

**PO-0123 THE INCREASE IN PLASMA SELENIUM IS INDEPENDENTLY ASSOCIATED WITH A BETTER OUTCOME OF CHILDREN WITH ACUTE SYSTEMIC INFLAMMATION**

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**Background and aims** To assess the effects of changes in plasma selenium on the outcome in critically ill children

**Methods** Plasma selenium concentrations were prospectively measured in 99 children with acute systemic inflammatory response. The exposure variable was defined as the difference between plasma selenium concentrations between the 5th day post admission and the admission to the ICU (delta selenium). Age, malnutrition, red cell GPx-1 activity, serum C-reactive protein, Paediatric Index of Mortality 2 and Paediatric Logistic Organ Dysfunction scores were analysed as covariates for the outcomes. The outcome variables were ventilator-free days, ICU-free days and 28-day mortality. Selenium was given only as part of the enteral diets.

**Results** Plasma selenium concentrations below the 2.5 percentile for age were found in 72% and in 59% of patients on admission and day 5, respectively. Values increased from admission (median 23.4 µg/L, interquartile range 12.0–30.8) to 5th day (median 25.1 µg/L, interquartile range 16.0–39.0;  $p = 0.018$ ). After adjustment for confounding factors, a 'delta selenium' increase of 10 µg/L was associated with reductions in ventilator days (1.4 days, 95% C. I. 0.4–2.5;  $p = 0.016$ ), ICU days (1.6 days, 95% C. I. 0.6–2.6;  $p < 0.002$ ), and with decreased 28-day mortality on univariate model ( $p = 0.036$ ). The mean daily selenium intake (6.82 µg; range 0 to 48.66 µg) was correlated with the increase in selenium concentrations on day 5.

**Conclusion** In children with systemic inflammation, the increase in plasma selenium concentration was independently associated with shorter times of mechanical ventilation and ICU stay. These results raise the question of selenium supplementation in children with critical illness.

**PO-0124 FATHERS' KNOWLEDGE AND ATTITUDE TOWARD BREASTFEEDING: A CROSS SECTIONAL STUDY**

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**Objective** To determine the breastfeeding knowledge and attitudes of fathers seen at the University of Santo Tomas Hospital.

**Design** Cross-sectional design

**Setting** University of Santo Tomas Hospital (USTH)

**Participants** 156 fathers who were accompanying their wives/children at the USTH

**Findings** The outcome of the Iowa Infant Feeding Attitude Scale showed fathers to be generally unbiased whether their child be fed breast milk or milk formula. About 85% agreed that breast milk is the ideal food for babies, 79% believed that breastfed babies are healthier than formula fed and 55% of them do not believe that breast milk lacks iron. About 80% agreed that it is easily digested, 87% are aware of the economical value and 57% agreed of its convenience. Breastfeeding support was noted when 55% of the fathers would encourage mothers to breastfeed so as not to miss the joys of motherhood, 91% believed that

breastfeeding increased mother-infant bonding. About 57% do not feel left out whenever the mothers breastfeed.

However, 46.6% support the decision of their wives to switch to formula feeding once they go back to work, 42% only find breastfeeding in public to be acceptable and 57% will not allow breastfeeding to mothers who drink alcohol.

**Conclusion** In the study although fathers' attitude toward breastfeeding is unbiased towards breastfeeding or formula feeding, the majority of the fathers appreciate breastfeeding and its benefits.

**PO-0125 CORRELATION BETWEEN ESOPHAGEAL PH-METRY AND ESOPHAGITIS IN GASTROESOPHAGEAL REFLUX DISEASE**

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**Background and aims** The study compares the 24 h esophageal pH-metry, used to be considered the "gold diagnosis" for the gastroesophageal reflux, with the esophagitis degree observed at the upper digestive endoscopy.

**Material** 72 children were included, aged over 4 years old, admitted in a paediatric gastroenterology regional centre in northeast Romania, diagnosed with gastroesophageal reflux disease (GERD) by 24 hours pH-metry (with a positive Boix Ochoa score), which also underwent the upper digestive endoscopy.

**Results** Out of the 72 children diagnosed with GERD, 47 (65.28%) had first degree esophagitis and 25 (34.72%) second degree esophagitis. In GERD associated with second degree esophagitis the Boix Ochoa score is statistically significant higher compared with the GERD associated with first degree esophagitis ( $F = 9.76$ ,  $p = 0.0036$ , 95% CI).

**Conclusions** Upper digestive endoscopy performed in patients with gastroesophageal reflux disease shows the constant presence of esophagitis at all patients. There were only first and second degree esophagitis due to the fact that they are young patients with a relative short history of the disease. The correlation tests show a perfect parallel between the pH-metry scores and the endoscopic lesion. The correlation is so accurate that the pH-metry scores can be sufficient to prove the disease and the esophagitis degree, the upper digestive endoscopy being reserved only for the cases that does not respond to the medical treatment or have other complications.

PO-0126 WITHDRAWN

PO-0127 WITHDRAWN

**PO-0128 INFANT AND YOUNG CHILD FEEDING PRACTICES IN INFANTS RECEIVING SKIN TO SKIN CARE AT BIRTH: A FOLLOW UP OF RANDOMISED COHORT**

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**Background and aims** Skin to Skin (STS) care in neonatal period influences immediate breastfeeding outcomes in early childhood, especially the duration of exclusive breastfeeding. We investigated influence of STS care given on day one of life on infant and child feeding (IYCF) practices through one year of life.

