

Conclusions. The analysis of 24-hour monitoring of rheopneumogram helps to better understand the mechanisms of adaptation of a newborn child to the out-of-life conditions and makes it possible to list Holter monitoring as one of the prognostic methods that allow early detection of disruption of regulatory processes, and foresee likely of clinical significance pathological conditions. To sum up, a favorable impact of the Kangaroo mother care on the breathing pattern contributes to an earlier adaptation of low birth weight infants.

THE RELATIONSHIP OF GASTROESOPHAGEAL REFLUX AND OBESITY

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Actuality. Gastroesophageal reflux disease (GERD) is a long-term condition in which reflux of gastric content into the esophagus leads to mucosal damage and clinical problems. Many children have occasional reflux and about 25 % of children have symptoms of GERD. One of the risk factors for GERD is obesity. Childhood obesity is one of the most serious public health challenges of the 21st century. There is an epidemiological link between obesity and GERD in both Europe and America. Diagnosis of GERD in overweight and obese children remains a pressing issue since the prevalence of obesity has increased at an alarming rate.

Aim of the research. The aim of this study was to determine the relationship between the development of GER in overweight and obese children.

Methods and materials. In this study, 60 children between ages 9-17 years were observed. The 1st group (1gr.) – 30 children with overweight or obesity (middle age – 12,8±2,2) and the 2nd group (2gr.) – 30 patients with established chronic gastro-pathology (middle age – 14,1±2,5). All included subjects were asked to complete self-reporting questionnaires which consisted of the GERD-Q, extended GERD-Q and additional questions about lifestyle and diet. The physical development of children was evaluated in accordance with BMI. Statistical analyses were performed with a statistic package “Microsoft Excel”.

Results. Among the examined children, in the 1gr. girls were predominated (53,3±9,1%), in the 2gr. – boys (56,6±9,1%). Assessment of physical development showed that in 1gr. 66,7±8,6 % of the patients were overweight and that 33,3±8,6 % of them were obese with BMI > 30. In the 2gr., the result showed that only 26,7±8,1 % of investigated patients were overweight, while 30±8,3% of patients were underweight and 43.3±9, % were normal weight children. The prevalence of children of the 1gr. with a standard GERD-Q score of ≥7 was just 13,3±6,2 %, but using the extended GERD-Q score of ≥8 it had 56,7±9,1 % (ranged 7-14). In the 2gr. with a standard GERD-Q score of ≥7 was 6,6±4,5 % of prevalence, however by the extended GERD-Q score of ≥8 frequency of suspected GERD was 70,0±8,3 % (ranged 7-10). In 56,6±9,1 % of these patients, the diagnosis of GER was confirmed by endoscopy. Based on the questionnaire filled by the patients about their diet, 56,7 ±9,1 % of the children said they had a healthy diet and lifestyle.

Conclusions. Diagnosis of GERD in overweight and obese children remains a difficult task, as it is not accurately examined. Since objective measurements are often impossible to perform, we recommend using the extended GERD question to better identify the pathology and refer children for further examination. When using the extended questionnaire, the probability of detecting GER increases. Despite the fact that in childhood, patients with GERD have increased weight or normal body weight, however, obesity remains an additional risk factor for GERD and requires a more in-depth study.

THE ATTITUDE TO HPV VACCINES OF TEENAGE GIRLS PARENTS

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Actuality. Since the HPV vaccine was first introduced in 2006 in the U. S., the number of cervical cancer among young females has dramatically decreased. In Lithuania this vaccine was introduced only in 2016.

Aim of the research. To evaluate parents', raising teenage girls, opinion about HPV vaccination and the factors that influence it.

Methods and materials. A questionnaire survey was conducted in Vilnius schools in the period from December 2018 to March 2019. Participated 113 parents of girl aged from 10 to 14. The respondents in the anonymous questionnaires provided information about gender, education level, age, number of children and their opinion about HPV vaccine. The data is processed by SPSS 22.0 program, the difference between the compared groups is considered significant when $p \leq 0.05$.

Results. 110 (97.3%) respondents are mothers, 103 (91%) respondents have higher education. 102 (90.3%) parents have heard of HPV infection. The majority from the Internet (77.5%). Parents rated the HPV vaccines' usefulness 6.23 points out of 10 possible. Only 56 (49.6%) parents found this vaccine useful for their children and rated it 8 points or more. Even 60 (53.1%) respondents believe that vaccine can have a negative impact on their children. There is a negative correlation between opinion on vaccine effectiveness and opinions: which way is better to get immunity, the prevalence of HPV, and in which age girls should be vaccinated ($p \leq 0.05$). Those who do not trust vaccine efficacy believe that it is better to gain immunity to HPV infection by getting ill. Also they believe that this infection is rare and girls should be vaccinated at an older age ($p \leq 0.05$). 103 (91.2%) respondents have heard negative information about vaccination. Most of them 89 (36.9%) receive negative information from the Internet. However, there was no statistically significant correlation between vaccine benefit evaluation and negative information obtained from the Internet. There was a correlation between the evaluation of vaccine benefit and the receipt of negative information from family members and

health care specialists ($p \leq 0.05$). 85 (75.2%) parents reported that there is a lack of evidence-based information on HPV infection and vaccination.

