**761**

## GROWTH AND PUBERTY IN THE COELIAC DISEASE OF THE CHILD

**M. Bessahraoui**, K. Bouziane

*University of Medecine, Oran, Algeria*

The aim of the present study was to evaluate growth, celiac disease (CD) adult height and age at menarche.

**Subjects and methods:**

1. Growth was assessed by:-Longitudinal study, compared with Sempé, Pédron subjects.-Semi longitudinal case-control study. Controls (eliac brothers and sisters).

2. Age at menarche was assessed by case-control study. Controls ( eliac sisters).

**Results:**

1. Growth was significantly more delayed in CD patients (103 girls,92 boys) than in Sempé, Pédron subjects. However, evident catch-up growth was noted between the 18 and 21 years age ( 103 CD girls and 92 CD boys CD).

2. The growth speed was less important during puberty compared to Sempé, Pédron subjects. After 18 age, our CD patients was contuned their growth in time where Sempé, Pédron subjects finished their growth.

3. When CD was associated with Diabete type 1, growth was significantly more delayed than in the CD isolated or diabetes patients isolated.

4. Semi-longitudinal study: The mean adult height was: 158, 42 ± 6, 3 cm (269 women CD) vs 162, 17 ± 6, 3 cm (193 controls :p< 0, 0001). The mean adult height was 170, 28 ± 7, 5 cm (194 men CD) and 172, 53 ± 6,8 cm (200 controls: p < 0.09).5.The mean age of menarche in 174 CD was: 4,56 ± 1,63 years vs 13,74 ± 1,36 years in 174 controls (p< 0,0001).

**Conclusion:** Growth, puberty and adult Height are delayed especially in the CD girls. Additional factors influencing growth, is the auto immuns diseases associated.

**762**

## THE ROLE IN CELL DEATH IN CHOLESTASIS MURINE

**M.-M. Tiao**[1], Y.-J. Yang[2]

*[1]Pediatrics, Chang Gung Memorial Hospital-Kaohsiung Medical Center, Chang Gung University College of Medicine, Kaohsiung, [2]National Cheng Kung University and Hospital, Tianan, Taiwan R.O.C.*

**Objective:** We find that the biogenesis of mitochondria is response to the early stage of cholestasis with internal pathway. The regulation pathogenesis of the liver cell apoptosis in this early stage in cholestatic liver injury is not clear.

**Methods:** A rat model of cholestasis was established by bile duct ligation (BDL), with simultaneous creation of the sham group receiving laparotomy without BDL. Liver LC3B1, LC3B2, Beclin-1, caspase 9 protein expression was analyzed by western blotting. The ATF6, IRE1, BIP RNA level was measured by real-time polymerase chain reaction.

**Results:** The liver LC3B-2 and LC3B2/LC3B1 ratio at 6-72 hours with caspase 9 activity and Beclin-1 levels at 72 hours significant upregulated. The ATF6, IRE1, BIP significantly decreased at 24- 72 hours.

**Conclusions:** Our results indicate that regulation of the liver biogenesis is within a few hours after complete bile duct obstruction. Early murine cholestatic liver injury is via autophagy pathway.

**763**

## APPLICATION OF STOOL ALPHA-1 ANTITRYPSIN IN PEDIATRIC PATIENTS WITH GASTROINTESTINAL DISEASES

**C.-Y. Yeung**, H.-C. Lee, W.-T. Chan, C.-B. Jiang

*Division of Gastroenterology and Nutrition, Department of Pediatrics, Mackay Memorial Hospital, Taipei, Taiwan R.O.C.*

**Objectives and study:** In children with gastrointestinal (GI) disease, ongoing losses of endogenous proteins have been suggested as contributing to impairment of nutritional and immunologic status. Quantification of stool alpha-1 Antitrypsin (sAAT) excretion is established for estimation of enteric protein loss and assessment of disease activity. This study is to access the

feasibility of the application of sAAT in pediatric patients with different GI diseases.

