

Stamati A.¹, Revenco N.¹, Palii I.², Romanciu L.¹, Zahariuc T.², Beli O.², Tiron L.²

EVOLUTION ISSUES IN PEDIATRIC DILATED CARDIOMYOPATHY IN CHILDREN

¹Department of Pediatrics, State University of Medicine and Pharmacy "Nicolae Testemitanu", Republic of Moldova,

(Director – Professor Ninel Revenco)

²Mother and Children Institute, Republic of Moldova (Director – S.Gatcan)

Aim. Cardiomyopathy presents a heterogeneous group of myocardial disorders. Dilated cardiomyopathy (DCM) is the most common pediatric primary cardiomyopathy. The annual incidence of DMC in children is, according to different authors, from 0.57 to 2.6 / 100,000 pediatric population. The authors mention a higher incidence for children aged up to 1 year and is prevalent at boys. Evaluation of children with DCM includes clinical and instrumental parameters, especially the left ventricular (LV) function. The aim of the study was to evaluate echocardiographic evaluation of children with DCM.

Material and methods. The study included a total of 75 children with primary cardiomyopathy (45 boys and 30 girls), aged 1 month - 18 years (mean age - 4.81 ± 2.42 years) consecutively admitted in cardiology department of Mother and Child Institute (Chisinau, Moldova). The diagnosis was confirmed through clinical methods and explorative complex tests: anamnestic (relationship-onset symptomatic viral infection, family history), general clinical examination, chest radiography, electrocardiography (ECG), EcoCG at rest, laboratory tests to determine the specific enzyme activity in myocardial cells. Average duration of patient follow-up was 12 months. The entire group of patients was then divided according to clinical diagnosis: group I - 40 patients with the diagnosis of myocarditis (17 girls, 23 boys), and group II - 35 DCM children (9 girls, 26 boys). There were not significant differences by gender and average age between groups.

Results and discussion. Initial clinical general manifestations more pronounced in the group were fatigability (90.6%) and dyspnea (46.6%). Analysis of demographic, clinical and laboratory parameters revealed apparent prevalence of boys, the presence of cardiomegaly, and frequent association of general signs of cardiac insufficiency (ICC grade II-III NYHA / Ross). We determined to improve clinical status in terms of functional class NYHA / Ross. Patients with myocarditis (group I) had a better prognosis, which showed improvement of LV myocardial function in over 90% of the analyzed cases. At the same time, children with DCM showed different signs of ICC degree, of which 3 (11.4%) died in 4-6 months after primary presentation, and 2 children were included in the waiting list for heart transplantation ICC due to progression of degree of ventricular dysfunction (Table 1).

Table 1.

Assessing of EcoCG parameters in children with myocarditis and DCM

| Parameters | Initial | 3 month | 12 month |
|-----------------------------|------------|-------------|--------------|
| <i>DTDVS</i> , mm (M±m) | | | |
| Group I | 38,51±2,1 | 36,4±2,3* | 36,14±1,7* |
| Group II | 39,32±1,2 | 37,62±1,4 | 36,33±1,6* |
| <i>DTSVS</i> , mm (M±m) | | | |
| Group I | 25,91±1,5 | 25,21±2,1 | 23,36±2,1* |
| Group II | 26,85±1,3 | 25,23±2,3 | 23,91±1,7** |
| <i>SIV</i> , mm (M±m) | | | |
| Group I | 5,81±0,4 | 5,35±0,2◊ | 5,21±0,3*◊ |
| Group II | 6,46±0,3 | 6,34±0,4 | 6,24±0,4 |
| <i>FE</i> , % (M±m) | | | |
| Group I | 35,32±3,1◊ | 42,4±1,13*◊ | 48,63±1,34** |
| Group II | 27,18±8,1 | 32,21±4,2* | 41,24±1,82** |
| <i>FS</i> , % (M±m) | | | |
| Group I | 20,32±2,3 | 23,5±3,1* | 24,3±1,17** |
| Group II | 18,21±4,3 | 23,2±3,1* | 26,7±3,24** |
| <i>Index Tei (IT)</i> (M±m) | | | |
| Group I | 0,44±0,2 | 0,38±0,18*◊ | 0,33±1,15**◊ |
| Group II | 0,50±0,2 | 0,46±0,1 | 0,42±0,02** |

Note: a) DTDVS-enddiastolic diameter of the LV; DTSVS-endsystolic diameter of the LV, SIV- interventricular septum, b) compared to baseline - * p <0.05, ** p <0, 01, ◊ - p <0.05 - the difference between parameter changes in groups I and II evaluation stages.

Conclusions:

1. The etiology of primary cardiomyopathy in children is heterogeneous, the data of our study confirmed contact with flu-like infectious in 50.6% of cases.

2. Acute myocarditis can associate a transient LV dysfunction, which recovered in the first 3 months of treatment in most cases (90.6%).

3. EcoCG measurements: FE, FS, and Tei index (TI) are easy to calculate, and are useful in assessing LV performance in children both in establishing the initial diagnosis and the clinical evaluation of patients with myocarditis and DCM, independent of the clinical signs of ICC.

