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LIPID METABOLISM PARAMETERS AND LEVELS OF ANTIOXIDANTS IN MONGOLOID GIRLS WITH OBESITY

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to analyze the state of lipid metabolism and antioxidant status in Mongoloid girls with obesity Studies were conducted in 22 girls (mean age – 15.06 ± 1.53 years) with the first degree exogenously constitutional obesity of and in 48 girls of control group (mean age – 14.25 ± 2.42 years). All girls by ethnicity were Mongoloids. Lipid components (total cholesterol, triglycerides, high-density lipoproteins, low-density lipoproteins) and components of antioxidant defense (total antioxidant activity, α -tocopherol, retinol, reduced and oxidized glutathione, superoxide dismutase activity, glutathione peroxidase activity, glutathione reductase activity and glutathione S-transferase activity) in the blood were determined. Spectrophotometric and fluorometric methods were used.

Mongoloid girls with obesity had higher values of total cholesterol (1.22 times higher, $p=0.017$), triglycerides (2.16 times higher, $p<0.0001$) and lower values of HDL (1.26 times, $p=0.0018$), compare to the control. In the antioxidant defense system a decrease in α -tocopherol (1.41 times, $p=0.0262$), retinol (1.12 times, $p=0.0306$), superoxide dismutase activity

(1.28 times, $p=0.0004$) and glutathione S-transferase activity (1.71 times, $p<0.0001$) were noted in comparison with the control group with the absence of statistically significant changes in other components.

The study revealed changes in lipid metabolism and antioxidant defense parameters in Mongoloid girls with exogenously constitutional obesity, consisting of the presence of dyslipidemia, a decrease in fat-soluble vitamins and antioxidant-enzymes activity. Based on results obtained corrective measures recommended for Mongoloid girls with exogenously constitutional obesity to stabilize the lipid metabolism and antioxidant status by increasing the content of products containing polyunsaturated fatty acids in the diet and administration of antioxidants complex.

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CLINICAL AND GENETICAL CHARACTERISTICS OF CELIAC DISEASE IN KOSOVAR CHILDREN

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Coeliac disease develops in genetically susceptible individuals who, in response to unknown environmental factors, develop an immune response that is subsequently triggered by the ingestion of gluten. The disease has many clinical manifestations, ranging from severe malabsorption to minimally symptomatic or non-symptomatic presentations. The aim of this study is to evaluate the genetical and clinical presenting patterns of celiac disease in pediatric patients from Kosovo.

Study subject were children aged 0-18 treated for celiac disease at Pediatric Clinic, University Clinical Center of Kosovo (UCCCK), as a referral center for celiac disease. The diagnosis of celiac disease was established according to the

90's or 2012 ESPGHAN criteria. Personal data and clinical presentation at time of diagnosis were collected through individual interviews.

A total of 60 unrelated patients with celiac disease were evaluated.

Children's age at diagnosis ranged from 17 month to 18 years, with a mean age 5.5 years ($SD \pm 3.31$). The classical celiac disease presented with (diarrhea, abdominal distention and weight loss) occurred in 78% of the cases while non-classical form in 22% ($p<0.001$). Presenting features were diarrhea, abdominal distention and weight loss, each with 47 cases (78%), abdominal pain ($n = 42$, 70%), anorexia ($n = 48$, 80%); vomiting ($n = 28$, 46%), anemia ($n = 46$, 76%), constipation ($n = 14$, 23%), failure to thrive ($n = 17$, 28%), short stature ($n = 18$, 30%). All children were positive for IgA-tTG, while 52 of them (87%) had tTG titers levels >10 times of upper limit of normal. The HLA-DQ heterodimer pattern of these 60 patients was: heterozygous DQ2.5 heterodimer ($n = 35$), heterozygous DQ2.5/DQ2.2 heterodimer ($n = 12$), homozygous DQ2.5 heterodimer ($n = 3$), heterozygous DQ2.5/DQ8 heterodimer ($n = 3$), heterozygous DQ8 heterodimer ($n = 2$), heterozygous DQ2.2 heterodimer ($n = 2$). Three patients, biopsy proven, were negative for DQ2.5, DQ2.2 and DQ8 heterodimers. In the present study, 18 (30.0%) patients had a dual dosage of HLA-DQ-susceptible genotypes; we found no correlation between HLA double dose and/or tTG IgA level with clinical presentation.

Children diagnosed as having celiac disease in Pediatric Clinic at the University Clinical Centre of Kosovo, presented namely with gastrointestinal manifestations and contains very few patients with atypical symptoms. While there was found no correlation between HLA double dose and/or tTG IgA level with clinical presentation.

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THE ROLE OF RAPID QUALITATIVE IMMUNOCHROMATOGRAPHIC ANTIBODY TEST FOR SCREENING OF COELIAC DISEASE IN CHILDREN

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Coeliac disease (CD) is an immune-mediated inflammatory disease triggered by dietary gluten and related proteins in genetically predisposed individuals.

Standard serology testing and small bowel biopsy are used to establish the diagnosis of CD. New and improved point-of-care (POC) methods are non-invasive and could help reduce the diagnostic delay of CD. We aimed to determine the prevalence (using rapid POC test) and clinical characteristics of CD found by screening in first-grade schoolchildren.

A rapid qualitative immunoassay POC test (Simtomax Blood Drop DGP) designed for detection of immunoglobulin (Ig) A and IgG deamidated gliadin antibodies (DGP) as well as total IgA (to identify IgA deficient patients) in whole blood was used to test healthy, first-grade schoolchildren who consumed gluten regularly without restrictions. All children with positive POC test were examined by paediatric gastroenterologist and referred to do total IgA and coeliac serology testing – IgA antibodies against type-2 tissue transglutaminase (tTG) in IgA sufficient children and IgG DGP in those with IgA deficiency. Finally, the diagnosis of CD was established according to