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CORRECTION OF THE NEUROLOGICAL STATUS OF CHILDREN WITH PERINATAL INJURIES OF THE CENTRAL NERVOUS SYSTEM

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Annotation: Musical art directly and strongly affects a person already in the first years of his life and occupies a large place in his general cultural development. Music is close to the emotional nature of the child. That is why music therapy can become not only a way of developing a child's personality, but can also be successfully used as a method of correcting childhood neuroses, various disorders and defects of the psyche of children. We observed 32 children with the consequences of perinatal lesions of the nervous system (PPNS) aged from 4 months to 1 year, who received music therapy courses against the background of conventional therapy. After the inclusion of music therapy in the treatment complex, the neurological status, EEG and Echo-EG indicators had a faster positive dynamics.

Key words: Children, music therapy, consequences of perinatal lesions of the nervous system, EEG, echo-EG.

Relevance of the problem: Of all the diseases of the nervous system in children, two-thirds of their origins go to the perinatal period. The list of neuropsychiatric disorders associated with hypoxic brain damage is extremely wide. However, not only the frequency of pathology, but also its severe consequences give importance to this problem [3,9,13]. There are a lot of new drugs used parenterally, which have not only a traumatic effect, but also require certain costs. The enteral administration of certain drugs can affect not only the function of the gastrointestinal tract, but can cause allergic reactions. Therefore, it is necessary to search for new, non-invasive, with the absence of pronounced side effects, as well as inexpensive means to correct the neurological status of the younger generation [1,6]. Such, at present, can be the method of music therapy. This is one of the methods of treatment without drugs, which is actively used in traditional medicine. The positive effect of music therapy for children and adults on the human body has been known for a long time, literally since time immemorial, and the use as one of the methods of treatment began in the XIX century [5,10]. And today, without knowing it, we use music as a "medicine" for healing the soul and body: a remedy for a sad mood, as a lullaby for a baby, etc. Music influences our emotions, and with the help of music therapy, you can set the necessary mood to get rid of all the unnecessary and negative things that put pressure on us psychologically and weaken our immunity. Often it is internal conflicts that give rise to poor health [4,11].

Musical rhythmics is widely used in the treatment of motor and speech disorders (tics, stuttering, coordination disorders, disinhibition, motor stereotypes), correction of insufficient psychomotor development of a sense of rhythm, speech breathing [8,15]. The analysis of literary sources proves the beneficial influence of certain musical works on intellectual activity.

Experience shows that music therapy improves the overall emotional state of children; improves the performance of the quality of movements (expressiveness, rhythm, coordination, smoothness, serial organization of movements), correction and development of sensations, perception,

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presentation, stimulation of speech function; normalization of the prosodic side of speech (tempo, timbre, rhythm, expressiveness of intonation) [7,12].

Music therapy is a medicine that is listened to. Specialists distinguish the following functions of music therapy: regulatory, which consists in influencing the emotional status; communicative and actually readaptation [2,14].

Listening to music by children involves the use of both a "live" voice and a tape recording.

Purpose of the study: the study of the influence of music therapy on the somatic state and neurological status of children with perinatal injuries of the central nervous system. **Materials and research methods.** In the base of music therapy, we have included the children's city hospital No. 1, the nursing home and the children's polyclinic No. 4. Music therapy can be carried out at home, in such cases we teach mothers of sick children.

On the basis of GDB No. 1, we have started the introduction of music therapy for the rehabilitation of children with perinatal lesions of the central nervous system. It should be noted that we set ourselves the task of an individual management scheme for these children, depending on the prevalence of one or another syndrome.

We observed 32 children with the consequences of perinatal lesions of the nervous system (PPNS) aged from 4 months to 1 year, who received music therapy courses against the background of conventional therapy. The control group consisted of 12 children with PPPNS who received conventional therapy. All children, in addition to neurological examination, underwent electroencephalographic and echo-encephalographic studies before and after music therapy. The course of healing with music is selected and prescribed by the doctor strictly individually for each patient.

Research results and their discussion. After the inclusion of music therapy in the treatment complex, the neurological status, EEG and Echo-EG indicators had a faster positive dynamics. Analysis of the Echo-EG data performed after complex rehabilitation showed that cerebrospinal hypertension decreased, the width of the third ventricle decreased, the index of the lateral ventricle decreased and, consequently, the degree of displacement of the median structures decreased. According to EEG data, there was a shift in the background frequencies of amplitude characteristics towards the predominance of alpha activity in 68% of patients; the severity of slow—wave activity decreased in 35.7% of patients. The change in the parameters of Echo-EG and EEG towards normalization is also proved by a positive clinical picture. This is evidenced by a decrease in the tremor of the chin and limbs, a decrease in muscle tone almost to normal, and improved sleep in children with increased neuro-reflex excitability. Whereas in children with delayed psychomotor development, there was an improvement in the act of sucking, a slight increase in motor activity and interest in caring staff and parents.

We recommend three types of music therapy programs: the so-called "soothing" program, "activating" program, and a mixed-type program. We recommend performing lullabies and calm songs 2-3 times a day for 5-10 minutes after feeding, and songs at a fast pace 5-10 minutes before feeding. It should be particularly noted that the "sedative" program was intended mainly for children with increased neuro-reflex excitability, while the "activating" program is for children with psychomotor development delay syndrome.

When conducting music therapy in recording mode, it is necessary to select musical compositions that differ in high performance and sound qualities. In our work, music was selected in the

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national flavor. It is recommended to listen to an individually selected music program for 7-10 days.

Conclusion: Experience shows that a well-chosen melody has a beneficial effect on children with the consequences of perinatal damage to the nervous system and accelerates their recovery, preventing disability. The introduction of music therapy into the complex therapy of children with PPPNS is accompanied by a positive therapeutic effect: faster recovery of body weight, normalization of motor activity, muscle tone, acceleration of psychomotor and speech development, normalization of the function of internal organs, reduction of the duration of hospital stay. The main thing is to choose the right melodies for treatment, so that they coincide with the internal rhythms and have an impact on the problem areas. And most importantly, music therapy has no limitations or contraindications: music therapy is useful for both children and adults. It turned out that the introduction of music therapy into the complex rehabilitation of children with PPPNS is more effective for combined disorders and its consequences. Any musical rhythm is a kind of irritant (in a good sense of the word) for the body. Accordingly, well-chosen music is able to restore the harmony of both the psychological and physical state of a person (the whole body or individual organs). Moreover, the music should be selected individually, depending on the prevalence of a particular syndrome. It is gratifying that the introduction of lullabies into the generally accepted practice of nursing and raising children undoubtedly contributes to a more harmonious development of the younger generation.

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