

Use of alpha-lipoic acid for treatment of children with diabetes mellitus type 1 complicated with polyneuropathy and hepatitis

L. Nifontova, N. Pogadaeva, T. Begutova

Summary. 96 children with type 1 diabetes mellitus have been examined and treated with Espa-lipon in order to test the efficacy of the drug and develop a prescription scheme for alpha-lipoic (thioctic) acid medication in treatment of children with diabetes mellitus type 1 complications. The age of children ranged from 4 to 18 year and the disease history varied from 6 months to 16 years. The comparison group included 15 children. As it was found, all the patients had diabetic polyneuropathy (DPN) with different rates of manifestation as well as accompanying disorder: of liver function and lipidic metabolism. After the treatment with Espa-lipon all the patients reported a distinct positive effect: improvement of the general status, less intensive subjective manifestations of polyneuropathy, improvement of vibration sensation, positive dynamics when registering evoked potentials, normalization of the indices of the lipidic metabolism and liver tests. It was also observed that it is the prescription scheme that influences the intensity of the overall positive effect. The best scheme was found to be the initial intravenous infusion in the course of 10 days. The positive therapy effect in the comparison group was much less intensive and did not include the peripheral nervous system (confirmed by instrumental tests). Based on the data obtained, Espa-lipon can be recommended for extensive application in the pediatric practice for treatment of children suffering from type 1 diabetes mellitus.

Key words: diabetic polyneuropathy, children, alpha-lipoic acid.