**Methods** Mothers of 100 neonates (48 girls, 52 boys) from previous study cohort of RCT on STS care was followed. A telephonic survey on IYCF practices during the first year of life was administered.

**Results** There was no difference in the groups as far as the duration of exclusive breastfeeding, number of times breastfed per day, or stoppage of night feeds. No baby in either group received bottled feeds but about 53 received some form of extra lacteal feeds in the first 6 months without significant group difference. Fewer STS group mothers reported difficulties with breastfeeding or extra lacteal supplementation. All mothers who faced problems contacted physicians for advice, and 20 were advised top milk and 6 given other foods. At one year of life 66% mothers were giving less than the recommended five food servings. There was no difference in practices related to hand-washing, food preparation and storage, feeding habits of child and illness episodes in the children.

**Conclusions** IYCF practices even in this small group were not as per recommended guidelines. Few positive trends were seen with fewer STS mothers facing problems related to breastfeeding. The study was underpowered to detect differences in IYCF practices in relation to STS care.

#### PO-0129 ALPHA-1 ANTITRYPSIN: CHARACTERISATION OF CHILDREN FOLLOWED IN A LEVEL 2 HOSPITAL

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**Background** Deficiency of Alpha-1 Antitrypsin (D-AAT) is one of the most common serious hereditary diseases worldwide, however, remains an under diagnosed entity.

**Objectives** To characterise children with D-AAT followed in a level 2 hospital (2000–2013).

**Methods** Retrospective analysis of clinical records of children with D-AAT followed in a paediatrics digestive pathology consultation.

**Results** 41 cases (61%males) were diagnosed. The average age at diagnosis was 6 yrs (1 month<sup>-15</sup> yrs).

The diagnosis was established in the following settings: study of allergies in 26.83%; family history in 21.95%; lower respiratory infections in 9.76%; asymptomatic elevation of transaminase in 7.32%; Escreva texto ou o endereço de um Web site ou traduza um documento Traduzir do: Português neonatal cholestasis, prolonged neonatal jaundice, and persistent transaminase elevations after acute gastroenteritis in 4.88% each; others pathologies in 34.14%.

Immunophenotyping allowed detection of alleles Z and S, in 85% and 40%, respectively. Other pathological alleles identified less frequently were the I, V and Mmaltom. The phenotype identified were: MZ in 32.5%, SZ 26.8%, ZZ 19.5%, SS and IZ 4.88% each; MS, MV, SV, and SM maltom 2.5% each.

In 100% of cases the presence of at least one disease in parental allele was verified.

**Discussion** The most common pathological allele was the Z, and the predominant phenotype was MZ. All children are clinically well, without complications. We highlight the need for awareness

of the scientific community for the early diagnosis of this entity in order to implement interventions to prevent the progression of lung disease by decreasing any proinflammatory stimuli, and to undertake family studies to ensure early diagnosis of other cases and provide genetic advice.

#### PO-0130 CAMPYLOBACTER GASTROENTERITIS IN CHILDREN

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**Introduction** Acute gastroenteritis (AGE) remains, throughout Europe, a public health issue. *Campylobacter* is the most common enteropathogen after the age of five, particularly in Northern Europe.

**Objective** Epidemiological data of the paediatric population with AGE by *Campylobacter*.

**Methods** Retrospective data collection from clinical records of patients less than 18 years with confirmed *Campylobacter* positive stool cultures over a one year period.

**Results** Out of 322 patients with AGE and at least one or more clinical criteria for stool culture (fever, blood or mucus stools in our case), in 83 (25.8%) *Campylobacter* was isolated. Although, this was the most frequently identified agent, there was, an inverse relationship with increasing age (mean age 2.8 years; range 3 weeks to 17 years). Most cases (39.8%) occurred in the spring. Serotypes isolated were *C. jejuni* in 83.1% and *C. coli* in 3.6%. Possible food items responsible included free range home produced eggs and non-potable water. In 12% there was a family history of illness and in one patient there was a previous infection by *Campylobacter*. Eleven (13.3%) children required admission. Antibiotics were started prior to stool culture results in only two cases; following the stool cultures only one child was given antibiotics, having the remaining 98.8% clinically improved by then.

**Discussion** AGE is a self-limited disease with most patients recovering within a week. Rehydration and electrolyte correction is the mainstay of treatment.

#### PO-0131 VALUE OF STOOL CULTURE OF CHILDREN

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**Introduction** Acute gastroenteritis (AGE) remains, throughout Europe, a public health issue. Under the age of 5, some 20 to 30% of bacterial microorganisms are identified. However, cost-effectiveness of routine stool cultures yielding only 2% results preclude routine stool culturing.

**Objective** Evaluation of the value of stool culture of children with AGE.

**Methods** Retrospective data collection from clinical records of patients less than 18 years old submitted to stool cultures over a one year period.

**Results** Out of 322 stool culture, 56.8% fulfilled the accepted ESPGHAN criteria and 74.8% had at least 1 clinical predictor of positivity (fever, blood or mucus stools, > 10 bowel actions/24 h, abdominal pain, travelling to highly epidemic countries).