

Abstract PO-0144 Table 1 Mean values (SD) of the study population, divided in two groups, according to insulin response. Mann-Whitney non parametric test for independent samples

Parameters	All subjects n = 268	Non insulin resistance n = 133	Insulin resistance n = 135	p*
BMI z-score	2.21 (0.39)	2.16 (0.41)	2.25 (0.36)	0.019*
Insulin (U/ml)	16.84 (10.27)	11.747 (5.67)	21.916 (11.28)	<0.001*
Triglycerides (mg/dl)	107.07 (54.32)	93.63 (39.56)	120.50 (63.19)	<0.001*
HOMA index	3.60 (2.31)	2.44 (1.20)	4.79 (2.53)	<0.001*
TyG index	8.33 (0.47)	8.20 (0.41)	8.47 (0.49)	<0.001*
Triglycerides/HDL ratio	2.42 (1.69)	1.20 (1.09)	2.86 (2.03)	<0.001*
Waist/Height ratio	0.59 (0.06)	0.58 (0.06)	0.59 (0.05)	0.303

Results 135 subjects showed insulin resistance, with higher TyG index than those with normal insulin sensitivity ($P < 0.001$) and higher Triglycerides/HDL ratio ($P < 0.001$) (Table).

In all the studied population a positive association between TyG index, HOMA index and Triglycerides/HDL ratio was found ($P < 0.001$); in the non-insulin resistance group a positive association between TyG index and waist/height ratio was observed ($p = 0.03$).

Conclusions TyG index is a good predictor of decreased insulin sensitivity also in paediatric ages and might be considered also a marker of cardiovascular risk considering the association with waist/height ratio and Triglycerides/HDL ratio.

PO-0145 CELIAC DISEASE – THE EXPERIENCE OF A SINGLE CENTRE IN 29 YEARS

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Aims The study aimed to evaluate the epidemiological and clinical profile of the patients diagnosed with celiac disease in 'Grigore Alexandrescu' Children's Hospital over a 29 years period.

Methods We performed a retrospective study including 224 patients diagnosed with celiac disease, from January 1985 until December 2013. Three groups resulted. The first group included patients diagnosed from 1985 until 1995, before celiac serology was available, the second group patients diagnosed from 1996 until 2006 using qualitative antitissue-transglutaminase antibodies and the third group patients diagnosed from 2007 until 2013 using quantitative antitissue-transglutaminase antibodies and HLA DQ2/DQ8 typing. From the medical records we extracted age and clinical characteristics of patients at presentation.

Results The groups included 1.8, 13.8 and 7.7 patients/year. The mean age at diagnosis was 5.9 ± 4.7 , 4.4 ± 3.6 and 4.4 ± 3.5 years respectively. Gastrointestinal symptoms were described in 100%, 86.8% and 59.2%, particularly chronic diarrhoea in 90%, 51.9% and 48.1%. Twenty percent of patients in the first group presented with celiac crisis, only 0.6% in the second group and none in the third. Non-gastrointestinal symptoms were not observed in the first group and were reported in the second and third groups in 13.1% and 61.1%.

Conclusion Since 2007 a decreasing tendency in the number of patients diagnosed/year was observed. Gastrointestinal symptoms were initially the sole clinical finding, particularly chronic diarrhoea, but in time patients presented with non-gastrointestinal

symptoms or oligosymptomatic/asymptomatic celiac disease with an increasing frequency.

PO-0146 PHENOTYPICAL FEATURES IN CHILDHOOD WILSON DISEASE: THE EXPERIENCE OF A HEPATOLOGY CENTRE FROM BUCHAREST

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Background and aims Wilson's disease (WD) may have a polymorphic clinical picture and positive diagnosis can sometimes be difficult. The study aimed to analyse the clinical and laboratory characteristics of children with WD, diagnosed in the "Grigore Alexandrescu" Children's Hospital, Bucharest.

Methods The study included 23 patients diagnosed with WD between 1995 and 2013. From the medical records we extracted: age, sex, family history, clinical manifestations and laboratory parameters at diagnosis.

Results The mean age at diagnosis was 12.1 years. Sex ratio was male/female = 2.1/1. Eight patients had family history of WD. The frequency of clinical signs was: hepatomegaly (47.8%), ascites (22%), jaundice (22%), splenomegaly (22%), esophageal varices (15%). Neurological manifestations were encountered in 4 cases. Children aged 10–14 years presented the largest number of clinical and laboratory abnormal findings. Urinary excretion of cooper was increased in 22 patients. Elevated transaminases was a common finding. Serum ceruloplasmin was low in 74%. Haematological abnormalities were: thrombocytopenia (26%), leucopenia (4%). Hepatic steatosis was found in 56%, fibrosis in 18% and signs of portal hypertension in 11%. Liver biopsy was performed in 8 cases, 6 presenting vacuolar lesions. Genetic testing was performed in 6 patients, 4 had heterozygote exon 8 mutation.

Conclusions WD is sometimes difficult to diagnose. Symptoms are more frequent in elder children and are dominated by liver disease with moderate cytolysis syndrome without liver failure; rarely neurological signs are associated. Family screening is extremely useful and allows precocious diagnosis in asymptomatic patients with early therapy initiation.

PO-0147 NUTRITIONAL STATUS AND GROWTH PATTERN IN CHILDREN WITH CHRONIC LIVER DISEASE

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Background Malnutrition and growth retardation are important consequences in children with chronic liver disease (CLD). The aim of this study was to evaluate nutritional status and physical growth of children with CLD.