**Methods:** From 2000 to 2007, fecal materials for sAAT determination were obtained from patients in pediatric patients with different GI diseases. Values of sATT were correlated with diseases entities, stool pathogens and serum albumin.

**Results:** Data were available from 185 pediatric patients. 60% of chronic diarrhea patients had elevated sATT while 48% of acute diarrhea did (3.66 vs 4.63 mg/gm of dry stool weight, p=0.245). There were no difference between acute infectious diarrhea and acute non-infectious diarrhea (4.49 vs 4.85, p=0.789). Patients with colitis complicated with perforation were associated with much higher sATT levels. However, there was no significant difference regarding the etiologies between acute diarrhea and acute appendicitis /peritonitis (4.63 vs 3.82, p=0.716). In those patients with functional abdominal pain, sATT levels were alll normal. Higher sATT values were found in inflammatory bowel disease patients when compared with those with motility disorder (9.78 vs 1.92, p< 0.05). No correlations with age, duration of diarrhea, or serum albumin noted.

**Conclusion:** Our study indicates that sATT provide a useful and non-invasive tool to evaluate the damage severity of GI tract and monitor the progression of diseases.

**764**

## CLINICAL AND BIOCHEMICAL FEATURES OF CHILDREN WITH AUTOIMMUNE HEPATITIS ATTENDING ASSIUT UNIVERSITY HOSPITALS

**N.H. Abuf Addan**[1], L. Abd Elbaky[2], H.G. Rashed[3], S. Aly[4]

*[1]Pediatrics, [2]Tropical Medicine, [3]Clinical Pathology, [4]Microbiology, Assiut University, Assiut, Egypt*

Autoimmune hepatitis (AIH) in children is a rare chronic progressive liver disorder.

**This study aims** to assess the clinical, biochemical features and outcome of AIH in children attending Assuit University Hospitals.

**Patients and methods:** 30 children (20 female and10 male with a mean age7 ±3.2 years) with AIH, based on the International Scoring Criteria of Autoimmune Hepatitis, recruited from Assuit University Hospitals, during the period from January 2005 to December 2008. Complete blood picture, liver function tests, prothrombin time and concentration, total plasma protein, serum albumin, abdominal ultrasound, antinuclear antibody, anti-smooth muscle anti body and anti-liver-kidney-microsomal antibody type1 were done. All patients received prednisolone 2 mg/kg per day. Follow-up was done for one year.

**Results:** 73.3% of patients was diagnosed as type 1 AIH (15 female and 7 male with a mean age 6.5 ± 1.7 years) and 26.7% of patients was diagnosed as type 2 (5 female and 3 male with a mean age 4 ± 2.3 years). Clinical presentation was acute in 76.7 % and insidious in 23.33% of patients. The main presenting symptoms were anorexia and fatigue in 83.3% of patients followed by jaundice and abdominal pain in 66.7% of the patients. Complete remission occurred in 46.7%, partial remission in 40%, and no remission in 13.3% of patients.

**Conclusion:** The mode of presentation in children is variable, and the disease should be suspected and excluded in all children presenting with symptoms and signs of prolonged or sever liver disease.

**Keywords:** Autoimmune hepatitis, children

**765**

## THE MAIN ASPECTS OF DIAGNISTIC OF FUNCTIONAL DISPEPSIA AND SYNDROME OF DISPEPSIA IN CHILDREN

**O.M. Horlenko**, O.A. Pushkarenko

*Pediatrics with Infectious Diseases, Uzhgorod National University, Medical Faculty, Uzhgorod, Ukraine*

**Background and aims:** The important question of child's gastroenterology is timely disgnostics of functional diseases of digestive tract, which appear the symptoms of dyspepsia. It is predefined large prevalence of dyspepsia violations among adults children - from 20 to 50%.

Improvement of diagnostics of dyspepsia for children on the basis of complex estimation of clinic-laboratory and instrumental indexes for differentiation of of functional dyspepsia (FD) and SD.

**Methods:** Clinical - laboratory analyses, morphological, instrumental and ultrasonic research of motor-evacuatory function of the stomach by Lemeshko Z.A.