surface antigens (CD41, CD61) in children with immune thrombocytopenic purpura (ITP) have a diagnostic and pathogenesis role.

**ZINC DEFICIENCY IN LYMPHOMA AND LEUKEMIA**

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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=0.54). 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.

**MYOCARDIAL PERFORMANCE INDEX (TEI INDEX) IN PRETERM NEONATES WITHOUT BPD**

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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 index 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) then 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 to 0.28 at 40 wks pca).

**Conclusion** The higher mean value of the Tei index in the RV might be reflecting the “persistent” fetal status of this ventricle in the first day of life. Although constant value of the Tei index in the LV reflect the degree of neonatal myocardial immaturity. Grant-MNiSW No. 40741436.

**CHANGING OF JONS CRITERIA WITH LESS OR MORE CRITERIA?**

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The more patient come in emergency department with tachcardia and one major criteria with others nonspecific labatory data has rheumatic fever and some with 2 major criteria can not explain totally RF so its looks like the jons criteria found some variatin and nowadays cannot explain RF totally and may be some variation an mutation in streptococcus kinds that explains it

**A COMPARISON OF DIFFERENT METHODS OF TEMPERATURE MEASUREMENT BY MOTHERS AND PHYSICIANS IN HEALTHY NEWBORNs**

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**Background and aim:** The aim of this study was to compare the accuracy of digital axillary thermometer (DAT), rectal glass mercury thermometer (RGMT) and infrared forehead skin thermometer (IFST) measurements made by mothers and physicians in healthy newborns.

**Methods** The body temperature measurements of 120 healthy newborns were made on their 2nd day of life using DAT, RGMT and IFST, first by mothers followed by a designated physician. Correlation analysis was performed for the measurements obtained by mothers and the physician. The presence of a former child or children at home, the educational level of the mother and maternal age were also recorded.

**Results** No correlation was observed between the measurements made by mothers and the physician using RGMT (R²=0.096). The temperatures measured by mothers and the physician showed a significant correlation when a DAT and IFST were used (R²=0.923, p<0.001; R²=0.916, p<0.001, respectively).

**Conclusions** Difficulty of use and interpretation make RGMTrs less practical than DATs and IFST for use by mothers. Measurements with an IFST are obtained from a newborn’s forehead in a shorter length of time compared to DATs, which makes it a more practical option.

**HEMODYNAMIC SUPPLY OF THE AFFECTED OF NEPHROBLASTOMA KIDNEY**

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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.