

bolii atât la pacienții copii, cât și la adulți. Activitatea medie la debutul LESp a fost $21,18 \pm 4,6$ puncte, pe când la adulți $17,3 \pm 6,4$ puncte. La copii indexul lezării SLICC la debut a fost estimat la 0 puncte pe când la momentul studiului s-au înregistrat 2 puncte (prin osteoporoză, fractură patologică și necroză avasculară). Debutul bolii cu nefrita a fost la 5 copii, afectare vasculară – la 3, afectare cutanată -10, afectare articulară - la 7 copii. Sindromul antifosfolipidic a fost evidențiat la 5 pacienți (38,5%). Dintre 13 pacienți supravegheați, 3 au decedat; până la un 1 an -1 pacient, după 5 ani de la debut -2 pacienți. Cauza deceselor a fost afecțarea renală progresivă în 2 cazuri și complicațiile sindromului antifosfolipidic (tromboze) - un caz. Pe durata supravegheții au survenit 15 sarcini, cu consecințele: 2 - avorturi medicale, 6 - avorturi spontane, s-au născut 7 copii sănătoși de la 6 femei cu LESp.

Concluzii

Lupus Eritematos Sistemic pediatric s-a remarcat prin evoluție clinică agresivă și activitate înaltă la debut. Indexul lezării organice pe parcursul evoluției bolii a fost determinat în special prin afectarea țesutului osos. Sindromul antifosfolipidic secundar a fost depistat la 38,5%, în corelație strânsă cu rata mortalității ($r=0,83$) pacienților.

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THE CORRELATION BETWEEN ENDOSCOPIC AND HISTOLOGICAL CHANGES IN THE DIAGNOSIS OF CELIAC DISEASE TO CHILDREN

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Background. Depending on the clinical form, the intake of gluten and celiac disease stage of the histological changes are diverse and irregular, with a maximal manifestation in the duodenum and proximal jejunum from the undamaged mucous membrane to the entire vilar atrophy.

Objectives. Assessing histological changes of the children with celiac disease.

Material and methods. Based on a retrospective study conducted in the Gastroenterology Department of the Mother and Child's Institute, during the years 2000 – 2006, based on Marsh's endoscopic and histological criteria, 84 children with celiac disease were examined.

Results. The endoscopic examination revealed a lightish mucous to 19 children (22.61%), thickened intestinal vilosities with a chorionic height decreases to 21 children (25%), moderate villous atrophy 13 children (15.47%), the slightly disorganized vascular network is damaged to 12 children (14.28%) and no endoscopic changes to 24 children (28.57%). Histological changes Marsh 0 (normal mucous or preinfusible phase) to 29 children (34.52%), Marsh I (intraepithelial lymphocytes infiltrated in vilosital epithelium) - 31 cases (36.9%), Marsh II (crypts hyperplasia) - 11 cases (13.09%), Marsh III (moderate vilozital atrophy) - 9 children (10.71%), Marsh IV (total vilosital atrophy) – any subject.

Conclusion. For definitive diagnosis of celiac disease, the histological examination could be considered the gold standard because in 48 of subjects (57.14%) the endoscopic examination showed a intact mucous membrane.

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EFFICACY OF SILDENAFIL THERAPY IN CHILDREN WITH PULMONARY HYPERTENSION SECONDARY TO CONGENITAL HEART DISEASE

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Purpose: pulmonary hypertension (PH) resulting from congenital heart disease (CHD) remains one of the most difficult childhood illness to treat. Sildenafil, a selective inhibitor of phosphodiesterase-5, is known as an effective and promising pulmonary vasodilator, with minors and insignificant reverse effects.

Methods: we have evaluated the efficacy and the tolerability of sildenafil in children with advanced PH secondary CHD with shunts (simple (14 pts), mixed (35 pts) and complex (28 pts). In this monocentric, double-blind, placebo-controlled study we randomly assigned 77 pts with advanced PH (35 with repaired shunts, 31-palliative procedure and 11 inoperable pts) to placebo or Sildenafil orally, with the dose of 1-2 mg/kg/day each 8h for 6-12 months. The Sildenafil group consisted of 38 pts (mean age $19,9 \pm 5,3$ months: 16 boys/22 girls) and the placebo group – 39 pts (mean age $21,7 \pm 7,8$ months: 22 boys/17 girls). The study protocol included: functional class (FC) NYHA/Ross; O₂ saturation; 6-min walk test; transthoracic echocardiogram (mean PAP, tricuspid annular plane systolic excursion (TAPSE), myocardial performance index (MPI or Tei index), right cardiac catheterisation, measuring pulmonary vascular resistance (PVR). In addition a special questionnaire of evidence of adverse reactions was available.

