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Introduction Migration refers to the movement of persons or children from an origin place to a destination place across some pre-defined, political boundary. Since the 1990s after war, Bosnia and Herzegovina has continued being a country of mass children immigration from Sandjak, Kosovo, Serbia, Monte Negro and sporadic immigration from China.

Methods The presence of tuberculosis disease in the Immigrants children or foreign-born child should prompt the pediatricians to collect appropriate specimens to recover an organism. We conducted a secondary data analysis focusing on immigrants children sampled in the 1995 through 2010 versions of the National Bosnian Children Health Records Survey.

Results The increase in tuberculosis among Gypsy children in Sarajevo coincided with similar increases in immigration into Bosnia and Herzegovina. Medical records were available for review to assess adequately potential missed opportunities to prevent tuberculosis in children from Sandjak in only 1.5% of cases and Gypsies in 33% cases. Most children with drug-resistant tuberculosis were Gypsy (18.1%) or Chinese Asian (11.2%), and 16.4% of children or their parents were from a Bosnia and Herzegovina regions in which tuberculosis is highly endemic as Sarajevo Canton mountain area.

Conclusions Pediatricians should be aware of the special health problems as tuberculosis for which immigrant children are at risk. Immigration poses unique stresses on children and families. There were no significance difference between incidence of tuberculosis and resistance on therapy between children from Sandjak and Bosnia but that differences were higher in case of Gypsies children.

610 TOTAL PARENTERAL NUTRITION AS A SOURCE OF OXIDANT LOAD LEADING TO BRONCHOPULMONARY DYPLASIA

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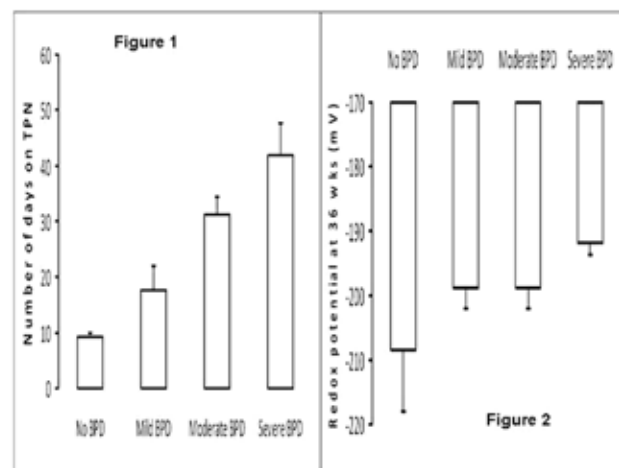
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Background Immaturity of antioxidant defense coupled with oxidant load is suspected to induce the development of bronchopulmonary dysplasia (BPD) in premature infants. Peroxide load from total parenteral nutrition (TPN) is associated with oxidative stress in this population. We hypothesize that the oxidative stress and, consequently, the severity of BPD, both increase in function of duration of TPN infusion.

Objective To document the relation between the duration of TPN as well as the redox potential of glutathione measured in blood and the severity of BPD.

Design/methods GSH and GSSG from whole blood sampled at 36 weeks of corrected age in 51 infants less than 29 weeks of gestational age, were measured by capillary electrophoresis in order to calculate the redox potential (Nernst equation). Severity of BPD was classified according to NICH guidelines (Job and Bancalari, 2001). Means (s.e.m). (n = 5–21 per group) were compared by ANOVA.

Results The duration of TPN in days was strongly associated ($p < 0.001$) with the severity of BPD. A logistic regression model confirmed the independent effect of TPN.



Abstract 610 Figure 1 TPN, redox potential and BPD

Conclusions The duration of the oxidant load from TPN exacerbates the oxidative stress in preterm infants as observed with the more oxidized status of the redox potential in infants having received TPN for a longer time. The strong relation between severity of BPD and duration of TPN could be explained by this oxidative stress generated by the TPN.

611 OESOPHAGEAL ATRESIA AND ASSOCIATED ANOMALIES

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Background In previous studies the incidence of associated congenital anomalies for infants with oesophageal atresia(OA) ranges between 40–57%. OA mostly associated with Tracheoesophageal fistula is a part of VACTERL association (Vertebral anomalies, Anal atresia, Cardiovascular anomalies, Tracheoesophageal fistula, Renal/ or radial anomalies, Limb defects).

Aim To determine the incidence of associated anomalies in babies with oesophageal atresia.

Methods 32 babies treated for oesophageal atresia at our regional surgical neonatal unit between the period February 2007 to February 2012 were included in the study.

Results Out of 32 babies, 17 were male and 15 were female infants with gestation ranging from 31–40 weeks. 10 babies (31%) were born in-utero and 22 babies were transferred from local neonatal units. Birth weights ranged between 1380g–4300g.

In total 15 babies (47%) had some form of Cardiac anomalies with 5 babies either having Atrial septal defect or Ventricular septal defect and 8 babies having a patent ductus arteriosus (PDA).

3 babies (9%) had associated anorectal anomalies.

In total 10 babies (31%) had associated anomaly excluding isolated PDA and 16 babies (50%) if isolated PDA were included.

Conclusion Association of anomalies with Oesophageal anomalies is well documented in literature. It is important to identify vertebral anomalies early for follow up as the risk of scoliosis is 13 fold after repair of OA in relation to general population. This small study showed incidence of 50% for babies with OA to be associated with other anomalies and supports current literature.

612 FEASIBILITY STUDY USING FACIAL ANALYSIS SOFTWARE TO DOCUMENT FACIAL FEATURES ASSOCIATED WITH FETAL ALCOHOL SYNDROME IN NEWBORN INFANTS

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