13. ANEMIA MANAGEMENT IN CHRONIC HEMODIALYSIS PATIENTS

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Introduction: Anemia is one of the most important consequences of chronic kidney disease. It is caused by a defect in erythropoietin regulation. Anemia can have an early onset, but the severity ant the prevalence increases with the progression the kidney disease.

Purpose and Objective: To do a complex examination of the treatment of anemia in Republic of Moldova and the efficacy of the methods used in the hemodialysis departments.

Materials and Methods: This is a retrospective study, analyzing the patient documentation of 47 patients from the department of Nephrology and Hemodialysis of the Municipal Hospital "St. Trinity" and from the department of Hemodialysis of the Republican Clinical Hospital.

Results: In Republic of Moldova, Reocormon® is used for the treatment of anemia in chronic hemodialysis patients. Neither of the 47 patients examined had been treated with the necessary dosage and for the right period of time due to financial problems. Only 5 of the 47 patients have reached the recommended targeted hemoglobin level. This could be the result of an inadequate dosage, a poor control of iron levels or because of an associated chronic disease, such as a chronic inflammation of the kidney or the urinary tract.

Conclusions: Anemia is relative rare in the incipient stages of kidney disease (1-3 stages KDOQI). The prevalence of anemia starts to increase significantly when the glomerular filtrate rate < 60 mL/min. Iron level should be checked before administrating an erythropoiesis-stimulating agent.

Keywords: Anemia, chronic kidney disease, erythropoietin, erythropoiesis

14. DETERMINATION OF LEVEL OF LEPTIN IN PATIENTS WITH OBESITY AND COMPONENT OF METABOLIC SYNDROME

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Introduction: Obesity is the chronical polyetiological disease, which associated with some genetical and neurological factors, changes of functions of endocrine system, one of the serious factors of occurrence of diabetes II, essential hypertension, dyslipidemia, cardiovascular disease, reproductive disorders. In the basis of disorders of metabolic processes and occurrence of listed above conditions lying the resistance to insulin. Leptin has links with weight of adipose tissue, effect on insulinemia and resistance to insulin.

Aim of study: Analyze BMI, level of leptin, cholesterol and triglycerides in blood in patients with obesity (I, II, III lvl.) with components of metabolic syndrome, such as: diabetes II and essential hypertension.

Materials and methods: Since 2013 to 2014 we examine the 28 patients aged from 38 to 65 years old (19 female and 9 male). In this group the 11 patients were ill with obesity of first level, 9 patients - obesity of second level and 8 patients - obesity of third level. All patents were ill with moderate diabetes in phase of subcompensation. During the examination in all patients was the condition of metabolism of carbohydrate, lipid, protein, electrolyte and instrumental examination.

Discussion results: On the basis of examination, in the patients with obesity of first level, the BMI was 32,00 ± 0,38 kg\m2, level of leptin - 34,84 ± 6,40 ng\ml, level of cholesterol - 5,89 ± 0,31 mmol\l and level of triglycerides - 2,36 ± 0,9 mmol\l. In the patients with obesity of second level, the BMI was 39,20 ± 0,49kg\m2, level of leptin - 35,48 ± 6,34ng\ml, level of cholesterol - 5,35 ± 0,36mmol\l and level of triglycerides – 270 ± 0,41mmol\l. In the patients with obesity of third level, the

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