

USE OF L-CARNITINE FOR ACUTE OBSTRUCTIVE BRONCHITIS IN CHILDREN WITH MYOCARDITIS

¹Ataeva Muhibba Sayfieva,

¹Senior teacher of the Department of Pediatrics No. 1 and Neonatology,
Samarkand State Medical University,

Avliyoyev Azamat, Arabov Ohunjon
clinical residents of the 2nd year
Samarkand State Medical University

Khaydarov Odilkhon Lazizovich
Student of Group 508, Faculty of Medicine No. 1,
Samarkand State Medical University, Samarkand, Uzbekistan

Summary:

Respiratory diseases occurring with broncho-obstructive syndrome are among the common ones, the significance 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 tract lesions, an increase in the number of children with atopic constitution, and exposure to adverse environmental factors. In this work, we studied the effect of L-carnitine on the course of bronchial obstruction in patients with myocarditis.

Keywords: bronchitis, myocarditis, children, L carnitine

Relevance:

Broncho-obstructive syndrome, bronchial obstruction syndrome is a set of clinical signs that are formed due to the total narrowing of the bronchial lumen. The narrowing of the lumen of the small bronchi and foreshadowing exhalation leads to whistling sounds. Clinical manifestations of biofeedback consist of lengthening of expiration, the appearance of expiratory noise (wheezing), asthma attacks, participation of auxiliary muscles in the act of breathing, unproductive cough. With severe obstruction, the respiratory rate increases, fatigue of the respiratory muscles



develops, and the partial pressure of oxygen in the blood decreases. According to the World Health Organization, acute myocarditis is an inflammatory lesion of the myocardium, confirmed histologically, immunologically and immunohistochemically. The issue of diagnosing acute myocarditis in children still remains unresolved. Difficulties in the diagnosis of myocarditis in children are the variety of clinical manifestations and non-specific symptoms of the disease, as well as the limited use of certain research methods, in particular, endomyocardial biopsy and magnetic resonance imaging of the heart. Currently, the search for differential diagnostic algorithms for the disease continues. According to modern literature, much attention is paid to non-invasive methods for diagnosing acute myocarditis in children, the course of which can be complicated by life-threatening cardiac arrhythmias and conduction disorders: ventricular extrasystole, prolongation of the corrected QT interval, atrioventricular blockade. In turn, the occurrence of the above cardiac arrhythmias increases the risk of sudden cardiac death. Recommendations for the treatment of myocardial infarction in children often undergo changes due to the small number of multicenter and controlled studies in the pediatric population. The article presents an overview of modern approaches to the treatment of acute myocarditis in children: the use of antiviral drugs, intravenous immunoglobulin, immunosuppressive therapy, and features of the treatment of heart failure.

Objective:

To evaluate the effectiveness of L-carnitine in acute obstructive bronchitis in children with myocarditis.

Material and methods of research:

The paper presents the results of anamnestic, clinical, conventional laboratory, paraclinical and special methods of examination of young children with acute and recurrent obstructive bronchitis in children who were hospitalized in the departments of pediatric intensive care, I and II emergency pediatrics of the Samarkand branch of the Republican Scientific Center for Emergency Medical Care in the period from 2018 to 2020. In the course of our study, 90 patients were examined, who, according to the goal and objectives of the research, the patients were divided into groups III: group I consisted of 30 patients with acute obstructive bronchitis, group II - 30



patients with recurrent obstructive bronchitis, group III - 30 children with obstructive bronchitis on the background of myocarditis

The results of the study in patients with recurrent course of obstructive bronchitis, so the general condition was assessed as follows: in group I, moderate in 5 (16.7%), severe in 25 (83.3%) and extremely severe was not observed in anyone, in Group II - moderate in 2 (6.7%), severe - in 26 (86.7%) and extremely severe in 2 children (6.7%); in group III moderate in 1 (3.3%), severe in 27 (90.0%) and extremely severe in 2 children (6.7%)

Severe cyanosis, respiratory failure II and III degree occurred 1.5-1.8 times more often in patients with recurrent obstructive bronchitis compared with patients of group I, which, apparently, was due to deep morphofunctional changes in the structure of the bronchopulmonary tree in patients with frequent relapses of broncho-obstructive syndrome, which often led to gross violations of gas exchange processes. Cyanotic seizures and paroxysmal cough were observed, respectively, 1.5 times more often, respectively, in children of groups II and III compared with group I, which was the result of dysregulation of the mucociliary apparatus, increased sputum viscosity in children with recurrent obstructive bronchitis.

Indicators of the severity of the condition, such as heart failure and hypothermia, occurred with approximately the same frequency. At the same time, a significantly more frequent impairment of consciousness is typical, reflecting hypoxic disorders in children of groups II-III, which occurred on average 2.5 times more often than in patients of group I.

Conclusions:

Thus, the use of L-carnitine in the complex treatment of patients with obstructive bronchitis in children with myocarditis can increase muscle function and the ability of patients to self-care, as well as prevent early disability.



References

1. Lim M.V., Shavazi N.M. "The combined use of acetylcysteine and 3% of sodium chloride in the nebulizer therapy of acute bronchiolitis" European science review. № 11-12, 2016. pp. 63-66.
2. Shavazi N.M. and Lim M. V. "The effectiveness of nebulizer inhalations of acetylcysteine in the therapy of acute bronchiolitis in infants". Problems of Biology and Medicine. № 2, 2016: 87.
3. Shavazi N.M. et al. "The assessment of the degree of bronchoobstruction in acute bronchiolitis in infants". Materials of III conference of the Association of Doctors of Emergency Medical Care of Uzbekistan. Tashkent, 2015.
4. Chandima P. Karunanayake, Donna C. Rennie, and others «Bronchitis and Its Associated Risk Factors in First Nations Children» Children (Basel). 2017 Dec; 4(12): 103.
5. Закирова Б. И., Мамаризаев И. К. Течение рецидивирующих респираторных инфекций у детей на фоне атопического дерматита. Ж //Вопросы науки и образования. – 2021. – Т. 9. – С. 134.
6. Закирова Б. И. и др. Бронхообструктивный синдром: прогностическая значимость дисбиоза кишечника в его развитии //Достижения науки и образования. – 2020. – №. 10 (64). – С. 83-85.

