

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⁻¹⁵ 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).

There were 121 positive cultures positive, 79.3% in patients obeying the defined criteria and 91.7% with clinical predictors of positivity. *Campylobacter* was the most frequently identified agent (68.6%), followed by *Salmonella*. *Campylobacter* decreased within an increasing age whilst *Salmonella* showed an inverse pattern. *Campylobacter* was the most frequently identified agent throughout all seasons of the year, followed by *Salmonella*, except in the winter when *Yersinia* took the second place.

Discussion Sticking to accepted criteria for stool collection and/or to defined clinical features, increasing the yield of stool cultures.

PO-0132 ACID REFLUX INTO THE OESOPHAGUS AND EXERCISE: A PROSPECTIVE STUDY IN CHILDREN

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Background and aims It has been reported that gastro-oesophageal reflux (GOR) can be induced by exercise, as described in adult subjects; studies in children are lacking. We sought whether the presence of acid in the oesophagus may increase with exercise and its potential relationship with atopy and lung function in children.

Methods We recruited 45 patients (M/F: 30/15) aged 11 ± 2.7 years with reported exercise-induced respiratory symptoms; subjects were asked for frequency of gastrointestinal symptoms. All patients did lung function before and after 24-h gastro-oesophageal (GO) pH monitoring; they also underwent exercise testing (treadmill) before removing GO catheter. GO-pH was also analysed for 6 min intervals before, during and after exercise. The gastro-oesophageal reflux disease (GORD) was defined as a 24-hour reflux index (IR) $\geq 4.5\%$ and/or symptom index $\geq 50\%$. Total serum IgE levels were also assessed.

Results GORD was found in 11/45 (24.4%) of our patients; these children had also a higher IR score during exercise than patients without GORD (7.1 ± 18.5 vs 0.5 ± 2.3 , $p < 0.05$). A fall of GO-pH was recorded during exercise, greater in children with GORD as compared with those without (17.2 ± 42.2 vs 0.9 ± 6.4 , $p = 0.03$). The exercise-induced fall in GO-pH was associated with frequent gastrointestinal symptoms and correlated with IgE levels and baseline FEV₁% (IgE: $r = -0.37$, FEV₁%; $r = -0.31$, $p < 0.05$ for both).

Conclusions Our results suggest that oesophageal acidity increase with exercise, particularly in atopic children with frequent gastrointestinal symptoms and low baseline respiratory function.

PO-0133 GASTROESOPHAGEAL REFLUX IN INFANTS AND OSTEOPATHIC MANIPULATIVE TREATMENT: AN ALTERNATIVE THERAPY?

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Background and aims Several study have been reported that modifying vagus nerve control of transient lower esophageal sphincter relaxation can induce improvement of gastroesophageal

reflux disease (GERD). Our aim was to evaluate the efficacy of osteopathic treatment (OMT) in infants with GERD.

Methods We enrolled 40 infants (M/F:24/16), age ranged 1–18 months (median 4 month) attending for persistent reflux. Each patient performed I-GERQ-R questionnaire and ultrasonography of the gastro-esophageal junction before and after treatment. The ultrasound score was 0 to 3 on the basis of severity of reflux (number of reflux episodes in 10 min). Moreover each patient did an osteopathic treatment consisting in an extensive physical examination, to evaluate TART parameters (T = tissue texture changes; A = asymmetry; R = restriction of motion; T = tenderness). Then, a specific therapeutic intervention was chosen, treating only the parts of the body presenting greater TART modifications.

Results All the somatic dysfunctions observed before OMT (at the scale 32/40 patients, the condyles 36/40 patients, the occipito-mastoid suture 36/40 patients, the stomach 22/40 patients, the small epiploon 30/40 patients) disappeared after treatment. The average score of I GERQ-R questionnaire before and after treatment was 22.7 ± 4.7 and 17.2 ± 4.5 respectively ($p < 0.05$). In 29 (72.5%) patients we found an improvement of ultrasound parameters (mean score before and after treatment was 1.7 ± 0.8 and 0.7 ± 0.7 respectively; $p < 0.05$).

Conclusion OMT could be considered as an alternative treatment in infants with gastroesophageal reflux. Further data are needed to confirm our hypothesis.

PO-0134 COW'S MILK PROTEIN ALLERGY: ORAL FOOD CHALLENGE BEFORE 12 MONTHS OF AGE?

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To characterise the cases of cow's milk protein allergy (CMPA) followed in our GI Outpatient Clinic and determine how much parents save on extensively hydrolyzed milk (EHM) when oral food challenge (OFC) is performed <12 months (M).

CMPA patients observed between October2010-October2013 were included in this retrospective study based on Service's CMPA protocol: OFC >6 M, except at parents' request. Calculations: each package of EHM costs 20€ and has 102 doses and of infant formula (IF) costs 10€ and has 181 doses, according to each infant's nutritional needs. Statistical analysis: Mann-Whitney test.

Sixty-four children were included; 59% females. The median age of onset was 3 M (0.43–12 M). Most frequent symptoms were cutaneous ($n = 37$) and gastrointestinal ($n = 27$). IF was the main dairy product that triggered symptoms (64%;22% with hypoallergenic formula). Family history of atopy was positive in 63%;54% had atopic disease, namely atopic dermatitis (82%). Measurement of cow's milk-specific IgE was performed in 33;24 with positive results. Fifteen of 20 children with information about the use of IF in maternity had the first dose of CMP at that time. The first OFC was positive in 45%, and was performed at a median age of 10 M (3–39 M). Forty children had their OFC <12 M and in most cases ($n = 25$) it was negative. Performing the OFC <12 M, each infant with a negative result spared 326€ on EHM. Tolerance was achieved at a median age