Tighineanu O¹, Mihu I¹, Feghiu L²

ROLUL STRESULUI ÎN INDUCEREA SAU MENTINEREA BOLILOR INFLAMATORII INTESTINALE LA COPII

¹Institutul Mamei și Copilului, secția gastroenterologie, Republica Moldova (Director - Ș.Gațcan)

²Centrul Republican de Reabilitare pentru Copii

Actualitate. Mecanismele psihoneuroimmunologice în patogeneza bolilor inflamatorii intestinale constituie un domeniu nou de cercetare, și anume psihoneuroimmunologia. Indiferent de mecanismele neuroimunologice implicate în debutul și recidivarea frecventă al maladiilor inflamatorii intestinale, măsurile de prevenție ale stresului ameliorează simptomatologia, reduce activitatea patologiei de bază și ameliorează calitatea vieții.

Scopul studiului a fost evaluarea stării psihomotionale asupra evoluției bolilor inflamatorii intestinale la copii.

Material și metode. Studiul a fost prospectiv și a inclus pacienții cu diagnosticul de colită ulceroasă sau boala Crohn, internați în secția gastroenterologie, Institutului Mamei și Copilului, în perioada anilor 2010–2012. În acest termen copii au fost evaluati periodic de psihoterapeut, prin convorbiri, desene, teste, remarcindu-se impactul stresului asupra copiilor cu recidive, iar deregările de personalitate au fost evaluate conform criteriilor *Asociației Americane de Psihiatrie*, 1994.

Rezultate. La studiu au participat 41 copii, cu colită ulceroasă 36 (87,8%) copii și boala Crohn 5 (12,2%) copii, cu vîrstă cuprinsă între 4 luni și 17 ani. În rezultatul evaluării psihoterapeutice 16 (39,02%) copii, dintre care 5 (31,25%) copii de vîrstă preșcolară și 11 (68,75%) adolescenți, au fost diagnosticați cu deregările de personalitate. La adolescenți au fost remarcate tulburări de anxietate: tulburare de panică 4 (36,4%) copii, tulburarea obsesiv-compulsivă 7 (63,7%) copii, dintre care la 3 (27,3%) adolescenți fiind asociată cu fobia de cancer, iar la copii preșcolari 31,25% au fost exprimate prin neliniște, iritabilitate, tensiune musculară, tulburări de concentrare.

Concluzii. Impactul stresului asupra pacienților cu boli inflamatorii intestinale, este irevocabil, 1/3 din aceștia necesitând suport psihologic, pentru inducerea sau menținerea remesiei și ameliorarea calității vieții, iar studierea mecanismelor psihoneuroimmunologice în patogeneza bolilor inflamatorii intestinale ar permite o conduită terapeutică mai eficientă.

Борисова Л. Г.

АДАПТАЦИЯ ЦЕНТРАЛЬНОЙ ГЕМОДИНАМИКИ У НОВОРОЖДЕННЫХ С СИНДРОМОМ ЗАДЕРЖКИ РОСТА ПЛОДА В РАННЕМ НЕОНАТАЛЬНОМ ПЕРИОДЕ

Федеральное государственное бюджетное учреждение «Уральский научно исследовательский институт охраны материнства и младенчества министерства здравоохранения России», г. Екатеринбург.

Цель: Изучить гемодинамические показатели у новорожденных с синдромом задержки роста плода в раннем неонатальном возрасте.

Характеристика детей и методы исследования: Обследовано 50 новорожденных в динамике раннего неонатального периода. Основную группу составили 40 доношенных детей, родившихся с признаками СЗРП. Группу сравнения составили 10 новорожденных с нормальными показателями физического развития при рождении. Все дети обследованы двукратно: на первые и десятые сутки жизни. Проводилось измерение артериального давления (АД) методом тонометрии и эхокардиографическое исследование (ЭхоКГ) по стандартной методике. Одними из показателей, отражающих адаптацию сердечно-сосудистой системы являются частота сердечных сокращений (ЧСС) и артериальное давление (АД), таблица 1:

Показатели частоты сердечных сокращений и артериального давления у новорожденных (M±m)

| Основные показатели | Основная группа,n=40 | | Группа сравнения,n=10 | | Достоверность различий, p |
|-----------------------|----------------------|-----------|-----------------------|------------|---|
| | 1 сутки | 10 сутки | 1 сутки | 10 сутки | |
| САД, мм.рт.ст. | 81,6±16,6 | 83,1±11,1 | 87,33±1,09 | 84,44±0,98 | p ₁ <0,0001;p ₂ <0,02 |
| ДАД, мм.рт.ст. | 47,3±8,1 | 43±10,2 | 39,78±0,54 | 54,06±0,60 | p ₁ <0,01;p ₂ <0,001 |
| Среднее АД, мм.рт.ст. | 56±8,5 | 52±10,5 | 67,89±0,67 | 82,89±0,69 | p ₁ <0,0001;p ₂ <0,0001 |

Примечание: p₁ – достоверность различий между показателями основной группы и группы сравнения в первые сутки жизни; p₂ – достоверность различий между показателями на 10-е сутки.