



CHILDREN WITH CHILDREN'S CEREBRAL PARALYSIS - CORRECTION OF RATIONAL EATING

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Annotation

Cerebral palsy (cerebral palsy) refers to severe diseases of childhood, disability is 30%. The reason is a number of unfavorable factors that damage the central nervous system (1, 3, 6). Pyramidal disorders are manifested by hereditary movement, with complex regulation of tone and lack of formation of chain straightening reflexes. Against this background, changes of a secondary nature in the bones and joints. That requires a special approach to the methods of treatment and rehabilitation.

Keywords: cerebral palsy, disease, rational eating, treatment, rehabilitation.

Introduction

Moreover, the disease is associated with an early age in children who are not aware of their defect, not striving for recovery and overcoming motor impairment. All this explains the inexpediency of early surgical intervention in the musculoskeletal system. According to literature data, early operations aggravate and complicate the clinic of infantile cerebral palsy. Many scientists are of the opinion that an integrated approach of rehabilitation methods in combination with drug correction gives greater efficiency (2, 7, 5). Moreover, the achievement effect can be achieved only by continuous treatment and rehabilitation for months, years, taking into account the individual approach and the nature of the social conditions of the patients' living. The socio-economic status of the family raising a sick child affects the prognosis of the disease, since according to literature data, adequate rehabilitation and treatment of



children with Cerebral palsy in 50% leads to a successful, or not complete, but recovery, which makes it possible for patients to live independently, psychosocial adaptation in society (4, 5).

Target. Justify and introduce rational nutrition in children with cerebral palsy.

Material and Research Methods

The examination of children with cerebral palsy was carried out in the department of pediatric neurology of the 1st clinic of SamMI for the period of 2021, 30 children with spastic diplegia and hemiparetic form of cerebral palsy. In all the children examined, the analysis was studied, a detailed emphasis was placed on the diet, drinking regimen, the nature of appetite, and the regularity of stool when interviewing parents. All children underwent, in addition to a neurological, basic examination, an anthropometric examination; physical examination was studied by a pediatrician. Nutritin status was determined due to the parameters of body mass index, musculoskeletal body mass, specific gravity of fluid, fat content, growth rate and compliance with age-related norm. The observed children were divided into two groups. The first group of children took Peptamen Junior formula as a complementary meal. In compliance with the drinking regime. The second group remained on the usual diet. After 6 months, the children underwent a repeated examination of anthropometric indicators, studying the nature of changes in rehabilitation measures, the effectiveness in relation to the changed rational level of nutrition. The children averaged 7.5 years of age. The examined children were hospitalized in the department twice during the monitoring period. At the beginning and at the end of the study period. In addition to nutritional control, the diagnostics included instrumental, neuroimaging and neuropsychological examinations. Their description did not provide for the task; therefore, these data are not described. The composition of the proposed and used Peptamen Junior mixture contains (lit. 3). Statistical processing of the results was carried out on an individual computer and included the standard values of the student's test.

Research Result

The examination of children with cerebral palsy for the presence of nutritional status was carried out. As indicated above, of the entire group of children under study, 21 children were with a form of spastic paralysis - double hemiplegia and 9 children with a hemiparetic form. Anthropometric analysis was assessed over time, before and after the proposed therapy. The main point of reference was the body mass index, so in the



observed children in 70% the index was below normal, averaging 11.5. If body weight is lean, reduced in almost 80% of children with cerebral palsy, then fat weight varied within the normal range in 50% of children. The same interesting parameters were observed in the analysis of musculoskeletal body mass, where the decrease was very insignificant, even in some cases the indicators were above normal, from 2 to 20 kg in children with cerebral palsy. The relationship of musculoskeletal body mass with age was equal to 0.65, which corresponded to $p < 0.01$, with a height of 0.080, where $p < 0.01$, and body fat mass 0.81, where $p < 0.01$. The general specific metabolism in terms of indicators is reduced in 5 children, in other cases within the normal range. An important point is the calculation of the volume of fluid; in the examined children, the decrease was noted a little more than in half of the cases, 57%. The relationship between fluid volume and age corresponded to 0.050, where $p < 0.01$, with an increase of 0.80, $p < 0.01$, and body fat mass 0.70, where $p < 0.01$. To obtain a complete picture of nutritional status, it was necessary to analyze the level of nutrition. In many cases, according to parents, a child with cerebral palsy found it difficult to swallow denser food, difficulty in chewing. More often than not, the food itself did not match the diet, quality and quantity. Many parents, due to a lack of knowledge, focused on the wishes of the child, therefore, the drinking regime suffers. Children did not receive additional food in the form of special products. It was revealed, taking into account age-related needs, the caloric content of food had a low figure in 90% of cases. And as a consequence, not advising nutrition, and difficulty in eating, is directly proportional to the low weight, both fat mass and musculoskeletal mass. Taking into account the conducted examination, a nutritional deficiency was revealed, and the children were offered food according to the individual program "Peptamen Junior" - specialized food (can be used as the only food source). The mixture has such qualities as, good tolerance, energy requirement due to protein, without additional renal load, is intended for children with underweight. The examined children were divided into 20 children - the group who received additional food Peptamen Junior, 10 children remained in the control group without additional food. Re-examination of children was carried out after 6 months, where the indices of the body mass index, musculoskeletal mass were again determined, the indices of anthropometric data were compared with the primary indices. At the end of the observation period in the observed children with cerebral palsy in the group where the children were supplemented with additional food, the body weight increased significantly, the reliability was $p < 0.01$, which averaged 2.5 kg; in the group where they remained in the old diet, the increase in weight was 0.5 kg on average. The growth rate changed in a positive direction in the children of the first group. The average indicator is 3 cm, in



the second group 0.8 cm. The body mass index in the first group increased and averaged 15, approached the norm. Of course, as a result of the increase in body weight, the indicators of musculoskeletal mass increased, in 89% they approached the norm in terms of age. The rest turned out to be above the norm. Since, in addition to nutrition, the drinking regime was also taken under control, the total fluid in the body increased, in 70% it approached the norm. In addition, appetite levels and stool regularity were assessed. According to the parents, the children had an appetite, the feeding of the children was established at certain hours, the children did not refuse to eat (as before), but they followed the diet with pleasure. It was the same with the stool, in the beginning the regularity of the stool was an exception, the children suffered from constipation and the stool was every third day, at best. With the correction of the diet in 100% of cases, regular bowel movements were noted in the first group. The chemical composition of Peptamen Junior is saturated with a vitamin complex, so there is no need for additional intake of vitamins. All components can be absorbed even through the damaged intestinal wall, and the Omega-3, 6 complex contained in the composition reduces intestinal inflammation. Replenish the energy-protein potential necessary for children with cerebral palsy, since the mixture meets the requirements of the child's body.

Thus, in the diagnosis of children with cerebral palsy, it is necessary to include control of anthropometric data such as weight, height. Normalization of the nutritional status in children with cerebral palsy, improves the rehabilitation of children of the underlying disease and strengthens the somatic status (children did not catch colds during the period of proper nutrition, which confirms an increase in immune deficiency, in this direction, it will be possible to dwell in more detail in the following studies).

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