### 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

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

artificial ventilation - 82.93% newborns), perinatal CNS lesion - 82.93%, multiple organ failure -28, 05%, meconium aspiration syndrome - 45.12%, seizure syndrome - 19.51%, brain edema -19.51%, asphyxia of severe degree - 10.98% and moderate degree - 20.73%. Clinically, combined disorders of the digestive system in newborns of the group with severe perinatal pathology were characterized by: decreased food tolerance - 86.59%, regurgitation/stasis - 80.49%, paresis/weak intestinal peristalsis - 57.32%, suppression - 16.44% and absence of sucking reflex - 3.66% of neonates. Paraclinically in the experimental compared with the control group, there was a significant decrease in red blood parameters - Er - 5.024±0.336 and 5.60±0.06, p<0.05; Hb -183.061±11. 37 and 194.102.88, p<0.05; decreased platelet count, 203.04±18.55 and 239.9±10.09, p<0.05; white blood cell count,  $19.014\pm1.99$  and  $10.25\pm0.55$ , p<0.05; eosinophils were significantly lower, 1.92±0.27 and 2.700.27, p<0.05; segmented leukocytes, 52.07±3.36 and 62.301.00 monocytes, 2.02±0.23 and 2.600.24, p<0.05; lymphocyte count tended to decrease, 24.79±2.34 and 25.001.00, p>0.05; stab neutrophils were significantly more prevalent in the experimental group, 19.19±1.75 and 10.25±0.55, p<0.05. Total protein was decreased in comparison with control -57,25±4,93 and 59,83±2,59, p<0,05; high indices of total bilirubin (mainly due to indirect fraction) were explained by the presence of neonatal hemolytic disease - 71,399±68,675 and 33,9±2,16, p<0,05; elevated ALAT, 20.4041.860 and 16.31.89, p<0.05; AsAT, 51.300±4.903 and 30.11.89, p<0.05; urea was higher in the main group, 3.57±0.33 and 3.20.16, p<0.05; blood glucose levels were lower in the experimental group compared to control, 3.563±0.386 and 3.80.27, p<0.05.

Conclusions. Involvement of the digestive system in the pathological process is a logical outcome of severe hypoxic damage of the body. The causes of dysfunction of the digestive system are complex disorders of hemodynamics, including regional, with decreased blood flow in the mesenteric arteries, endothelial changes in the first minutes of life after birth. Disruption of systemic and peripheral circulation, lack of absorption and delivery of oxygen to the tissues, accompanying perinatal asphyxia, develop a number of pathophysiological and pathochemical cascades, leading to secondary damage to the gastrointestinal tract.

# Kovtyuk N.I. PHYSICAL AND MENTAL FUNCTIONING IN CHILDREN WITH PRIMARY HEADACHE

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**Introduction.** Headache disorders are one of the most common and disabling pain conditions in children. Frequent headache in children was associated with negative psychosocial impact such as school absence, higher levels of emotional problems, in particular anxiety and depression, as well as other somatic complaints and lower levels of quality of life (QoL).

**The aim of the study.** The goal of prospective study was to establish influence of primary headache on children's health-related quality of life.

**Materials and methods.** We examined 98 children (age 10-17 years). All participants were assessed using validated instruments for measuring physical (physical health summery - PHS) and mental (mental health summery - MHS) functioning. We used generic questionnaire of QoL with Children Form health surveys (CF). We were carried out the medical examination, questionnaire with refinement social, anamnesis, and other features. We were looking on a direction, force and significance of correlation.

**Results.** Quality of life is recognized as an important outcome of children health. The main parts of QoL estimation include physical and mental functioning summary and overall quality of life summary. The difference in MHS between healthy  $(77.8\pm13.0)$  and PHA  $(73.1\pm11.9)$  children was significant (p<0.05). The biggest difference between healthy  $(84.6\pm12.9)$  and headache  $(76.7\pm14.1, p<0.05)$  children was seen in PHS. We found out some difference in gender depending child self-report. The girl's data comparing with boy's had wider range (76.2 vs 61.4) and general higher assessment (77.4 vs 76.1) of their physical functioning index. Children with headache reported a worse overall index of QoL (QLS)  $(73.9\pm9.4)$  as compared to age-related healthy

individuals (78.8±10.1, p<0.05). Thus generic questionnaire CF is particularly useful when comparing health-related quality of life of subpopulations with different diseases with intermittent character, like headache, with a healthy control group.

