

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-

nal ultrasound (high echogenicity, granular liver aspect, posterior attenuation suggestive for steatosis); there were 48 patients with various malignancies under or after chemotherapy, with tumor infiltration of the liver or hepatotoxicity related to cytostatic treatment and a number of 20 patients with various etiology of hepatopathy (viral hepatitis, acute toxic hepatitis, drug hepatotoxicity). Alanine transaminase (ALT, IU) was $19,56 \pm 8,67$ SD in the control group, and $37,42 \pm 31,16$ in the group of children with liver diseases, while aspartate transaminase (AST, IU) was $24,88 \pm 8,67$ SD in the control group, and $39,92 \pm 20,12$ in the group of children with liver injury.

As far as it concerns aspartate transaminase (AST, IU), in the control group it were, also, smaller levels than in the group of children with hepatopathies, the difference between AST mean for the two groups was, as for ALT, statistically extremely significant, with $p < 0.0001$. We searched for correlations between global SVW and other determined parameters (AST and ALT) in each group, but we obtained no statistically significant correlations between the assessed parameters, except that between SVW and AST, only for the group of children with liver injury ($r = 0,54$ and $p = 0,01$), statistically significant.

Conclusions: In normal conditions (children with free liver tissue), SVW was higher for the segment VIII compared to I, statistically significant, meaning that caudate lobe is "softer", difference that does not exist in the group of liver diseases.

SVW values in group of children with hepatopathies were found to increase particularly in the segment I (caudate lobe), which shows that it is first affected by any liver injury.

Key words: elastography, ultrasound, liver, children.

CHARACTERISTICS AND TREATMENT OUTCOMES OF PATIENTS WITH MDR TUBERCULOSIS

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Introduction: Multidrug-resistant (MDR) tuberculosis is a growing clinical and public-health concern. The treatment of patients with MDR- and XDR-TB is more complex, toxic and costly and less effective than treatment for other forms of TB. A better understanding of risk factors associated with poor treatment outcomes among MDR- and XDR-TB patients would be useful to provide better case management.

Objectives: The aim of this study was to determinate the characteristics, treatment outcomes and risk factors associated with poor treatment outcomes among patients who were treated for MDR-TB in intensive phase.

Methodology and materials: Retrospective study about all cases of MDR TB of patients hospitalized in the Phthisiopneumology Department of Municipal Hospital, Bălți, Moldova, between 2009-2010. Fifty patients were enrolled to the trial from June 2009 to August 2010. It was examined the group of patients according to the distribution of cases by gender affiliation, age, location and living conditions, employment, harmful habits, associated diseases, changes in treatment regimens, adverse effects, regimen and the influence of these factors on outcomes of treatment for MDR TB. The statistical analyses of the study results were done based on computer software specialized applications (Microsoft Excel 2007 for Windows).

Results: MDR TB is more common in men 84% than in women 16%, the most affected age is 19-49 - 80%, and the urban population is affected in 68% than rural 32%. According to the structure of social