

EFFECT ON HEART RATE VARIABILITY IN HEMODIALYSIS PATIENTS

Olena Loboda, Iryna Dudar, Valentyna Savchuk, Yurii Gonchar

SI "Institute of nephrology NAMS of Ukraine"
 Departement of efferent technologies
 Kyiv, UKRAINE

INTRODUCTION AND AIMS: The aim was to investigate the change of heart rate variability (HRV) in patients with CKD st. 5D in the correction of anemia with epoetin alfa.

METHODS: We examined 28 patients with anemia treated by hemodialysis. We investigated the effect of treatment with epoetin alfa on HRV. HRV was measured according to internationally accepted guidelines before and after 3 month of correction of anemia epoetinom alpha in the patients with CKD st. 5D. Age of patients was 54±5,1 years.

RESULTS: Patients receiving treatment with epoetin alfa there was an improvement the time-frequency analysis of heart rate variability. - Tabl.

Indicators of HRV				
Parameters of HRV	Before treatment	After 3 months	Norma	p
SDNN, ms	17 (13:31)	23 (18:38)	58 (42:78)	<0,001
rMSSD, ms	27 (13:34)	35 (27:36)	49 (32:61)	<0,01
pNN50, %	1,78 (0,71:2,01)	3,7 (1,9:4,4)	29 (10:51,4)	<0,001
TP, ms ²	887 (659:949)	1028 (954:1301)	3790 (2948:4714)	<0,001
HF, ms ²	197 (179:451)	289 (223:501)	975 (460:1378)	<0,001
LF, ms ²	1258 (978:1699)	1008 (889:1011)	1170 (676,1:1933)	<0,05
VLF, ms ²	1029 (614:1067)	834 (518:921)	765 (301:1134)	<0,001
LF/HF	3,5 (2,2:3,5)	2,7 (1,6:2,8)	0,7 (0,48:0,98)	<0,001

CONCLUSIONS: We determined improvement in the time-frequency analysis of heart rate variability in patients with CKD st. 5D.

