МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ

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106-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького колективу
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Матеріали підсумкової 106-ї науково-практичної конференції з міжнародною участю професорсько-викладацького колективу Буковинського державного медичного університету (м. Чернівці, 03, 05, 10 лютого 2025 р.) – Чернівці: Медуніверситет, 2025. – 450 с. іл.

У збірнику представлені матеріали 106-ї науково-практичної конференції з міжнародною участю професорсько-викладацького колективу Буковинського державного медичного університету (м. Чернівці, 03, 05, 10 лютого 2025 р.) зі стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

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The aim of the study. To analyze the burden of influenza and influenza-like illness and age, epidemiological and clinical features of respiratory viruses among in-patient children in the winter-spring season of 2022-23.

Material and methods. We analyze 143 inpatient cases of influenza and influenza-like illness of children at the Chernivtsi Regional Children's Clinical Hospital since December 2022 till April 2023. Verification of viruses was carried out using PCR-RT of nasopharyngeal swabs (97 – influenza A, 10 – influenza B, 11 – adenovirus, 8 – RS virus, 11 – metapneumovirus, 6 – rhinovirus).

Results. In this study, school-age children predominantly presented with influenza. Absence of an established history with the source of virus in adenovirus and rhinovirus infection may indicate a certain number of asymptomatic forms of these infections. At the same time, the identification of a burdened history with influenza and metapneumovirus can be explained mostly by the manifest forms of these infections. Most children were hospitalized for 3-4 days of illness, the RSV infection turned out to be quite rapid and aggravating, as evidenced by an earlier period of hospitalization and a longer stay in the hospital. The diseases representation is mostly represented by lower respiratory tract infections, such as bronchitis and pneumonia. The severity of the disease in most patients was associated with respiratory failure in some cases in combination with dehydration phenomena. The predominance of dehydration was associated with refusal to eat and drink (in case of influenza B) and vomiting and diarrhea (in the case of adenovirus).

Conclusions. The burden of respiratory viruses identified in children corresponded to the results of European studies of winter-spring season 2022-23 at the end of the COVID-19 pandemic with the dominance of the influenza A virus. The heterogeneity of epidemiological history indicated a different manifestation of different respiratory viruses. Lower respiratory tract infections dominated due to the selectivity of inpatient children group and severity according to respiratory failure and dehydration.

Horbatiuk I.B.

STREPTOCOCCAL ACUTE TONSILLOPHARYNGITIS AND ITS CONSEQUENCES IN CHILDHOOD

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Introduction. Acute tonsillopharyngitis is among the most prevalent conditions in pediatric care, accounting for half of all illnesses.in pediatric patients. Tonsillitis is an infectious disease that causes inflammation of the palatine tonsils. The causative agents can be both bacteria (most often group A beta-hemolytic streptococcus) and viruses (especially in early age). Despite the capabilities of modern medicine, streptococcal tonsillitis remains a threat in terms of long-term consequences.

The aim of the study. To study the clinical manifestations of long-term consequences of acute streptococcal tonsillopharyngitis in children.

Material and methods. To achieve this goal, the study included 102 children with acute tonsillopharyngitis, who were divided into two clinical groups. The first group consisted of 68 patients with non-streptococcal acute tonsillopharyngitis, and the second group consisted of 34 children with beta-hemolytic streptococcus group A in the bacterial culture – the group with streptococcal acute tonsillopharyngitis. The groups were comparable in terms of their main characteristics.

Results. Prospective 1-year follow-up of children with acute tonsillopharyngitis revealed that every third child in group I and half of the representatives of group II had various complaints associated with vegetative-vascular dystonia syndrome. When determining the Kerdo index, values higher than +10, indicating the presence of sympathicotonia in a child, occurred in clinical group I in 52.6% of cases, and in representatives of group II – in 60.7% of observations. Unsatisfactory results of Rufier-Dixon test, reflecting decrease in tolerance to dosed physical activity, were noted in children with non-streptococcal acute tonsillopharyngitis in 2.6 cases and in the control group – in 29.6% of observations ($P<0.05$).

