neurological disorders, more commonly in the neonatal period. In the Republic of Moldova, the incidence of neonatal seizures varies from 0,2-2,7 per 1000 live births and 57,5-132 per 1000 preterm infants.

Aim of the study. Studying the multi-factorial etiology of seizures in children, in order to highlight the most common causes that lead to their onset. Analyse the particularities of the complaints, according to the cause, the age of the child, the severity in order to highlight the most common ones, to find what is common in these patients.

Materials and methods. The study includes 100 randomly selected patients admitted to the pediatric neurology department of the IMSP ICM (Public Medical Sanitary Institution Scientific Research Institute of Mother and Child Health Care) during the years 2017-2018. 39 girls and 61 boys aged 0-18 were analyzed. The research was based on the clinical examination of the patients and on the results of laboratory and instrumental investigations.

Results. Seizures were distributed by age as follows: 55% in children up to 3 years old, followed by a decrease in frequency up to 18 years, given that in the first years of life the immune system is immature, thus children are more susceptible to infections. In the study group, more frequent fever seizures occurred in the case of intercurrent illnesses (Acute viral respiratory infection, pneumonia-87,5% in children with chest X-ray). Among the complaints at hospitalization were: 18%- headache, 17%- tonic-clonic seizures, 11%-dizziness. Doppler ultrasound of the master vessels was performed at 13%, of which 69,2% were modified: 33,34% venous congestion and 22,22% was due to the slightly diminished flow on the right vertebral artery. CT was performed in 20% of children with changes in 45%, of which 28,57% is hydrocephalus, due to head trauma, brain malformations, meningitis or other infections in the brain. The electroencephalogram was performed in 87%, in 57,5% changes were detected, of which 33,37%- moderate changes in the brain's bioelectrical activity, and in 17,5%- isolated epileptiform K-complexes.

Conclusions. Sezures in children are a medical emergency. Following the study, I can say that 29% of children had seizures due to TORCH, bacterial, viral infections, 21%- due to hypoxic-ischemic and hypoxic-traumatic encephalopathy, 9%-metabolic causes, 2%- cerebral abnormalities, and the rest 39%- other causes.

Key words: Seizures, children.

212. LEFT VENTRICULAR HYPERTROPHY IN PEDIATRIC HYPERTENSION

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Introduction. Left ventricular hypertrophy (LVH) is the most commonly assessed target organ effect of hypertension (HTN) among children and adolescents. Left ventricular hypertrophy is an independent predictor of cardiovascular morbidity and mortality in children. Prevention or regression of left ventricle (LV) geometric changes with blood pressure control is an effective way of decreasing future adverse cardiovascular disease outcomes in patients with HTN.

Aim of the study. The purpose is to provide background on the importance of LVH in children with HTN, to assess frequency of LVH and determine the correlation between cardiac index of left ventricular mass (LVM) and body mass index (BMI), simpatoadrenale system activity and blood pressure variability.

Materials and methods. This study included 20 patients aged 10-18 years with HTN, who were treated in 2018-2019 in the Department of Cardiology of the Institution of Mother and Child. Left ventricular mass was calculated using the formula by Devereux et al. according to the American Society of Echocardiography guidelines. The left ventricular mass index (LVMI) was derived by dividing LVM in grams by the subject's height in meters raised to the 2.7 power. Left ventricular geometry was classified as normal, concentric remodeling, concentric LVH, or eccentric LVH. Respondents were examined through echocardiography, also the tension values, and BMI were evaluated.

Results. Left ventricular hypertrophy was reported in 7 (35%) children with HTN, and in 2 (10%) children severe LVH was determined (> 51 g/m2, 7). Nearly 4 (20%) children with normal arterial blood pressure had LVH. Left ventricular hypertrophy was more frequently detected in boys (n=5; 38%) compared to girls (n=2; 28, 6%). Distribution by LV geometry revealed concentric remodeling of the LV in 1 (5%) patients; concentric hypertrophy was found in 4 (20%) hypertensive children and eccentric hypertrophy was detected in 2 (10%) patients ($p < 0,05$). The main factors that contribute to development of LVH are: obesity, mean values of systolic blood pressure (131, 4±1, 11 versus 123, 17±1, 22), the level of plasma and urinary catecholamines (85% versus 55%). There is a statistically significant correlation between BMI and LVH ($p< 0,001$). Thus, in this study, children with LVH were more frequently obese (40%) compared with patients who had normal LVMI (5%). The mean value of BMI percentile in children with LVH was 82, 3 ± 4, 0 kg/m2 compared with 66, 7 ± 3, 5 kg/m2 in subjects with normal LVMI ($p<0, 01$).

Conclusions. The study reveals that LVH is the most common target organ effect of HTN in children. Adaptation of the LV myocardium to pressure overload in hypertensive children resulted in the development of more frequent concentric hypertrophy and eccentric hypertrophy. Obesity and high level of plasma and urinary catecholamines is associated with increased risk for LVM in children.

Key words: left ventricular hypertrophy, children, hypertension.

213. INSIGHTFUL IMAGING: CT OR MRI IN ACCURATELY DIAGNOSING ACUTE APPENDICITIS IN CHILDREN

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Introduction. Appendicitis is the most common condition requiring acute abdominal surgery in children. Clinical diagnosis of acute appendicitis (AA) is not always straightforward, and abdominal ultrasound is specific but insufficiently sensitive. Computed tomography (CT) has become favored but its use in children is discouraged due to ionizing radiation exposure. Therefore, magnetic resonance imaging (MRI) is considered an alternative.

Aim of the study. This study aims to compare the accuracy of MRI with that of CT for the diagnosis of AA in pediatric patients.

Materials and methods. For this systematic review, a search of the PubMed database was conducted to select studies that used MRI for diagnosing pediatric patients with suspected appendicitis. Studies that focused on evaluating the accuracy of MRI to diagnose appendicitis were included. Studies with insufficient data to calculate the outcomes were excluded, as well