Conclusions. Parents value vaccinations against HPV infection insufficiently. Negative attitude towards vaccination depend on receiving negative information from family members and healthcare specialists. Parents also lack access to evidence-based information on vaccines for HPV infection.

THE IMPORTANCE OF HERPES VIRUSES IN THE GENESIS OF CONVULSIVE SYNDROME IN CHILDREN

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Actuality. Convulsive syndrome is one of the most common syndromes in young children. The occurrence of seizures should be considered as a universal reaction of the child's immature brain to various stimuli (toxins, hypoxia, allergic factors). In children, convulsions often occur amid an increase in body temperature to febrile numbers (febrile convulsions). More attention has been paid to herpes viruses as an etiological factor in the occurrence of febrile seizures in children.

Aim of the research. to study the role of herpes viruses in the etiology of convulsive syndrome in children.

Methods and materials. Under our supervision, there were 64 patients with acute respiratory viral infection (ARVI) with convulsive syndrome who were admitted for treatment to the Regional Children's Infectious Clinical Hospital in Kharkov. All these patients were examined by immunofluorescence analysis for the presence of ARVI antigens. Using enzyme immunoassay specific antibodies to herpes viruses were determined (HSV, HHV-6, CMV, EBV). Using the polymerase chain reaction, herpes virus DNA was detected.

Results. depending on the results, the following groups of patients with ARVI were identified: (1) caused by herpes viruses (HSV, CMV, EBV, HHV-6) - 34 (53%) patients, (2) respiratory viruses (adenovirus, influenza virus, parainfluenza, respiratory syncytial virus) - 17 (26,6%), (3) mixed infection (herpes viruses with respiratory viruses) - 9 (14,1%), (4) of unknown etiology - 4 (6,3%) cases. The main etiological factor was herpes viruses, among which HHV-6 occupies a leading position (63%). Most often (85% cases), convulsions were observed in children aged 1-3 years old. In 48 (75%) children, febrile body temperature was noted, in 13 (20,3%) subfebrile, in 3 (4,7%) - normal body temperature. All children had tonic-clonic seizures, and only one child had focal seizures. Attacks in patients with herpes virus infection were longer, repeated convulsive seizures were observed more often. Along with convulsive syndrome, patients with herpesvirus infection experienced lymphadenopathy (9 cases) and exanthema (3 children). In patients with negative herpes virus markers, the duration of clinical manifestations and the recovery period were shorter, but catarrhal phenomena more prolonged.

Conclusions. the studies carried out confirm the role of herpes viruses in the genesis of convulsive syndrome, the provoking factor of which is fever. The findings allow doctors to focus on the earlier appointment of antiviral therapy in the complex treatment of convulsive syndrome.

THE DIAGNOSTIC VALUE OF NATRIURETIC PEPTIDES IN CHILDREN WITH JUVENILE IDIOPATHIC ARTHRITIS

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Actuality. Natriuretic peptides are a family of substances synthesized by cardiomyocytes, which include atrial and brain natriuretic peptides. They activate the same transmembrane guanylate cyclase receptors (natriuretic peptide receptor, NPR-A) in target organs for common physiological effects, which include increased renal excretion of sodium and water, vasodilation by relaxing smooth muscle of vascular cells, improving diastolic relaxation, and inhibition renin-angiotensin-aldosterone system and prevention of myocardial fibrosis. The most active and persistent is the study of the N-terminal polypeptide of the brain natriuretic hormone (B-type), which is called NT-proBNP. In the consensus for the diagnosis of heart failure (HF), it is recommended that this indicator be studied as an early biomarker of HF. According to many studies, the most common cause of death in patients with rheumatoid arthritis in adults is various diseases of the cardiovascular system, primarily heart attacks and strokes due to atherosclerotic disease.

Aim of the research. The aim of the study was to study NT-proBNP in patients with juvenile idiopathic arthritis, a polyarticular variant (JIA).

Methods and materials. We examined 10 patients with JIA (9 girls, 1 boy), whose average age was 12.78 ± 0.95 years.

Results. The control group consisted of 7 peers without chronic pathology (1 girl, 6 boys), the average age of whose was $14, 25 \pm 0.73$ years. A study was conducted of the N-terminal polypeptide of the brain natriuretic hormone (B-type) by the method of competitive immunoassay on the analyzer IMMULITE 2000, Siemens. The study was conducted in the cardiorheumatology department of the State Institution "Institute for Children and Adolescents Health Care at the National Academy of Medical Sciences of Ukraine". Statgraphics 3.0 test were used for processing of the data. The study obtained significantly higher levels of NT-proBNP in patients with JIA, which amounted to 47.5 ± 14.09 pg / ml versus 20.29 ± 0.29 pg / ml of the control group, $p < 0.05$.

Conclusion. Thus, in patients with juvenile idiopathic arthritis, the level of the N-terminal polypeptide of the brain natriuretic peptide is less than the recommended borderline value, but significantly higher than in healthy peers, which may be a marker of slowly progressing heart failure in this category of patients and requires further study.