Conclusions. Children with acute streptococcal tonsillopharyngitis exhibited a notably higher risk of cardiac performance decline with measured physical activity after one year.

Sazhyn S.I.

IS BODY MASS INDEX ASSOCIATED WITH POOR LEVEL OF ASTHMA CONTROL IN SCHOOL-AGE CHILDREN?

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Introduction. Asthma is a common, chronic respiratory disease affecting 1–29% of the population in different countries. According to Global Strategy for Asthma Management and Prevention (GINA) the long-term goal of asthma treatment is to achieve the best possible long-term outcomes for the patient. It includes symptom control and future risk of adverse outcomes. Poor symptom control is burdensome to patients and increases the risk of exacerbations, but patients with good symptom control can still have severe exacerbations. Obesity is known to be a risk factor for developing bronchial asthma in children, but there are difference opinions about the effect of overweight on asthma symptom control and future adverse outcomes.

The aim of the study. To evaluate the association between body mass index (BMI) and level of asthma control in school-age children to improve management of bronchial asthma.

Material and methods. On the base of the Chernivtsi Regional Children Clinical Hospital were observed 62 children who are suffered from bronchial asthma. According to the BMI of patients two clinical groups were formed. The first (I) group included 38 patients with BMI less than 20.99 kg/m^2, the second (II) group was formed of 24 children with BMI $\geq$ 21.0 kg/m^2. The clinical groups were compared by gender, place of residence, severity and duration of disease. The «Asthma control test» (ACT) was used to determine the symptom control. Pulmonary functional tests (initial forced expiratory volume in the first second (FEV_1), peak expiratory flow (PEF) and airways reversibility) were performed to assess potential risk of future adverse outcomes like asthma attack. The impact of risk factors was evaluated by attributive risk, relative risk, odds ratio and their 95% confidence intervals (CI).

Results. According to the results of the ACT the average value of the scores was 20.2 (95% CI 19,3-21,2) in patients of I clinical group versus 17.1 (95% CI 16.0-18.5) ($P<0.05$) in school-age children with overweight. Thus, the attributive risk of not achieving control over asthma symptoms in children of the II clinical group was 28.2%, relative risk – 1.7 (95% CI 1.0-3.0) with odds ratio – 3.2 (95% CI 0.8-13.0). At the same time, there was no significant difference in spirometric indices in the comparison groups. The average value of the initial FEV_1 was 97.6% versus 96.2%, PEF – 82.6% versus 81.5%, bronchodilator responsiveness after inhalation of short-acting β2-agonist (a test with a result of 12.0% or higher is considered positive) – 7.2% and 9.6% among patients of I and II clinical group. Therefore, overweight in children does not have a significant effect on the risk of future adverse outcomes like asthma exacerbation.

Conclusions. Overweight in asthmatic children is associated with poorer symptom control but does not significantly affect the risk of future adverse outcomes. The lower level of asthma symptom control among children with overweight allows strongly recommend combination of low-dose inhalation corticosteroids and formoterol (track 1) as a reliever therapy.

Білоус Т.М.

ВМІСТ БІОМАРКЕРІВ РЕМОДЕЛІНГУ БРОНХІВ У МОКРОТИННІ ДІТЕЙ, ХВОРИХ НА БРОНХІАЛЬНУ АСТМУ, ЗА РІЗНОГО ЇЇ ДЕБЮТУ

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Вступ. Процес персистування алергічного запалення в бронхах супроводжується їх морфологічними змінами у вигляді ремоделінгу та формуванням нечутливості до бронхорозширювальних препаратів. Виходячи з цього, представлялося доцільним вивчити біомаркери ремоделінгу дихальних шляхів у мокротинні хворих, що дозволило б у