dysplasia (IED). The patient received parenteral and enteral nutrition with elemental formulas.

Previous reports have suggested that IED may be a congenital inherited autosomal recessive disease. We report a case of congenital enteropathy that represents a diagnostic and therapeutically challenge.

707 EOSINOPHILIC DIGESTIVE DISEASE AND ATOPIC BRONCHIAL ASTHMA; TWO DISEASES OR AN EXPRESSION OF ONE DISEASE IN TWO DIFFERENT SYSTEMS

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Eosinophilic digestive disease (EDD) includes a broad spectrum of clinical presentations due to eosinophilic inflammation involving anywhere from the esophagus to the rectum. The heterogeneity in the clinical presentations of EDD is determined by the site and depth of eosinophilic infiltration. The sites of inflammation determine the nomenclature for EDD. The most well characterized of these, eosinophilic esophagitis (EE), eosinophilic gastroenteritis (EG), and eosinophilic colitis or enterocolitis. While the depth of esosinophilic infiltration through the three main layers (mucosa, musculosa and serosa) determines the prominent clinical manifestation. The recent advances in gastrointestinal endoscopy and the increasing awareness and diagnosis of EDD, in my viewpoint, can be of help to add to our understanding of the heterogeneous clinical syndrome under the broad title bronchial asthma.

Here I present a multidisciplinary comparitive analysis to prove that EDD and the allergic bronchial asthma can be regarded as two clinical expressions of one disease in two systems that are functionally different but anatomicaly and embryologically related.

708 PREVALENCE OF FAT-SOLUBLE VITAMIN DEFICIENCIES IN CHILDREN WITH CYSTIC FIBROSIS

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Background Malabsorption of fat-soluble vitamins is likely in most patients with cystic fibrosis, particularly those who are pancreatic insufficient. Low vitamin levels are associated with poorer clinical status, and reduced lung function. Since the introduction of improved pancreatic enzymes, normal to high fat diets and routine vitamin supplementation, clinical evidence of fat-soluble vitamin deficiency is rarely seen.

Aim To determine the prevalence of fat-soluble vitamin deficiencies in children with cystic fibrosis in Calderdale and Huddersfield NHS Trust.

Method Retrospective analysis of vitamin levels performed in children with cystic fibrosis in Calderdale and Huddersfield Trust over a period of six years. Data was available for 19 out of 22 children with cystic fibrosis. Results of plasma vitamin A, D (Total 25 OH Vit D) and E levels for these children were collected on a pre-designed proforma.

Results Vitamin A, D and E levels were checked for a total of 75, 75 and 76 times respectively over a period of six years. Vitamin E levels were normal. Vit A levels were subnormal on two occasions. However, Vitamin D levels were sub-optimal (< 60nmol/l) on forty occasions and amongst them levels were below 20 nmol/l on three occasions.

Conclusion Sub-optimal Vitamin D levels are still very common in children with cystic fibrosis despite routine vitamin supplementation.

709 SPREADING OF NOURISHMENT DISORDERS IN SCHOOLCHILDREN POPULATION

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Goal Study of nourishment disorders' spreading and evaluation of the impact of risk factors in schoolchildren population.

Materials and Methods Study included 3012 children of 6–15 age: 1654 girls and 1358 boys. By means of the questionnaire we studied prevalence of nourishment disorders among schoolchildren population; evaluated peculiarities of clinical course and mathematically evaluated frequency and combinations of risk-factors. Statistical processing was provided by SPSS/v.12 software.

Research results Study was conducted by stages. In 47.2% of cases set of gastroezophagical symptoms was identified. Parents of 41% of the questioned children had gastrointestinal pathologies. Together with routine studies, pH-metry, measurement of amylase and lipase levels in blood and urine was conducted.

Studies showed various organic pathologies in 57% of children, among them: gastric and duodenal ulcer in 9% of cases, pancreatitis, reflex-esophagitis, associated with ulcer in 19% of cases, diaphragm hernia in 8%.

In 48% of cases organic pathologies, recurrent diseases, congenital disorders were excluded. Mentioned population had the diagnosis of functional dyspepsia, with the further relevant treatment scheme and diet.

Conclusion Data of our epidemiological studies do not significantly differ from the data of various countries and in our case the contributing factor is Georgian cuisine.

710 MAGNETIC RESONANCE IMAGING VERSUS ULTRASONOGRAPHY IN ASSESSING CHANGES IN FAT LIVER CONTENT IN OBESE CHILDREN AFTER ONE-YEAR NUTRITIONAL INTERVENTION

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Background and Aims Despite the potential clinical and practical relevance, there is lack of studies in current literature assessing the relationship of longitudinal change of liver fat content with liver biochemical parameters in paediatric age. The aim of the present study was to assess whether any association may exist of change in liver fat content based on MRI with change in liver biochemical parameters in obese children who underwent a one-year nutritional intervention.

Methods Fourthy six obese children, aged 6–14 years, underwent metabolic measurements, liver ultrasonography (US) and chemical-shift MRI examinations at baseline and after an one-year nutritional intervention. Biochemistry included serum alanine aminotransferase (ALT) and aspartate aminotransferase (AST). Liver fat fraction (FF) on MRI was judged elevated as it was 39%.

Results Prevalence of FF[3] 9% declined from 34.8% to 8.7% (P<0.01), with a mean (95%CI) reduction of 7.8 (5.0–10.6)%. At baseline, FF was associated with any liver biochemical parameters (maximum P<0.001). At the end of intervention association was found with AST (P=0.017). Change of FF was associated with change in AST (P=0.027) and ALT(P=0.024). Liver echogenicity was associated with ALT at baseline (P<0.001). An age and sex adjusted multiple regression analysis showed that FF change was independently associated with change in serum AST (adjusted regression coefficient 0.348, P=0.048).