and children received two negative gRT-PCR RNA-SARS-CoV-2 results. The presented cases demonstrated the asymptomatic COVID-19 in the early neonatal period where the child was born from symptomatic PCR confirmed COVID-19 mother; and mild symptomatic COVID-19 in a child that was infected by symptomatic mother in the late neonatal period.

Horbatiuk I.B.

CLINICAL AND PARACLINICAL MARKERS OF INFLAMMATORY ACTIVITY IN ACUTE TONSILLOPHARYNGITIS IN CHILDREN

*Department of Pediatrics and Children Infectious Diseases
Bukovinian State Medical University*

The objective is to study clinical and paraclinical markers of inflammatory activity in acute non-streptococcal and streptococcal tonsillopharyngitis in children to address rational treatment tactics.