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

complications. LGIE contributed to the final diagnosis of gastrointestinal disorder in 102/210 (48.6%) by showing histological findings in favor of the diagnosis in biopsies or negative signs allowing to eliminate the diagnosis or by revealing abnormalities in proctologic examination.

Conclusion Rates of endoscopic and histological abnormalities from LGIE vary based on age and indication for endoscopy. The diagnostic yield of LGIE was moderate (39%). However, LGIE contributed to diagnosis and management of patients in about half of the cases (48.6%). Negative findings from LGIE can contribute in a positive way to the diagnosis and management of children with gastrointestinal symptoms. A study must be conducted to identify factors associated with diagnostic yield of LGIE in children.

P331

EXTRINTESTINAL MANIFESTATIONS OF PEDIATRIC INFLAMMATORY BOWEL DISEASE: A TUNISIAN SINGLE-CENTER EXPERIENCE

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Introduction The incidence of pediatric inflammatory bowel disease (IBD) increased during last years. However, extra intestinal manifestations (EIM) in children with IBD are poorly characterized. The aim of this study was to describe clinical features of extraintestinal manifestations of IBDs in the Tunisian pediatric population.

Methods We conducted a retrospective study from 2012 to 2017 of children admitted to the pediatric gastroenterology department of BECHIR HAMZA Children's Hospital for Crohn's disease (CD) or ulcerative colitis (UC).

Results We collected 14 patients, six boys and eight girls, five cases with UC and nine cases with CD. The mean age at diagnosis was 10±3.3 years [18 month-14 years]. EIMs were reported in ten of 14 patients. EIMs included aphthous stomatitis (n=3), osteoporosis/osteopenia (n=4), peripheral joint inflammation (n=5), primary sclerosing cholangitis (n=1), ankylosing spondylitis (n=1), cerebral venous thrombosis (n=1) and cerebral vasculitis (n=1). We observed three children with skin involvement: one with erythema nodosum, the other with ulcerative skin eruption and a case of vitiligo. EIMs were more frequent in CD than UC (7/9 vs 3/5, p = 0.041). EIM appeared before IBD diagnosis in 11/18 cases. Three patients were treated with anti-TNF agents, six with azathioprine and only one with methotrexate.

Conclusion The prevalence of EIMs in children with IBD in our study was high mainly in patients with CD. EIM may appear before IBD diagnosis. Knowledge of these findings may lead to an increased awareness of underlying IBD, thereby decreasing diagnostic delay.

P332

COMPLICATIONS OF ACHALASIA IN A PAEDIATRIC PATIENT WITH DOWN SYNDROME

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Introduction Achalasia is a motility disorder whose pathophysiology is still incompletely understood. Although rare, achalasia can be associated with Down syndrome, with a higher prevalence than the general population. The treatment is palliative and the medical management often fails whereas the endoscopic and surgical treatment relief symptoms on the long-term with comparable success rates.

Case presentation We herein report the case of a 12 years old girl who was first referred to our hospital at the age of 3 for severe growth retardation. She was diagnosed from birth with Down syndrome by translocation, ventricular septal defect and interventricular membranous septal aneurysm. She presented post-prandial regurgitation from infancy, failure to thrive and numerous respiratory tract infections. Based on clinical symptoms and timed barium oesophagogram we defined the case as achalasia with megaesophagus. She was transferred to the surgical unit and underwent a surgical myotomy with fundoplication. She developed an oesophageal-mediastinal fistula for which a total oesophagectomy was performed, with colon interposition for oesophageal replacement. One year later, the patient presented melena and required another surgery for cologastric anastomotic stricture and anastomotic ulcerations. After a long-term asymptomatic period, during her last assessment she was diagnosed with pneumonia, aspiration syndrome and pleural effusion. The CT scan described a dilated, tortuous colon graph with significant stasis. As there was an important intra-thoracic compression with respiratory distress, she was transferred for surgical treatment considering this life-threatening disorder.

Discussion This case highlights the complex treatment of an uncommon association of achalasia and Down syndrome by translocation. Given that the treatment for achalasia in children is still continuously debated, the therapeutic option should depend on the patient and further attention should be given towards the long-term complications.

P333

AN UNUSUAL CASE- ASCITES IN A TWO YEAR OLD CHILD

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Aims Ascites in the paediatric population is very rare with no known prevalence. This case of ascites secondary to portal vein thrombosis demonstrates the work up required and complications that can occur.

Methods DH a previously healthy 2 year old boy presented with 3 week history of increased abdominal distention. He was clinically well with no anorexia, dyspnoea or discomfort. He had a normal urine output and bowel habit. No past medical history of note. On examination, he was a happy, well child with normal hydration status. His weight was 14.7 kg (91st-99th centile). His abdominal exam revealed marked distention; umbilicus everted & enlarged abdominal girth of 60 cm. Tense ascites present with positive fluid thrill. His bloods, including coagulation screen and liver function tests, were all normal. Ultrasound scan of liver showed cavernous transformation of left portal vein, splenomegaly and large volume ascites.

Results He was diagnosed with a portal vein thrombosis (PVT), this is a cause of ascites in 6 per 1,000 children^[1]. The PVT aetiology was investigated analysing for intrinsic &