BMI was 32,00 ± 0,38 kg\m2, level of leptin - 69,99 ± 5,3ng\ml, level of cholesterol - 5,86 ± 0,77mmol\l and level of triglycerides - 2,67 ± 0,42mmol\l. Results of study suggest that level of leptin, cholesterol and triglycerides increased in patients with obesity and component of metabolic syndrome.

Conclusions:

1. In patients with obesity and component of metabolic syndrome the level of leptin, cholesterol and triglycerides was increased.

2. Preventive health care and treatment of obesity promotes the prevention of increased levels of leptin, cholesterol and triglycerides.

Keywords: Leptin, obesity, metabolic syndrome.

15. CLINICAL SPECTRUM AND RISK FACTORS IN HYPERTROPHIC CARDIOMYOPATHY IN CHILDREN

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Introduction: Hypertrophic cardiomyopathy (HCM) accounts for 42% of childhood cardiomyopathy and has an incidence of 0.47/100,000 children (Colan SD, 2010). Clinical presentation is polymorphic, including sudden death may be the first symptom of HCM at any age. The risk of sudden cardiac death (SCD) is >1% annually in unselected HCM patients but increases to 5% or more if risk factors are presents. According to a recent report on survival of patients with HCM, a family history of cardiac sudden death was a risk factor for SCD in adult series, but it was much higher in patients <18 years of age (Dimitrow P., 2010). Several risk factors associated with an elevated risk of SCD in HCM adult patients have been identified, but risk factors in the pediatric population are not yet finalized.

Purpose and Objectives: The detection of unfavorable risk factors in the primary diagnosis of hypertrophic cardiomyopathy in children.

Materials and Methods: A retrospective study was performed on 7 children diagnosed primary with HCM, interned in departement of Pediatric cardiology of Child and Mother Institute (2009-2010). All subjects underwent detailed assessment that included clinical history (symptoms, when they started, date of diagnosis of the disease, family history data on evolution, past and present therapy, etc.), clinical examination, 12-lead electrocardiogram (ECG), ECG Holter monitoring and echocardiographic study (EcoCG, M-mode, two dimensional and Doppler). Each clinical case was analyzed with reference to detection the presence of unfavorable risk factors at primary diagnosis.

Results: The primary diagnosis of HCM was established at the age of the infant in 42,8% of cases, of whom 2 patients had a positive family history. Most children (71,4% of cases) were suspected to specific symptoms: chest pain, dyspnea and intolerance at effort. Standard ECG determined left ventricular hypertrophy (LVH) in 100% of cases. The EcoCG measurements, allowed the establishment HCM phenotype: 4 (57%) patients having the symmetric form; 3 patients - asymmetric form (with the involvement of the interventricular septum (IVS), 3 patients had the thickness report IVS / LV posterior wall thickness > 1.3. Concomitantly standard EcoCG in rest allowed confirmation of the LV outlet tract obstruction (LVOT) to 3 patients, and 1 patient was appreciated the LVOT phenomenon by performing the effort EcoCG. In 5 patients (71,4%) was determined the significant increase LV mass myocardium, in 3 children were detected the increase of the left atrial cavity and 1 child - right ventricular involvement.

Conclusion: Primary diagnosis of HCM was suspected by cardiac symptoms; only 30% of children were found preclinical and positive family history. Early emergence of symptoms, aggravated family history and listed EcoCG criteria: significant increase in LV mass, the LV outlet tract obstruction and right heart involvement, may be considered unfavorable risk factors in the evaluation of children with HCM, including for the SCD syndrome.

Keywords: Hypertrophic cardiomyopathy, risk factors, echocardiography, cardiac sudden death