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**CIRCADIAN DYSREGULATION OF THE BOWEL EVACUATION FUNCTION  
 DISORDER IN CHILDREN**

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In recent years, among gastroenterological pathologies in children, an increase has been noted in congenital malformations of the colon causing the development of organic and functional diseases of the entire digestive system.

Research objective. To identify onset mechanisms of the bowel evacuation function disorders, to establish their main links and develop an adequate medical and preventive treatment program aimed at their elimination, which in turn will allow preventing the development of pathologic complications and decompensation in children with dolichocolon.

We have studied circadian dysregulation of the bowel evacuation function disorder in 252 children aged 4 to 15 using chronoenterography.

Children with a decompensated course of chronic constipation associated with congenital lengthening of the sigmoid colon, have demonstrated a slowdown of the bowel evacuation function in the form of category III-IV bradyenteria with pessimal actophase and a tendency to develop enteria. The regular circadian rhythm of the bowel evacuation function is an attribute of the functioning digestive system. We suggest using the "FPh" (Four Ph) principle featuring major directions of measures to prevent the onset and progression of chronic constipation in children with dolichocolon for the correction of desynchronosis (tab.).

Table

Dynamics of circadian rhythm defecation on the background  
 of treatment of children with chronic constipation

Degree of brady-enteria	Actophase	before treatment (n=172)		after treatment (n=172)	
		abs.	%	abs.	%
I	pessimal	0	0	0	0
	optimal	0	0	0	0
II	pessimal	12	57,14±10,79	5	23,81±9,29*
	optimal	9	42,86±10,79	16	76,19±9,29*
III	pessimal	118	97,52±1,41	84	69,42±4,48*
	optimal	3	2,48±1,41	37	30,58±4,48*
IV	pessimal	30	100,0	25	83,33±6,8*
	optimal	0	0	5	16,67±6,8*
Total	pessimal	160	93,02±1,94	114	66,28±3,60*
	optimal	12	6,98±1,94	58	33,72±3,6*

Notes. \* – p<0,05 reliability of differences.

Consequently, the category of bradyenteria and definitive acrophase are diagnostically valuable clinical symptoms in patients with dolichocolon. The use of the chronometric approach to the correction of the bowel motor-evacuation function disorders in children with chronic constipation associated with congenital lengthening of the sigmoid colon allows achieving positive clinical situation dynamics and can be used as a component of the medical and preventive treatment program for congenital lengthening of the sigmoid colon.