**Abstracts**

**770** RISK FACTORS ASSOCIATED WITH ANEMIA AND NUTRITIONAL STATUS IN INFANTS

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**Background** Growth assessment is an integral part of infants health. An understanding of anemia risk factors is essential to identify the groups that are more vulnerable.

**The Aim** of the study was to identify the risk factors for malnutrition in the vulnerable age group of 6 to 12 months and to evaluate possible related risk factors with anemia.

**Methods** The cross-sectional study which evaluated 206 infants aged between 6–12 months who attended the Pediatric Clinic during the years 2010–2011 for inadequate growth. Mothers were interviewed to collect informations regarding socioeconomic status and nutrition practices. Nutritional status was evaluated by anthropometric measurements using growth charts. Anemia was diagnosed if hemoglobin was ≤11 g/dL.

**Results** Mild and moderate anemia was characterised by hemoglobin levels below 11.0 and 9.5 g/dL. Rates for mild and moderate anemia were 38.6% and 11.9%. The highest anemia prevalence was found at 6 to 8 months of age. The risk factors for anemia were: urban residence (p=0.004), fever in the past 5–7 days (p<0.001) and age at 6–8 months (p=0.024), socioeconomic level and nutrition practices. Infants who were exclusively breastfed for 6 months showed lower prevalence of anemia compared to their mixed feeding. According to weight and height for age, 49% of the infants were at 25th, 32% at 10th, 9.2% at 5th and there was a significant correlation between the duration of breastfeeding and nutritional status.

**Conclusions** Strategies to control infant anemia should include health promotion and nutritional education for families from all socioeconomic levels.

**771** HIGH INCIDENCE OF IRON DEFICIENCY IN YOUNG CHILDREN WITH CYSTIC FIBROSIS

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**Background** Iron deficiency (ID) is common in patients with cystic fibrosis (CF). In adult CF patients ID is related to lung disease severity and thought to be caused by chronic inflammation. Increased iron levels in sputum are associated with *P. aeruginosa* infections.

**Aim** To establish the prevalence of ID and iron deficiency anaemia (IDA) in children with CF and associations of ID with dietary iron intake, lung disease severity and *Pseudomonas aeruginosa* infection.

**Methods** Clinical charts of 54 children with CF aged 0 to 16 were reviewed. Follow-up varied from 1 to 14 years with 346 annual follow-up. Detailed history taking, clinical examination and measurement of white blood cells count, hemoglobin concentration between ITP patients and controls. Platelet activation marker CD62P was significantly increased in ITP patients than controls (P<0.05). Platelet mean volume (MPV) was significantly increased in ITP patients than controls (P<0.05). The mean serum hepcidin level was significantly higher in patients than controls (P=0.001). The percentage of platelets associated IgM and IgG represented by the MFI was significantly higher in patients than controls (P=0.000). Furthermore, the amount of CD62P per cell, the platelets count and Platelets IgG were significantly higher in patients than controls (P<0.000). The percentage of platelets associated IgA, IgM and IgG were significantly increased in patients than controls (P<0.000). Also the MFI of IgM and IgG were significantly higher in patients than controls. Finally the concentration of serum leptin was increased in patients than controls (P=0.000) (table 2). There was a negative correlation between The platelets count and Platelets IgG (P=0.000 and r=−0.88).

**Conclusion** We concluded that antiplatelet antibodies (PAIgG, PAIgM) and decreased detection of platelet...
Surface antigens (CD41, CD61) in children with immune thrombocytopenic purpura (ITP) have a diagnostic and pathogenesis role.

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Background With regard to antioxidant role of zinc in body, zinc deficiency may be considered as one of the carcinogenic agents. Thus the determination of zinc deficiency percent in patients who are suffered from different types of cancers is useful to determine the dose of zinc supplementation which is used to such patients. In this study we evaluated the percent of zinc deficiency in different types of leukemic and lymphoma patients in comparison with normal subjects.

Methods Case population was considered of 50 patients who suffered from different types of leukemia (ALL, AML) and lymphoma. Our control was considered of 50 normal subjects with the same range of age (10–30 year). Atomic Absorption was used in order to determine zinc concentration.

Results Zinc deficiency percent was 73.3% in ALL and 54.5% in AML leukemic patients. 42.9% of lymphoma patients were zinc deficient. However zinc deficiency was seen in 16.7% of normal subjects too. It was not significant relation between the age and zinc concentration in both lymphoma and leukemic patients (p=0.39 and p=0.34). In patients and normal groups mean zinc concentration in men was not statistically different from women (p=0.99, p=0.41).

Conclusion Results obtained in this study indicate that zinc deficiency is a serious difficult in our country. Because of 16.7% zinc deficiency in normal subjects, zinc supplementation is recommended for all normal and abnormal subjects. However the dose of zinc supplementation must be determined carefully in regard to some factors such as age, sex and different abnormalities.

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Background To define age-related changes in left (LV) and right (RV) ventricular function by using myocardial performance index (Tei Index) in preterm neonates.

Materials and Methods 18 newborn infants were selected from preterm neonates with the gestational age of 24–32 weeks, mean birth weight 917.5 g (min. 520, max. 1920 g). The Tei Index is a Doppler-derived myocardial performance tool which can be used to evaluate the systolic and diastolic function. The first measurement was taken as soon as possible after birth, the second one was taken on day 3 of life, the third one at the 40 th wk post-conceptional age (pca).

Results The higher Tei index was obtained in the RV (mean value -0.39; SD +/-0.15) than the LV (mean value -0.36; SD +/-0.10) in the first day of life. In the LV the Tei index was constant during the neonatal period and at 40 wks pca (from mean value 0.36-day 1, 0.35 day 3 and at 40 wks pca.), and we observed the conversion in the RV between the first and the third day of life and at 40 wks pca (mean value 0.39-day 1 to 0.30 -day 3 and to 0.28 at 40 wks pca).

Conclusion The higher mean value of the Tei index in the RV reflect the degree of neonatal myocardial immaturity. Grant-MNISw No. 407414336.

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Purpose To study of the hemodynamic supply for the affected of nephroblastoma kidney and compare it with the contralateral kidney.

Patients and methods: We analyzed the data obtained by Doppler studies of blood flow in the main renal arteries in 23 children aged 2.5(1.3–3.0) years of both sexes with a solid tumor of mostly in the upper pole one of his kidneys. Volume of the tumor in each case was less than 600 cm³. All of them had a diagnosis of monolateral nephroblastoma.