Subjects and methods Fifty children with CLD, recruited from the outpatient clinic of paediatric hepatology and from the paediatric hepatology department of Paediatric Hospital, Cairo University were enrolled in the study. Their mean age was 2.05 years, ranged from 0.5 to 5.75 years. Physical growth and nutritional status were assessed from the Z score of anthropometric parameters, using the Egyptian growth reference data.

Results Short stature was identified in 54% of patients, while malnutrition was identified in 70% of patients. Anthropometric evaluation of the upper arm, skin fold thickness and weight for height are useful parameters to evaluate nutritional status in children with CLD.

Conclusions Growth retardation and malnutrition are common complications in children with CLD, particularly with progression of liver disease severity. Therefore, nutritional support is an important aspect of therapy.

Gastroenterology and Hepatology/Nutrition

PO-0147a EFFICIENCY OF THE COMBINED ANTIVIRAL THERAPY OF CHRONIC HEPATITIS C IN CHILDREN

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Aim The purpose of this work was to study efficiency of the combined antiviral therapy in children with chronic hepatitis C in Republic of Moldova.

Methods In compliance with the National Program (2007–2016) in paediatric hepatology department 35 children, aged 4–17 years, were treated with pegylated interferon alpha 2b (60 mcg/m²/week) plus ribavirin in a dose of 15 mg/kg/day; therapy length of 24 weeks for genotype 2 and 3 or 48 weeks for genotype 1b. The diagnosis was confirmed by clinical, biochemical, immunological modification, including degree of viremia (ARN VHC PCR Real Time ROTOR Gene6000 CORBETT RESEARCH) and transient elastometry (Fibroscan) for detecting liver fibrosis.

Results Chronic hepatitis C (genotype 1b – 31, genotype 2–1, genotype 3a in 3 children) was characterised by the minimal clinical signs, low biochemical activity in 60% of cases. Low virus loading (<600000 ui/ml) and a minimum degree of fibrosis of F0-F2 was identified in 29 of 35 children. 33 patients finished treatment. 2 children discontinued treatment because of the expressed headaches and in connexion with immigration. In the course of treatment by pegylated interferon and ribavirin most common of the side effects were pyrexia, headache, neutropenia, fatigue, anorexia, injection site erythema and vomiting. **Conclusions** Combined antiviral therapy of chronic hepatitis C in children was safe. This treatment program needs an individual approach and it was effective SRV in 73% cases, inclusive in genotype 1b – 69%, in genotypes 2 and 3a – in 100%.

PO-0147b EFFECT OF CONTROLLED CONSUMPTION OF AMARANTH FLOUR ON THE NUTRITIONAL RECOVERY IN MALNOURISHED CHILDREN WITH GRADE I

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Objective Analyse the effect of amaranth flour on the nutritional recovery in two groups of children from 2 to 4 years with malnutrition grade I, one with control over their consumption and the other with a regular consumption over a period of three months.

Material and methods Quantitative, quasi-experimental longitudinal prospective study. We followed up to 83 children aged

between two and four years of age with malnutrition grade I, three health centres in the Health District I San Luis Potosí.

Results 46 children joined the experimental group and 37 in the control group in the first 27 female and 19 male, average age of this group was 3 years and 4 months old. The control group was composed of 21 females and 14 males with a mean age was 3 years 1 month old. We followed up the groups over three months. The final comparison (sixth evaluation) by paired analysis between groups was observed in the experimental suffered significant increases compared to control variables such as weight, subscapular skinfold and Centripetal index.

In this study was demonstrated that parameters such as PT, PSE, PB, AM and AG can be used as evaluation measures sensitive to nutritional changes in short time.

PO-0148 WITHDRAWN

Hematology and Oncology

PO-0149 RED CELL TRANSFUSION VOLUME IN NEONATES

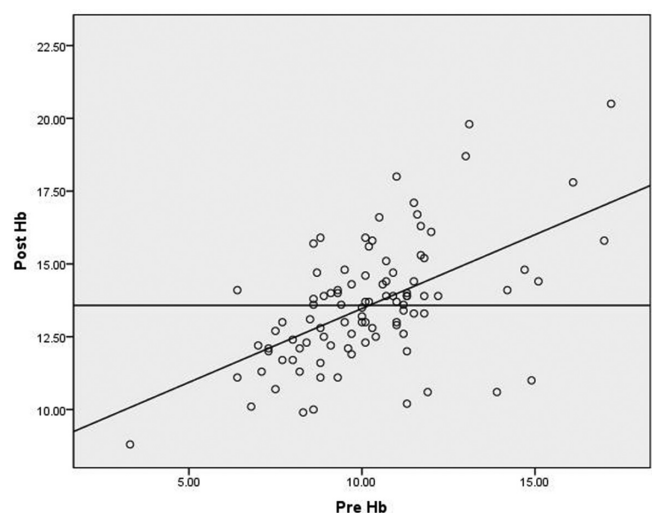
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Background Neonatal Red cell transfusion volume is traditionally calculated based on weight 10–20 ml/kg. The main objective was to explore whether desired Hb level was achieved post transfusion and if other variables such as weight, pre-transfusion Hb value, and RCC volume affect transfusion outcome.

Methods This retrospective quantitative descriptive study included all neonates admitted to NICU requiring their first blood transfusion in a single tertiary referral centre. Hb levels pre and post transfusion as well as volume transfused were evaluated.

Results Over one year, 108 neonates received a blood transfusion. Complete data set in terms of pre and post transfusion Hb values, weight, and volume transfused was only available for 78 neonate. The mean Hb pre-transfusion was 10.3 ± 2.5 g/dl with



Abstract PO-0149 Figure 1 Correlation between pre and post transfusion Hb