

tween the CAT and the total score of the SGRQ ($r=0.59$, $p<0.01$). Also correlations between CAT and MRC score are significant ($r=0.48$, $p<0.01$). CAT score correlated negatively with 6 MWD ($r = -0.52$, $p<0.01$). The forward stepwise regression analysis shows that the age, dyspnea and oxygen saturation are important predictors of HRQL in COPD patients which explains 58% of the CAT score.

Conclusion: The CAT is a simple and easy-to-use questionnaire that distinguishes between patients of different degrees of COPD severity. Age, dyspnea and oxygen saturation in patients with COPD are independent risk factors for worsening of HRQL.

ASSESSMENT OF LUNG FUNCTION AND FUNCTIONAL CAPACITY IN PATIENTS WITH LIVER CIRRHOSIS

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Background: Various changes can be detected by pulmonary function tests at patients diagnosed with chronic hepatic diseases. These changes characterize the "hepatopulmonary syndrome" result in hypoxemia and affect one-third of all patients diagnosed with cirrhosis. Hepatopulmonary syndrome is defined by liver disease, intrapulmonary vasodilatation at the capillary and pre-capillary levels, and impaired arterial oxygenation.

The aim of this study is to assess and compare the pulmonary function and physical capacity in patients with liver cirrhosis according to the Child-Pugh score and to correlate these variables within each group.

Methods: Into the study were enrolled 40 patients with liver cirrhosis. Spirometry, hemoglobin levels, dyspnea by BORG scale, exercise capacity by 6-min walking test (6MWT), blood gas analysis were evaluated. Blood gases were measured in supine and sitting positions.

Results: The patients were classified into three groups, according to cirrhotic severity, using Child's-Pugh classification (A - 7 patients; B - 24 patients; C - 9 patients). There were significant differences ($p < 0.01$, ANOVA) in FEV1 between 3 groups: there was observed a decrease of pulmonary function with progression of cirrhosis from $107 \pm 13.1\%$ in group Child's-Pugh A to $89 \pm 17.4\%$ in group Child's-Pugh C. Also there was detected a diminution of PaO₂ in supine and sitting positions with progression of cirrhosis. The longest 6-min walking distance (6MWD) was 435 ± 17.8 m by group A, then group B (354.6 ± 43.4 m), and group C (310 ± 63.6 m). There was a strong negative correlation between 6MWD and Child-Pugh classification ($r = -0.55$, $p < 0.01$).

Conclusion: 6MWT is a useful tool for assessing physical function in chronic liver disease patients. The progress of liver disease contributes to the onset of several complications which together appear to contribute to the reduction of pulmonary function and functional capacity of patients.

RELATIONS: ENDOGENOUS INTOXICATION SYNDROME–OXIREDOX AND NITRIC OXIDE

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Introduction: Key indicators in the pathogenesis of acute pancreatitis are: trypsin, chymotrypsin, elastase, kallikrein, nitric oxide.

Purpose: Determining the role of oxiredox system and NO in establishing endogenous intoxication syndrome in children with acute pancreatitis

Materials and methods: It was done a study in PMSISCM "V. Ignatenco" in the pediatric gastroenterology department and included 100 patients. Children were divided into the following groups: first group, healthy children-20, II-group 40 children with acute pancreatitis during the onset, third group of 30 children who received standard therapy and *BowelGuna*, and fourth group of 30 children who received standard therapy. Treatment duration was one month.

Results and discussions: The highest values of early HPL were recorded in studied patients from group II- $16,76 \pm 0,29 \text{ uc/ml}$ ($p < 0,001$). Intermediate HPL-hexane, was registered at the maximum values in children with acute pancreatitis study group II who received *Guna Bowel* on the first day and constituted $5,27 \pm 0,15 \text{ uc/ml}$ with a return to normal limits $4,81 \pm 0,17 \text{ uc/ml}$ a month. MDA values were observed in large amounts in children from study group II $18,96 \pm 0,99 \text{ uc/ml}$ with subsequent decrease in value soverone month after treatment with *Guna Bowel* $17,14 \pm 0,47 \text{ uc/ml}$. Nitric oxide was observed in study group IV patients ($81,39 \pm 3,98 \text{ m/l}$) compared with healthy children ($78,7 \pm 2,85 \text{ m/l}$). In children from study group III – obvious reduction of nitric oxide up to $74,67 \pm 6,34 \text{ m/l}$ was revealed. In patients with acute pancreatitis, increased concentration of middle molecules up to $22,58 \pm 1,77 \text{ m/l}$ and returned to normal $14,66 \pm 0,6 \text{ m/l}$ after treatment with *GunaBowel*. The level of necrotic substances was determined at maximal values in study group II $2,28 \pm 0,17 \text{ u/c}$ with are turn to normal after treatment with *GunaBowel* for 1 month ($1,46 \pm 0,07 \text{ u/c}$).

Conclusions: 1. Endogenous intoxication syndrome in children with acute pancreatitis characterized biologically by increasing concentration of average molecules at the onset of the disease to $22,58 \pm 1,77 \text{ u/c}$ and return to normal indices over a month of standard treatment and inclusion in regimen after the onset of acute pancreatitis of *BowelGuna*; 2. Therefore, the realized study confirms the direct correlation between lipid peroxidation indices (HPL, DAM) and endogenous intoxication syndrome values (average molecule, necrotic substances). Coloring directly was determined from AAT, NO and the level of HPL, DAM, middle molecule, necrotic substances, which confirms the depletion of compensatory processes and implementation of the inflammatory process in the pancreatic gland.

NEW IMAGISTIC METHOD FOR ASSESSMENT OF LIVER STRUCTURE IN CHILDREN

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Introduction: Newly, acoustic radiation force impulse (ARFI) elastography has been introduced as a noninvasive technique for evaluating liver fibrosis.

Material and methods: The present study was carried out at the Ist Pediatric Clinic Tg.-Mures, Romania, between 2010 September and 2011, April; it was a prospective study including a control group composed of 38 children with normal clinical and paraclinical findings related to the liver function and a lot of 96 children with different causes of hepatopathies.

In group of patients with liver damage there were 28 overweight and obese children (considered overweight whether their weight was between the 85th and 95th percentile for age and sex, and obese whether their weight exceeds 95th percentile, respectively), all of them with modifications to the standard abdomi-