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

774

ZINC DEFICIENCY IN LYMPHOMA AND LEUKEMIA

doi:10.1136/archdischild-2012-302724.0774

Z Tahannejad Asadi, D Dayer. Ahvaz Jundishapur University of Medical Sciences (AJUMS), Para-Medical Faculty, Department of Medical Laboratory Sciences, Ahvaz, Iran

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.

775

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

doi:10.1136/archdischild-2012-302724.0775

¹R Bokiniec, ²P Własienko, ²J Szymkiewicz-Dangel, ¹MK Kornacka. ¹Neonatal and Intensive Care Department; ²Perinatal Cardiology Unit, Medical University of Warsaw, Warsaw, Poland

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) 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 and 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. 407414336.

776

CHANGING OF JONS CRITERIA WITH LESS OR MORE CRITERIA?

doi:10.1136/archdischild-2012-302724.0776

H Ghaffari. Medical University of Iran, Tehran, Iran

The more patient come in emergency department with tachcardia and one major criteria with others nonspecific labratory 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

777

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

doi:10.1136/archdischild-2012-302724.0777

¹MY Oncel, ²KS Tekgunduz, ¹R Ozdemir, ¹E Calisici, ³S Karahan, ¹O Erdeve, ¹SS Oguz, ¹A'U Dilmen. ¹Neonatology, Zekai Tahir Burak Maternity Teaching Hospital, Ankara; ²Neonatology, Ataturk University, Faculty of Medicine, Erzurum; ³Biostatistics, Hacettepe University, Faculty of Medicine; ⁴Pediatrics, Yıldırım Beyazıt University, Faculty of Medicine, Ankara, Turkey

Backgraund 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 (R^2 =0.096). The temperatures measured by mothers and the physician showed a significant correlation when a DAT and IFST were used (R^2 =0.923, p<0.001; R^2 =0.916, p<0.001, respectively).

Conclusions Difficulty of use and interpretation make RGMTs 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.

778

HEMODYNAMIC SUPPLY OF THE AFFECTED OF NEPHROBLASTOMA KIDNEY

doi:10.1136/archdischild-2012-302724.0778

^{1,2}I Begun. ¹Belarusian Research Center for Pediatric Oncology, Hematology and Immunology; ²Belarusian Medical Academy of Post-Graduate Education, Minsk, Belarus

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.