

THE IMPACT OF BETA-BLOCKERS IN THE TREATMENT OF CHILDREN WITH DILATED CARDIOMYOPATHY

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Introduction. Incidence of dilated cardiomyopathy (DCM) in children is 0.57/100,000 / year. The management of pediatric DCM is not similar to adults, the results of the combination of beta-blockers (BB) in the behavior of children with DCM is controversial.

Keywords: dilated cardiomyopathy, beta-blockers, prognosis

Purpose. The effects of beta-blockers (BB) in the clinical-hemodynamic evolution of children with DCM.

Material and methods. The prospective analytical study included 48 children (age 3 months-18 years) with DCM, based on anamnestic criteria, clinical and imaging criteria, especially echocardiography (Echo) Depending on the treatment, the patients were divided into 2 groups: I -14 children, conventional and BB; II - 34 children - conventional treatment.

Conclusions. The Tei index is a predictor of death, depending on age and heart failure. The association of BB in the treatment of DCM in children in the early stages contributes to the clinical and functional improvement of the heart. Adverse effects are rare, requiring correct dose titration.

Results. Most of the children were young (58%), with a predominance of boys (M F-30/18),with heart failure (HF) II-IV NYHA/Ross. Echo parameters with non-perforable predictive value: Tei index, associated with ejection fraction, size of left ventricle (LVEF, IVS thickness), PAPs and mitral regurgitation (grade of IVM). We have noticed an unfavorable evolution in 6 children, including 4 deaths, of which 3 (8.82%) cases in group II (without BB) (Table 1, fig 1).

Table1. Associative correlations of EcoCG parameters in group I patients (p <, 01)

	Age (m)	Weight, kg	Height, m	LVEF %	LVSF %	LVDD, mm	LVSD, mm	IVS mm	PAPs mm Hg	IT
Age (month)	-	0,99	0,99	-0,52	-0,39	0,91	0,89	0,73	0,25	0,22
Weight, kg	0,99	-	0,99	-0,51	-0,38	0,92	0,89	0,70	0,23	0,16
Height, m	0,99	0,99	-	-0,47	-0,37	0,89	0,85	0,72	0,27	0,15
LVEF,%	-0,52	-0,51	-0,47	-	0,94	-0,71	-0,74	-0,52	-0,36	-0,87
LFSF%	-0,39	-0,38	-0,37	0,94	-	-0,57	-0,59	-0,45	-0,39	-0,39
LVDD mm	0,91	0,92	0,89	-0,71	-0,57	-	0,97	0,60	0,26	0,20
LVSD mm	0,89	0,89	0,85	-0,74	-0,59	0,97	-	0,60	0,22	0,28
IVS mm	0,73	0,70	0,72	-0,52	-0,45	0,60	0,60	-	0,22	0,70
PAPs mmHg	0,25	0,23	0,27	-0,36	-0,39	0,26	0,22	0,22	-	0,76
LVTI	0,22	0,16	0,15	-0,87	-0,39	0,20	0,28	0,70	0,76	-

Fig.1. Associative links of the value of the IT index and the risk of death