**Conclusions.** Primary headache in children and adolescents is a common problem which influenced health-related quality of life. The importance of estimating quality of life among children with headache is emphasized. Physicians need more knowledge about QoL indexes and their associated factors in children. Rate QOL can be used in complex estimation of health state of children at all the stages of prophylactics, treatment and rehabilitation.

#### Mazur O.O.

# SPECIES MICROBIAL DIVERSITY IN CHRONIC RHINOSINUSITIS IN PATIENTS WITH TYPE 1 DIABETES MELLITUS

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**Introduction.** The aim of the study was to determine the qualitative and quantitative composition of the microbiota in patients with chronic sinusitis with type 1 diabetes mellitus.

The aim of the study. Bacteriological and micrological methods were used to determine the qualitative and quantitative composition of the microbiota of the biotope of sinusis cavities in 50 patients with chronic sinusitis with type 1 diabetes mellitus and 37 patients with chronic sinusitis of the same age without concomitant pathology.

**Materials and methods.** In the contents of the cavity of the maxillary sinuses of patients with chronic sinusitis, combined with type 1 diabetes, isolated and identified 175 strains of different species of microorganisms belonging to 24 different taxonomic groups, which in the biotope form different qualitative microbial associations consisting of 3 of different species in 58% of patients, of 4 species in 34.0% and of five different taxa - in 8.0% of patients.

Results. Chronic purulent sinusitis in patients with type 1 diabetes disrupts microbial associations. In patients with chronic sinusitis, the number of associations consisting of 3 species increases 2.7 times, but the number of associations consisting of 4 species of microorganisms decreases by 11.76%. The number of associations consisting of 5 species in patients decreases by 3.5 times. Among the most numerous associations consisting of 3 species of pathogenic and conditionally pathogenic autochthonous facultative microorganisms, the associations of the following representatives are more common: M. catarrhalis, S. aureus and Bacteroides spp.; Prevotella spp., S. viridans and S. salivarius; M. catarrhalis, Prevotella spp. and S. epidermitis; H. influenzae, Prevotella spp. and S. epidermitis. Associations consisting of 4 species were found in 34% of patients and consisted of S. pneumoniae, M. catarrhalis, S. pyogenes, Fusobacterium spp; S. pneumoniae, E. coli, S. aureus and Candida spp.; S. pneumoniae, E. coli Hly +, S. viridans and Candida spp. In patients with chronic purulent maxillary sinusitis combined with severe type 1 diabetes, there were associations consisting of S. pneumoniae, M. catarrhalis, Candida spp. and S. epidermitis; S. pneumoniae, M. catarrhalis, S. pyogenes, S. epidermitis; Bacteroides spp., H. influenzae, S. pyogenes, Enterobacter spp.; Bacteroides spp., H.influenzae, S.pyogenes, Candida spp. The above may indicate the influence of not only the etiological agent, but also a certain association of microorganisms on the severity of sinusitis combined with type 1 diabetes. Associations of microorganisms consisting of 5 species were found in patients with chronic purulent maxillary sinusitis combined with severe type 1 diabetes. Their composition was different, but all were isolated and identified pathogen S. pneumoniae in a high population level, opportunistic obligate anaerobic bacteria of the genus Bacteroides and Prevotella, Fusobacterium, streptococci and Staphylococcus aureus.

**Conclusions.** According to the Berger-Parker index of constancy and dominance, the dominant pathogens of chronic inflammation in the maxillary sinuses are S. pneumoniae, H. influenzae, M. catarrhalis. All major pathogens persist in the habitat in association. Microorganisms, depending on their role in the normobiocenosis, can inhibit the pathogenetic activity of the leading pathogen or, conversely, activate its pathogenetic role, which must be taken into account when choosing treatment tactics.