Results: at the patients treated with Sildenafil was observed an improvement of FC NYHA/Ross from $3,16 \pm 0,1$ to $2,15 \pm 0,1$ ($p < 0,001$); O₂ sat ($+3,1 \pm 0,5\%$) comparing with placebo ($+0,6 \pm 0,3\%$), ($p < 0,001$); an effort tolerance estimated

by 6-minute walk test (+152,5±17,4 m at 6 months and +184,3±21,2m at 12 months of treatment), ($p<0,001$); the decreasing of mean PAP, with 22,0±2,22 at 6 months and with 19,03±2,3 mmHg at 12 months ($p<0,001$) and PVRI had decreased with 2,45±0,19 UW·m² ($p<0,001$); the improvement of the systolic function, TAPSE from 16,55±0,34 to 20,7±0,64 mm/m² ($p<0,001$) and global function of RV (Tei index) with 0,15±0,01(-31%) to initial ($p<0,001$). In placebo group the respective signs slightly changed and only PVR diminished from 6,4±0,1 to 5,7±0,3 UW/m² ($p<0,05$). There was no death in the sildenafil-treated cases, contrary to 5 in the placebo group.

Conclusions: Sildenafil is efficient in treating PH secondary to congenital systemic-to-pulmonary shunts, but even more effective in corrected surgical shunts. Sildenafil improves FC, tolerability at effort, O₂ sat, systolic and global function of RV, diminishing PAPm and PVRI comparing with placebo. This remedy has good tolerability, with minors and insignificant adverse reactions and favourable impact on the quality of life.

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**VASODILATORS AND VASOCONSTRICTORS (NO AND ENDOTHELIN-1)
IN CHRONIC HEART FAILURE IN CHILDREN**

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Endothelial dysfunction in chronic heart failure (CHF) secondary to congenital systemic-to-pulmonary shunts (CSPS) associated with Pulmonary Arterial Hypertension (PAH) conducts to chronically impaired production of vasodilator and antiproliferative agents, e.g. NO, further leading to the overexpression of vasoconstrictor and proliferative substances - endothelin-1 (ET-1).

The aim: To accentuate the pathophysiological particularities of NO and ET-1 in CHF secondary to CSPS associated with PAH.

Methods and materials: Seventy children with CHF secondary to CSPS associated with PAH (mean age 37,4±3,4 months) were involved in the study. The patients were separated into 3 groups: 1st – 16 pts with CHF and PAH moderate, and 2nd – 54 pts with CHF (the majority with RV's dysfunction) and PAH severe, 3rd - 16 pts with CHF and without PAH. 15 health children with innocent cardiac murmur constituted the witness group. The groups were comparable w.r.t. the age and sex. Using ELISA method (DRG International Inc., SUA) NO and ET-1 were determined.

Results: Patients with CHF and PAH moderate had a higher level of NO - 116,45±6,1 fl mol/l comparing to children with PAH severe - 93,06±3,34 ($p<0,05$) and to those with CHF but without PAH - 90,91±4,07 ($p<0,05$), and versus the healthy children - 77,32±5,1 ($p<0,001$). In PAH severe the pulmonary vasodilators' mechanisms with the diminishing of NO got worse. ET-1 had higher values in children with PAH severe - 7,78±0,28 pg/ml with high statistical significance w.r.t. patients with PAH moderate - 3,88±0,21, vs those without PAH - 3,69±0,24 ($p<0,001$) and healthy - 2,9±0,27 ($p<0,001$). The hemodynamic stress within the CSPS associated with PAH is responsible for the endothelium's lesion which leads to the stimulation of ET-1 production by the endothelium cells.

Conclusions: The overall results reveal the major role ET-1 and NO in pathophysiology of PAH secondary to CSPS with CHF. At patients with CHF and PAH severe the endothelium's lesion leads to a disequilibrium between the production of the mediators with vasodilators effects and those with vasoconstrictor properties; at patients with PAH moderate the NO level being significantly higher vs those with PAH severe, while the ET-1 values were higher at pts with PAH severe vs those with a moderate level and without PAH.

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**FACTORII DE RISC CE CONTRIBUIE LA APARIȚIA MALFORMAȚIILOR RENOURINARE LA COPIL
RISK FACTORS ASSOCIATED WITH CHILDHOOD URINARY TRACT MALFORMATIONS DEVELOPMENT**

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Introduction: Amongst all of the analyzed factors for urinary tract anomalies development in children the highest risk correlated with genetic factors followed by administration of pharmacological drugs in pregnancy. The next factor was shown to be maternal smoking. The fourth risk factor was maternal age beyond 35 years at delivery time and for women who were alcohol-consuming during pregnancy the risk reached the level of 3,35. All other studied risk factors were found to have no influence on the development of fetal.

Obiective: Determinarea factorilor de risc ce contribuie la apariția malformațiilor renourinare la copii.

Material și metode: În total au fost supuse cercetării 500 de femei cu sarcină de peste 18 săptămâni. Din numărul total de femei, la 148 (29,6%) s-au determinat schimbări patologice intrauterine ale sistemului reno-urinar la făt, inclu-