

**EFFECTIVENESS OF LEVOCARNITINE IN CHILDREN WITH PNEUMONIA  
AGAINST THE BACKGROUND OF CARDITIS**

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**Abstract:** Respiratory diseases are the most common group of diseases among children and occupy the first place in the structure of general morbidity in children. The relevance of chronic bronchopulmonary processes, disability and mortality remains. The aim of the study is to study the effectiveness of levocarnitine in pneumonia in children with carditis. Materials and methods of the study. The study included 56 children aged 1 to 10 years with pneumonia against the background of carditis, who received inpatient treatment in the pediatric departments and the pediatric intensive care unit of the Samarkand branch of the RRCM. The patients were divided into 2 groups: Group I of 28 patients - children with pneumonia against the background of carditis, Group II of 28 patients - children with pneumonia. Sick children with pneumonia against the background of carditis were divided into 2 subgroups: Ia subgroup of 14 children who received standard therapy and Ib subgroup of 14 children who received oral levocarnitine in addition to standard therapy.

**Keywords:** efficiency, pneumonia, treatment, children, carditis.

**Relevance.** Respiratory diseases are common, and the importance of this pathology is steadily increasing, which is associated with an increase in the number of frequently ill children, an increase in the survival rate of newborns with severe respiratory diseases, and the impact of various premorbid and adverse environmental factors [1,4,6]. At the current stage of science, the concept of pneumonia is collective and can accompany various nosological forms of respiratory pathology, including a symptom complex of specifically defined clinical manifestations of bronchial obstruction disorders based on narrowing or occlusion of the airways. [9]. Detection of labored, wheezing breathing requires an in-depth examination and an individual program to eliminate risk factors to prevent and progress the disease [2,5]. The course of pneumonia in children often becomes protracted and recurrent with various concomitant pathologies, and the severity of the disease often depends on the degree of involvement of cardiovascular pathology in the body. In this regard, it seems relevant to study the course of pneumonia in children with carditis in order to improve both diagnostic and therapeutic measures, which will serve as the purpose of this study.

Carditis is an inflammatory disease caused by various infectious agents and characterized by inflammatory infiltration of the myocardium with fibrosis, necrosis and/or degeneration of myocytes. The true incidence of myocarditis in children is unknown due to the lack of uniform diagnostic criteria for the disease, even taking into account pathomorphological data and the extreme diversity of clinical symptoms of the disease, as well as the almost complete absence of coordinated multicenter studies. Currently, for the purpose of early diagnosis and prognosis of the course of myocarditis, the B-type natriuretic peptide (BNP) is determined, the level of which has age-related differences. [3,7,8]. Of particular importance is the determination of BNP in young children with cardiac pathology, when there is nonspecificity and low symptomatology of clinical manifestations of cardiac pathology, which determines the subjectivity in assessing its presence and severity.

**The aim of the study:** to study the effectiveness of levocarnitine in pneumonia in children against the background of carditis.

**Materials and methods of the study.** The study included 56 children aged 1 to 10 years with pneumonia associated with carditis who were treated in hospitals in the pediatric departments and pediatric intensive care unit of the Samarkand branch of the Republican Scientific Center for Emergency Medical Care. The patients were divided into 2 groups: Group I, 28 patients – children with pneumonia associated with carditis; Group II, 28 patients – children with pneumonia. The children with pneumonia associated with carditis were divided into 2 subgroups: Subgroup Ia, 14 children who received standard therapy, and Subgroup Ib, 14 children who received oral levocarnitine in addition to standard therapy. Levocarnitine is a B vitamin-related drug that has a metabolic, antihypoxic, anabolic, and antithyroid effect, increases appetite, stimulates regeneration, and activates fat metabolism. The drug was prescribed to children under 1 year old, 10 drops 3 times a day as an additive to sweet drinks, 1-6 years old, 14 drops, children from 6 to 10 years old, 1/4 teaspoon 2-3 times a day. The course of treatment is 1 month. The effectiveness of the drugs was assessed based on a study of the dynamics of the child's general condition, clinical symptoms, laboratory and instrumental data.

**Results of the work:** The results of the studies conducted before treatment showed that 20 (80%) patients in the 1st group and 18 (73.3%) patients in the second group had hyperthermia and signs of intoxication. Unproductive cough, with the expectoration of minor sputum, was observed in 24 (95%) and 21 (90%) patients in the 1st and 2nd groups. Shortness of breath, severe perioral cyanosis, and tachycardia were observed in 15 (20%) and 14 (20%) patients. On the 5th day from the start of treatment, 19 (70%) children of the 1a-st group and 23 (80%) of the 1b-st group showed positive clinical dynamics of the disease: manifestations of intoxication decreased, appetite increased. In 17 (56.6%) children of the 1a-st group and in 23 (76.6%) of the 1b-st group, cough decreased, shortness of breath decreased. By the 6-7th day of treatment, 25 (80%) children of the 1a-st group and 27 (93.3%) of the 1b-st group showed disappearance of cough, tachycardia, wheezing in the lungs, shortness of breath. On the 10th day of treatment, positive dynamics of hematological parameters, ECG parameters were noted.

**Conclusions:** Thus, the established effectiveness of oral administration of levocarnitine in pneumonia in children with carditis will improve treatment tactics and reduce the duration and number of complicated forms of the disease

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