In our study, for the first time we studied enteroendocrine markers in duodenitis of various etiologies. We were looking for a morphological tool that will help differentiate duodenitis with similar clinical and histological features. Increased expression of ghrelin, serotonin and chromogranin A, plays an important role in the mechanisms of duodenum structure disorders in celiac disease. When Hp infections a decrease in all studied markers, while giardiasis is not observed significant changes. All of this allows us to differentiate duodenitis aetiology and, therefore, reasonable to appoint therapeutic measures.

P239

PREVALENCE OF AUTOIMMUNE GASTRITIS IN CHILDREN WITH CELIAC DISEASE ACCORDING TO ENZYME-LINKED IMMUNOSORBENT ASSAY AND INDIRECT IMMUNOFLUORESCENCE REACTION

¹VP Novikova*, ²MO Revnova, ²NS Shapovalova, ³EJ Kalinin, ⁴SV Lapin, ⁴VI Guseva, ²OP Gurina, EA Dementieva, ²RA Nasyrov. ¹ Almazov V.A. Federal Medical Research Centre; ² St. Petersburg State Paediatric Medical University; ³ Mechnikov I.I. North-Western State Medical University, ⁴ St. Petersburg First Medical University Russia, St. Petersburg

10.1136/archdischild-2017-313273.327

Aim To evaluate the prevalence of autoimmune gastritis in children with celiac disease, according to enzyme-linked immunosorbent assay (ELISA) and indirect immunofluorescence reaction (IIFR).

Methods 155 children of both sexes at the age of 3 to 17 years were examined. The study involved 78 children with different clinical forms of celiac disease (CD). The diagnosis was confirmed according to ESPGHAN criteria: was biopsy-proven, was based on clinical manifestation, positive serological and genetic data. 72 children with chronic gastritis and excluded celiac disease were a control group.

All patients underwent a same examination: histological examination of gastric biopsies, histological verification of H. pylori infection and biopsy urease test. The biopsies were evaluated by a single pathologist who was blinded to all clinical data. Identification of anti-parietal cell antibodies (APCA), anti-Intrinsic Factor (ELISA) was carried out in 76 patient and anti-H+/K+ ATPase (ELISA) in 66. APCA, using indirect immuno-fluorescence reaction, were determined in 62 children.

Results In both groups of children chronic gastritis was diagnosed. Helicobacter pylori infection was verified in the majority of patients in both groups (53,7% and 55,9% p>0,05).

Anti- H+/K+ ATPase antibodies were common in both groups with no statistically significant difference (8.8% and 6.25%, p>0.05), but only in the group with celiac antibodies combined with gastric atrophy (2.9% and 0%, p<0.01). Anti- Intrinsic Factor antibodies were presented only in the control group (0% and 6.8%, p<0.01) and weren't combined with atrophy. APCA identified with IIFR were detected only in patients with celiac disease (4.54% and 0%, p<0.01) and were associated with gastric atrophy.

Conclusion Thus, the ELISA detected APCA with no evidence of gastric atrophy in both groups. This requires additional examination to confirm or to exclude the diagnosis of autoimmune gastritis. IIFR displayed complete concurrence of immunological and histological criteria of autoimmune atrophic gastritis,

including the lack of association with H. pylori infection. This may indicate a systemic autoimmune process in celiac disease.

P240

ERYTHROMYCIN AS PROKINETIC TREATMENT IN INFANTS AND TODDLERS WITH GASTRO-ESOPHAGEAL REFLUX DISEASE – A TWO-YEAR STUDY

¹Pop Radu Samuel*, ¹Florea Szidonia, ¹Nemes Georgiana, ¹Cireap Diana, ²Farcau Dorin. ¹
– Illrd Paediatric Clinic, Emergency Children's Clinical Hospital, Cluj-Napoca, Romania; ² –
Illrd Paediatric Department, University of Medicine and Pharmacy 'Iuliu Haţieganu' Cluj-Napoca, Romania

10.1136/archdischild-2017-313273.328

Background and aims Gastro-esophageal reflux disease (GERD) is defined by persistent reflux episodes associated with significant symptoms or complications. In infants and toddlers GERD symptoms are hard to distinguish and usually vary with the child's age. There is no consensus concerning GERD treatment in infants, especially regarding prokinetics. Therefore, this study aims to evaluate the effectiveness of erythromycin as prokinetic agent in infants and toddlers with GERD.

Methods This retrospective study evaluated 47 patients with GERD, admitted over a 2 year period in a paediatric department. We included patients under the age of 24 months with digestive and extra digestive symptoms proved with GERD clinically or by imagistic findings. We excluded those who received prokinetic or proton pump inhibitor therapy in the last week before the study and patients with respiratory and neurological diseases which could determine similar extra digestive symptoms. Regarding the pharmacological therapy, the patients were divided in 3 study groups: group A received erythromycin 3-5 mg/ kg/day for one month, group B received esomeprazole 0.5-1 mg/kg/day for one month, while group C received erythromycin 3–5 mg/kg/day combined with esomeprazole 0.5–1 mg/kg/ day for one month. All patients followed the same preceding dietary regimen during the entire duration of the therapy. Total or partial improvement in symptoms was considered as favourable clinical outcome while the persistence of symptoms was recorded as unfavourable clinical outcome.

Results Out of 47 patients 63.8% were male, 76.6% were infants and 29.8% were born preterm. Sixteen of the 17 patients in group A (94.1%) had a favourable clinical outcome compared to only six out of 14 patients in group B (42.8%). This difference was highly statistically significant (p=0.004). Comparing the effectiveness of therapy between group A and group C, erythromycin alone was significantly more effective than therapy with erythromycin combined with esomeprazole (p=0.039). No side effects were noticed in neither of the groups taking erythromycin.

Conclusion Our study proves that erythromycin is a safe and effective therapy for infants and toddlers with GERD. More studies with larger number of cases are necessary to confirm these data.



P239 Prevalence of autoimmune gastritis in children with celiac disease according to enzyme-linked immunosorbent assay and indirect immunofluorescence reaction

VP Novikova, MO Revnova, NS Shapovalova, EJ Kalinin, SV Lapin, VI Guseva, OP Gurina, EA Dementieva and RA Nasyrov

Arch Dis Child 2017 102: A127

doi: 10.1136/archdischild-2017-313273.327

Updated information and services can be found at: http://adc.bmj.com/content/102/Suppl_2/A127.1

These include:

Email alerting service

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to: http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to: http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to: http://group.bmj.com/subscribe/