THE USE OF MAGNE B-6 FOR THE COMPLEX TREATMENT OF CHILDREN

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ABSTRACT

Magne – B 6 is an important drug for the comprehensive treatment of children. One of the urgent problems that arise in newborns is perinatal encephalopathy (PEP) caused by perinatal hypoxia and asphyxia. These conditions are accompanied by changes in cerebral hemodynamics, which is a key factor in the development of pep. Thus, it becomes necessary to conduct therapy aimed at restoring general and cerebral circulation, as well as stimulating reparative processes in the brain. However, this therapy requires long-term administration of certain drugs and drugs that are administered parenterally into the body. It is known that each injection has a physical and psychological effect on the child, especially if they are painful. Vitamin B-6 and magnesium sulfate are among such drugs that children need to receive simultaneously and for a long time. Therefore, there is a need to choose the most affordable and painless medicines. In this case, magne B-6 is the best option, as it combines "two drugs in one".

Keywords: infants, magne B-6, perinatal encephalopathy.

INTRODUCTION

The purpose of our study was to study the effect of Magne B-6 on the condition of infants with manifestations of PEP.

Magnesium, together with vitamin B-6, improves cerebral blood circulation and has a neurometabolic effect. The most important is the participation of magnesium ions in bioenergetic processes, it affects the excitability and conduction of nervous tissue. Common manifestations of magnesium deficiency in the body are a decrease in physical activity of the child, fatigue or depression, sleep disorders, convulsive states (in newborns), muscle spasms, cardiac arrhythmias. Magnesium deficiency increases pain sensitivity, enhances the processes of lipid peroxidation.

Materials and methods of research

We examined 93 children of the first year of life who had manifestations of perinatal encephalopathy against the background of the underlying disease. As a result of physical examination of sick children, sagital suture was revealed, the small fontanel in all children was open, the size of the large fontanel turned out to be over 3x3 cm, unstable horizontal nystagmus, "setting sun" syndrome was revealed.

We prescribed Magne B-6 orally once a day at a dose of 6-8 mg / kg of body weight. The course of treatment was 15-20 days. The administration of the oral form of magnesium and vitamin B-6 preparations was chosen, as mentioned above, from an ethical point of view. Against the background of the ongoing treatment, the condition of the children improved significantly, positive dynamics was noted already on the 5-7 day of hospital stay.

The results obtained and their discussion.

The study focused on evaluating the effectiveness of oral forms of magnesium and vitamin B-6 preparations in providing clinical care to patients with various diseases. The set criteria for success were clinical improvement in the condition of patients, reduction of intracranial hypertension, improved sleep and acceleration of the pace of psychomotor development. Analysis of the results of control studies, such as neurosonography and the state of lipid peroxidation, showed that oral forms of magnesium and vitamin B-6 preparations demonstrated not only comparable, but even higher efficacy compared with parenteral forms of these drugs. In particular, there was a significant improvement in the clinical condition of patients, manifested in a decrease in symptoms of the disease and an improvement in their quality of life. In addition, oral forms of drugs contributed to a decrease in intracranial hypertension, which is one of the key factors in stabilizing the patient's condition. Another important aspect was the observed improvement in sleep in patients taking oral forms of drugs. It was found that these drugs allowed to normalize sleep and increase its duration, which contributed to the rapid recovery of the body and improved overall well-being. Finally, oral forms of magnesium and vitamin B-6 preparations had a positive effect on the psychomotor development of patients, which is an important indicator of their effectiveness. Accelerating the pace of psychomotor development allows timely identification and treatment of possible problems and developmental abnormalities, which ultimately has a beneficial effect on the overall result of treatment.

Thus, the results of the study indicate the overall effectiveness of oral forms of magnesium and vitamin B-6 preparations in providing positive changes in patients with various diseases. These drugs were not only not inferior, but also more effective than their parenteral forms. These data confirm the importance of oral administration of these drugs in clinical practice and can be used in further research and development of new treatment approaches.

The criteria for success were clinical improvement in the condition of patients, reduction of intracranial hypertension, improved sleep and an increase in the rate of psychomotor development. The results of control studies conducted using neurosonography and assessment of the state of lipid peroxidation speak in favor of oral administration of magnesium and vitamin B-6 preparations. It is important to note that they turned out to be not only no less effective, but even more effective than their parenteral counterparts.

CONCLUSIONS

All of the above allows us to conclude that in the rehabilitation of children with perinatal encephalopathy, it is important to use soft and gentle treatment methods immediately at an early stage. One of these methods is the use of magnetotherapy together with vitamin B-6.

REFERENCES

1.Vakhidova, A.M., G. N. Khudoyarova, and Z. T. Muratova. "Epidemiology And Immune Status In Echinococcosis of The Lungs Complicated By Pecilomycosis." Central Asian Journal of Medical and Natural Science 2.5 (2021): 262-269.

2.Khudayarova, G. N., Muradova, E. V., Vakhidova, A.M., & Akhmatov, H. (2019). Studies of the immunological status of patients with echinococcosis and bronchial asthma complicated by pecilomycosis and immunorehabilitation. In Priority directions for the development of science and education (pp. 241-244).

3.Galaktionova, M. Yu., & Osadtsiva, E. A. (2013). Perinatal lesions of the nervous system in children and their consequences: approaches to therapy. Questions of practical Pediatrics, 8(2), 23-29.

4.Zavadenko, N. N. (2012). Attention deficit hyperactivity disorder: diagnosis, pathogenesis, principles of treatment. Questions of practical Pediatrics, 7(1), 54-62.

5.Strizhakov, A. N., Davydov, A. I., Lebedev, V. A., Ignatko, I. V., Makatsaria, A.D., Mezhevitinova, E. A., ... & Shakhlamova, M. N. (2009). The biological role of magnesium in obstetrics and gynecology: scientific evidence and clinical research. Issues of gynecology, obstetrics and perinatology, 8(3), 5-18.

6.Vahidova, A. M., Khuzhdanova, M. A., & Kuziev, M. S. (2022). Intensification of Pecilomyces Spherules in Patients with Echinococcosis. *Jundishapur Journal of Microbiology Research Article Published online*, *15*(1), 2022.