P328 INFLUENCE OF BIRTH METHOD ON THE SPECIES COMPOSITION OF INTESTINAL MICROBIOTE BIFIDOBACTERIA AND MICROBIAL METABOLISM PROFILE IN CHILDREN OF THE FIRST SIX MONTHS

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Changes of intestinal microbiome in first year of life, related with cesarean section, are the most unfavorable and have long-term negative effects and have long-term negative consequences, further increasing the risk of allergic diseases development (food allergy, atopic dermatitis), development of obesity and Type I diabetes.

The aim of the study Evaluate the species composition of Bifidobacterium, range of Short-chain Fatty Acids (SCFA) in feces in children, who were born by natural way or by cesarean section, for clarification their diagnostic value in the process of formation of micropinocytosis in children.

Materials and methods Examined 60 children in the age of 4–6 months. 48 children were born by natural way and 12 were born by cesarean section. All of them were full-term and were on breastfeeding.

Researchs that were conducted microbiological examination of feces, typing of Bifidobacterium (PCR) with definition of infant (*B.bifidum*, *B.infantis*, *B.breve*) and adult (*B.adolescentis*, *B.longum*) strains, definition of SCFA (C2-acetic acid, C3-propionic acid, C4-butyric acid, C5-valeric acid, C6-caproic acid) content in feces.

Results Clinical demonstration of functional indigestion of moderate degree (regurgitation, colic, constipation) was noted in 49 children (81,7%). Allergomatitis was diagnosed in 10 (16,7%) children. III-grade dysbiotic changes in intestines were found less in natural-way born (NW) children in comparison with cesarean section (CS) born children (14,58% □33,33%, $p<0,05$). One infant strain of Bifidobacterium was in 41,67% of (NW) born children and in 25% CS born children ($p>0,05$). There were no significant differences in the allocation frequency of different infant strains in the observed groups. Established, that content of acetic acid was significantly higher in NW born children ($1,59\pm0,75$ □ $1,04\pm0,56$, $p<0,05$). Significant differences in relative content of SCFA fractions C3-C6 in feces of (CS) born children and (NW) born children: C3 ($0,16\pm0,14$ □ $0,08\pm0,08$), C4 ($0,06\pm0,07$ □ $0,11\pm0,16$), C6 ($0,01\pm0,01$ □ $0,01\pm0,01$) was not found ($p>0,05$).

Conclusion In CS born children, impoverishment of the intestines by infantile species of Bifidobacterium, lower content of acetic acid, were detected significantly more often. It shows decrease of activity and amount of obligatory anaerobic bacteria (*Bifidum*-, *Lacto*-) in intestines, increased activity of opportunistic flora. That can be used in practical healthcare with diagnostic purpose.

P329 ASTHMA AND GASTROESOPHAGEAL REFLUX IN CHILDREN

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Background and aims The gastroesophageal reflux and asthma is considered today as a specific causal relationship in which the continuous aspiration of the gastric refluente involves the development and maintenance of spasticity with the onset of real crisis of paroxysmic expiratory dyspnea. The aim of this study is to explore this relationship and to evaluate the outcome after appropriate treatment.

Methods A group of 56 children with asthma, admitted in a pediatric gastroenterology clinic in Iasi, were evaluated for the presence of gastroesophageal reflux by 24 hour continuous esophageal pH monitoring and the results were interpreted using the Boix Ochoa score. All patients with positive score received treatment with proton pump inhibitors and they were evaluated again after 2 months.

Results 39 children (69.64%) had gastroesophageal reflux proved by a positive Boix Ochoa score, while 17 (30.36%) had a negative score. After a 2 months treatment with proton pump inhibitors the Boix Ochoa score remained positive for 7 patients (17.95%).

Conclusions Asthma is a solid reason for evaluating the presence of a gastroesophageal reflux by 24 hour continuous esophageal pH-metry especially in the cases with poor response to asthma treatment. The bronchial spasm triggered and maintained by the aspiration of the acid refluente remains the most plausible explanation of this relationship and association. Adequate treatment of gastroesophageal reflux solves or at least helps the treatment of asthma.

P330 DIAGNOSTIC YIELD OF LOWER GASTRO-INTESTINAL ENDOSCOPY IN TUNISIAN CHILDREN

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Introduction Lower gastrointestinal endoscopy (LGIE) in children has diagnostic and therapeutic value. Pediatric LGIE is increasingly being used, but few studies have recently evaluated the diagnostic yield in children. This study aimed to investigate the indications and the diagnostic yield of diagnostic colonoscopy among Tunisian children.

Methods A retrospective study of children who underwent LGIE from January 2010 to December 2017, in a referral tertiary pediatric endoscopy center in Tunis was performed. Data on age, gender, indications, colonoscopic features and final diagnoses were collected and analyzed. The diagnostic yield of LGIE was defined as the percentage of patients in which the procedure showed endoscopic lesions.

Results Two hundred and ten children with 107 colonoscopies and 103 sigmoidoscopies were enrolled. The rate of successful ileocecal approach was 9%. The diagnostic yield of colonoscopy was 83/210 (39%). The most common indication was lower gastrointestinal bleeding (LGIB) 120/210 (57.1%), followed by endoscopy performed for a diagnosis of suspected inflammatory bowel disease (IBD) 61/210 (29%). Out of the children who underwent colonoscopy, 39/210 (18.6%) were confirmed to have polyps, 20/210 (9.5%) to have IBD, 10/210 (4.7%) to have intestinal lymphoid nodular hyperplasia and 12/210 (5.7%) to have no specific colitis and two cases of colic tumors. The diagnostic yields of colonoscopy according to the major indications were 41.7% in LGIB and 45.9% in suspected IBD. There were no major procedure-related