

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