

Possibilities of involvement of preparation “GA-40” in the treatment during some cardiovascular system diseases in childhood

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At the same time at the modern stage it is expedient to pose a question about the usage of immuno correctors in pediatric cardiology. If this question reagrads the possibilities of new preparation used only nonpediatric age, then the sphere of the topicaly of the problems given in this work will be considerably extended. The aim of this work was to srudy the action of “GA-40” preparation in the experiment (instrumental and morphological date of cardiovascular system)

Methods: It was studied on action of “GA-40” on cardiovascular in the experiment (in 30 rabbits) and analyse both instrumental (E.C.G., Ph.C.G., R.C.G.) indices and morphological data injections of different doses (1ml/kg and 5ml/kg).

Results: Results of E.C.G. and Ph.C.G. investigations have shown that after the injections of 50-fold dose of “GA-40” during 14, the dynamics of phasic structure of heart contractility do not change and all indices vary within the limits of initial level. This allows to conclude that in result of “GA-40” preparation action, functioning of cardiovascular system of these animals in stable.

Besaides above-mantioned, injections of different doses of “GA-40” (1 ml/kg and 5 ml/kg) on cardiomyocytes of experimental animals has shown that this preparation in dose of 1 ml/kg has an immunomodulator effect ($p < 0,01$). In cardiomyocytes of animals an activation of methabolic processes take place both in cellular nucleus and the cytoplasm. In addition, a positive effect on the endothelium of capillaries was also noted in aspect of structural organization. So, experiments in rabbits have corroborated a positive immunomodulating effect of “GA-40” on cardiomyocytes as well as on the endothelium of capillaries.

Effect of “GA-40” on cardiovascular system in the experiment allows us to suppose that this prepatration may be used in the treatment and prevention of cardiovascular diseases.

Conclusion: Action of “GA-40” preparation on cardiovascular system in the experiment (E.C.G., phonocardiography, rheography) and its morphological characterization in the rabbits allows us to use the preparation in the clinics in future, in dose of 1 ml/kg. ON the basis of experimental data it is expedient to continue the further study of “GA-40” preparation in the clinics as it is a presumable possibility of its usage in the complex treatment of cardiovascular system.