

Conclusion Intra-abdominal tumors are more common in males. Neuroblastoma was the most common tumor. Most of the tumors were noted in children less than 5 years of age.

681 CLINICOPATHOLOGICAL ASPECTS OF LOWER GASTROINTESTINAL BLEEDING IN CHILDREN: A SINGLE CENTER EXPERIENCE FROM SOUTHERN IRAN

doi:10.1136/archdischild-2012-302724.0681

E Fallahzadeh, M Zahmatkeshan, KS Najib, B Geramizadeh, M Haghghat, MHI Imanieh, SM Dehghani. *Shiraz University of Medical Sciences, Shiraz, Iran*

Purpose To determine the common etiologies and characteristics of lower gastrointestinal bleeding in children in southern Iran.

Methods This study was performed from March 2006 to March 2011 in Nemazee Hospital. All pediatric patients who referred to our center with visible lower gastrointestinal bleeding or two consecutive positive occult blood tests with at least one week interval were included in the study. The patients were categorized as neonates (1–28 days), infants (29 days–2 years), children (2–10 years) and adolescents (>10 years) and the findings were reported separately in each group. All the patients underwent colonoscopy and several mucosal biopsies were taken. Demographic and clinical information as well as colonoscopy and pathology findings were reported.

Results We included 363 pediatric patients with a mean age of 71.9±58.4 months, ranging from 1 to 216 months. There were 215 (59.2%) boys and 148 (40.8%) girls. The most common colonoscopy finding was sigmoid colon polyp in 91 (25.1%) patients followed by descending colon petechia in 78 (21.5%) patients, rectal whitish lesions in 45 (12.4%) patients, and sigmoid and rectal ulcers in 37 (10.2%) patients. Biopsy samples were non-specific in 96 (26.4%) patients. The most common pathological finding was juvenile polyp in 84 (23.1%) patients followed by lymphoid nodular hyperplasia in 55 (15.2%) patients and solitary rectal ulcers in 25 (6.9%) patients.

Conclusions Lower GI bleeding is more common among 2–10 year-old children and is rarely encountered in neonates. Hematochezia was the most common form of presentation followed by bloody diarrhea and occult blood.

682 THE ROLE OF LACTOBACILLUS RHAMNOSUS GG SUPPLEMENTATION ON THE ERADICATION OF PATHOGENIC INTESTINAL FLORA IN INFANTS

doi:10.1136/archdischild-2012-302724.0682

W Furmaga-Jablonska, K Czyn, M Rymgayllo-Katska, G Polkowska, M Zatorska-Karpus. *Department of Neonate and Infant Pathology, Medical University, Lublin, Poland*

Objectives and study It is suggested that colonization of gastrointestinal tract by pathological microorganisms in infants may modulate local mucosal immune response and start inflammation. Disorders of the digestive system in infants may be manifested by diarrhea, blood in the stools or abdominal pain. Probiotics, which exert effect on the health and well-being of the host, may be in that situations, a potential therapeutic option. Therefore, we constructed the study to investigate the efficacy of *Lactobacillus rhamnosus* GG (LGG) supplementation for the eradication of pathogenic intestinal flora in infants.

Methods A randomized, double-blind, placebo controlled trial included 65 infants (31 girls and 34 boys) at age from 2-st to 20-th month. All children presented symptoms such as vomiting, diarrhea, dyspeptic stools or blood in the stools. The enteropathological bacterial flora were revealed in each cases. Infants were randomly allocated to receive *Lactobacillus* GG 3x10⁹ CFU (active LGG group, n=36) or placebo (maltodextrin) (placebo group, n=29). After 14 and 28 days of oral supplementation control stool cultures were performed.

Results Compared to the placebo group, infants in LGG group had an increase in benefit of the pathological intestinal flora eradication after 14 days and 28 days of oral LGG supplementation (RR 1.31, NNT 12, RR 1.39 NNT 4) respectively.

Conclusion The use of LGG supplementation seems to be effective in the eradication of gastrointestinal colonization by pathological bacteria.

683 IS ESOPHAGEAL GLYCOGENIC ACANTHOSIS ASSOCIATED WITH GASTROESOPHAGEAL REFLUX DISEASE IN CHILDREN?

doi:10.1136/archdischild-2012-302724.0683

¹HH Emiroglu, ¹S Sokucu, ¹S Cantez, ²M Gulluoglu, ³M Keser, ¹O Durmaz. *¹Pediatric Gastroenterology, Hepatology and Nutrition; ²Pediatric Pathology; ³Pediatric Infectious Diseases, Istanbul University Istanbul School of Medicine, Istanbul, Turkey*

Background and Aim Glycogenic acanthosis (GA) is a common benign endoscopic and histopathological finding which has not known the pathogenesis and aetiology. There is a study about the relationship between GA and gastroesophageal reflux disease (GERD) on adults in the literature.

Retrospective in nature the aim of our study was to find out whether GA is associated with GERD in children.

Methods A total of 213 children (101 females, average age 8.4±4.9 years, range 2 months–18 years), who underwent diagnostic esophagogastroduodenoscopy during a three years period were included in this study.

The histopathological findings of GA and reflux-related changes according to Knuff & Leape classification were examined by the same pathologist. SPSS for Windows Release 16.0 was used to analyse the statistical data. All tests of statistical significance were two-sided with a p-value < 0.05.

Results Of the 213 children, 67 (31.4%) had GERD. GA was found in 38 (17.8%) of the 213 children. The prevalence of GA in the patients with GERD (12 of 67, 17.9%) and that in without (26 of 146, 17.8%) were similar. Likewise, when the prevalence of GERD in GA-positive patients (12 of 38, 31.6%) was compared with that in GA-negative patients (55 of 175, 31.4%), no statistically significant difference was found. It was found out that the prevalence of non-erosive reflux disease was quite alike in GA-positive and GA-negative children.

Conclusion Presence of GA was not associated with GERD in children.

684 GLYCOGENIC ACANTHOSIS OF THE ESOPHAGUS: IS IT ASSOCIATED WITH HELICOBACTER PYLORI INFECTION IN CHILDREN?

doi:10.1136/archdischild-2012-302724.0684

¹HH Emiroglu, ¹S Sokucu, ²M Gulluoglu, ¹S Cantez, ³M Keser, ¹O Durmaz. *¹Pediatric Gastroenterology, Hepatology and Nutrition; ²Pediatric Pathology; ³Pediatric Infectious Diseases, Istanbul University Istanbul School of Medicine, Istanbul, Turkey*

Background and Aim Glycogenic acanthosis (GA) is usually reported as a histologic finding. The pathogenesis and aetiology of GA has not been explained definitively yet.

There are many studies about the relationship between *Helicobacter pylori* (*H. pylori*) infection and gastric or extragastric manifestations of malignant or non-malignant diseases in the literature. However, only one study deals with the association between GA and *H. pylori* infection.

The aim of our study was to find out whether GA is associated with *H. pylori* infection in children.

Methods A total of 206 children (98 female, median age 9.0 years, range 2 months–18 years), who underwent diagnostic esophagogastroduodenoscopy during a three years period, were included. GA