prescribed after eradication.The hematologic profile were assessed after the iron therapy.

Results: We present four patients with iron deficiency anemia and poor nutritional iron intake, gastrointestinal bleeding, chronic inflammation were excluded on the basis of specific tests. Iron deficiency anemia was defined as a hemoglobin concentration of less than 12 g/dl (6.3-7.0 g/dl), serum iron concentration less than 6.6 µmol/L (3.4-4 µmol/L), a serum ferritin concentration less than 20 ng/ml (10-17 ng/ml). IgG antibody titer to H.pylori was positive in all the patients. Upper gastrointestinal endoscopy revealed a marked antral nodularity. A rapid urease test result was positive. Histopathology revealed chronic gastritis. H. pylori was successfully eradicated. Oral iron therapy was prescribed and 3 months later hematologic profile normalized.

Conclusions: A diagnosis of H. pylori infection should be taken in children with iron deficiency anemia even in the absence of gastrointestinal symptoms. H. pylori infection is a risk factor for iron deficiency anemia.

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THE USE OF MR ENTEROGRAPHY IN CHILDREN WITH CROHN'S DISEASE

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BACKGROUD: Ionizing techniques are frequently used in the evaluation of disease activity in children affected by inflammatory bowel disease (IBD). Magnetic Resonance enterography (MRE) is an interesting new imaging modality avoiding ionizing radiation and the discomfort associated with enteroclysis.

Methods: After fasting for at least 4 hours, bowel distention was achieved by ingesting 1 liter of a 2,5% mannitol solution. MRI was performed with a 1,5 T system (Philips Achieva) and a phased-array torso-XL coil. The examination was completed with administration of an IV spasmolyticum. During the examination 1 MR-technician provided patient support.

Results: 5 children (2 girls), aged 12.3 $\pm$ 1.6 years, underwent a MRE. 4/5 were newly diagnosed patients. The exam was well tolerated in all children. The MR-sequences were taken in 10-15 min. Overall image quality was good with sufficient bowel distension in the jejunum and excellent distension of the ileum. 1 patient (12,4y) had difficulties with breath-hold resulting in motion artefacts; the examination was however of diagnostic quality. MRI enterography revealed lesions of jejunum, preterminal or terminal ileum, caecum and rectosigmoideum in resp. 1, 2, 5, 1 and 1 patient. MR could detect lesions such as bowel wall thickening and oedema, deep ulceration, pseudo-diverticula, hyper-enhancement of bowel wall, stranding of fat, comb-sign, separation of bowel loops and reactive lymph nodes. No fistula or abscess were visualised in these patients.

Conclusions: MR enterography is a promising ionizing sparing technique for the evaluation of small and large bowel disease extent in children with Crohn's disease.

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TREATMENT OF GASTRIC OUTLET OBSTRUCTION DUE TO PEPTIC ULCER IN FOUR CHILDREN

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Background: Peptic ulcer disease complicated with gastric outlet obstruction (GOO) is rare in children. The experience in management of such patients is limited. The purpose of this study is to review the etiology, clinical manifestations, treatment and outcome of the patients in two tertiary referral centers.

Material and methods: From 2005 to 2008, all the pediatric patients admitted to National Cheng Kung University Hospital and Kaohsiung Veterans General Hospital, Taiwan due to pyloric stenosis were reviewed. Infantile hypertrophic pyloric stenosis (IHPS) and anatomical anomalies, such as atresia, web were excluded. Four patients were enrolled into the study. The diagnosis of all the patients were confirmed by panendoscopy and barium meal study in all the patients.

Results: There were 3 boys and one girl. The mean age was 32 months (15-71 months). Two patients had ulcer over the pre-pyloric area and the other two had duodenal ulcer. The etiology of peptic ulcers included non-steroid anti-inflammation drugs (NASIDs) ingestion (2), Helicobacter pylori (1) and unknown (1). All patients manifested as

post-prandial vomiting. Three patients received conservative treatment including proton pumping inhibitor successfully. Only one patient received operation with Billroth I +vagotomy due to pyloric complete obstruction. No recurrent gastric outlet obstruction was noted in all the patients

Conclusions: NSAIDs ingestion was an important cause of peptic ulcer in children. Conservative treatment including PPI should be first line therapy for the gastric outlet obstruction due to peptic ulcer in children. Surgical treatment should be reserved for the patients with failed medical treatment.

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COMORBIDITY OF AUTOIMMUNE DISEASES IN CHILDREN WITH DIAGNOSED COEALIC DISEASE

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Introduction: Coeliac disease is an inflammatory enteropathy with an immunological background, characterised by a permanent gluten intolerance in genetically predisposed individuals.

Aim of the study: The aim of the study was to analyse the comorbidity of autoimmune diseases in children with diagnosed coeliac disease, hospitalized in the Department of Paediatrics , in the period 2003- 2008.

Patients and methods: The analysis included 88 childred (55% girls and 45% boys), aged from 11 months to 18 years, in whom coealic disease was diagnosed on the basis of the clinical manifestation, the presence of p/IgAEmA antibodies and/or tTG antibodies, and abnormalities in the histopathological examination of the small intestine. The course of disease and comorbidity of other autoimmune diseases were evaluated in the examined children. The patients were analysed in relation to gender, age and time of disease manifestation.

Results: In 9/88 children (10.2%) with diagnosed coeliac disease, the coexistence of type1 diabetes was observed; in 4/88 children with coeliac disease inflammatory bowel disease was found; in 4/88 children - lymphocytic colitis was also present.

In children with diagnosed coeliac disease, thyroid gland diseases (2/88), psoriasis and vitiligo were less common.

In 11/88 patients (12.5%) with coeliac disease food allergy was diagnised, most often to cow´s milk protein and egg.

Autoimmune diseases were significantly more frequent in the subgroup of older children (>7 years of age).

Summary: In this study we would like to emphasize the frequent coexistence of autoimmune diseases in patients with diagnosed coeliac disease (24%), especially in older children.

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RISK FACTORS OF GASTROINTESTINAL DYSFUNCTION IN PATIENTS WITH SPINAL MUSCULAR ATROPHY

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Spinal muscular atrophy (SMA) is a neurodegenerative disease affecting motor functions, which may compromise feeding and swallowing ability, gastrointestinal motility, and nutritional status. We conduct a questionnaire survey for addressing the prevalence of and predictive factors for above problems in patients with SMA.

112 genetically confirmed SMA patients participated. The questionnaire recorded demographic data, neuromuscular status such as respiratory support and current ambulatory functions, feeding and swallowing difficulties, and gastrointestinal motility problems. Body weight was measured and insufficient weight gain was defined as Z score of weight-for-age less than -2.

Four patients with type I SMA were excluded, thus 108 type II & III SMA patients met the inclusion criteria (median age: 13.0 ±10.68 years, type II 60 cases and type III 48 cases). The prevalence rate of swallowing difficulties in type II SMA was higher than type III patients (41.7% vs. 6.3% in pre-oral phase; 38.3% vs. 10.4% in oral phase; 46.7% vs. 10.4% in pharyngeal phase; and 25% vs. 6.3% in esophageal phase, respectively). Multivariate analysis showed SMA type, neuromuscular status are independent predictive factors. The prevalence