EFFECTIVENESS AND MECHANISMS OF ACTION OF MICROCURRENT REFLEXOTHERAPY IN THE COMPREHENSIVE REHABILITATION OF CHILDREN WITH CONGENITAL MICROCEPHALY

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Background. Microcephaly is among the most severe perinatal pathologies, characterized by irreversible structural changes in the brain and persistent impairments of a child's psychoneurological development. In recent years, a steady increase in the detection rate of this condition has been observed, which is associated both with improvements in diagnostic methods and with the impact of adverse environmental factors, infectious morbidity among pregnant women, as well as socio-biological aspects of reproductive health.

Aim of the study. To substantiate the effectiveness and mechanisms of action of microcurrent reflexotherapy as a component of comprehensive rehabilitation in children with congenital microcephaly.

Materials and methods. The study included 260 children with a confirmed diagnosis of congenital microcephaly who were under dispensary follow-up and had pronounced neurological complications requiring comprehensive rehabilitation, including the use of microcurrent reflexotherapy.

Results. A comprehensive assessment of the effectiveness of microcurrent reflexotherapy in the rehabilitation of children with congenital microcephaly was carried out. The study involved young children with varying degrees of microcephaly severity who received a course of microcurrent reflexotherapy as part of comprehensive medical rehabilitation.

Analysis of the dynamics of cognitive, psychomotor, speech, and emotional–personal indicators demonstrated statistically significant improvements in the main group receiving microcurrent therapy compared with the control group ($p < 0.01–0.05$).

The following effects were observed:

- a significant increase in cognitive and psychomotor development levels according to the Bayley III Scale;

- marked improvement in speech development according to the Denver II test;
- reduction in the severity of sleep disturbances (decreased frequency of awakenings and easier sleep onset);
- increased motivation for movement based on a subjective activity assessment scale;
- reduced length of hospital stay in the main group;
- high parental compliance and good tolerability of therapy with minimal side effects.

Conclusions. Comprehensive data analysis showed that microcurrent reflexotherapy effectively stimulates neuroplastic processes, promotes restoration of functional activity of the central nervous system, and improves adaptive capacities in children with microcephaly.

Thus, microcurrent reflexotherapy can be recommended for widespread use in the system of medical rehabilitation of children with congenital microcephaly as a safe, effective, and socially significant method.

References

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