



LONG-TERM CONSEQUENCES OF CEREBRAL PALSY: SCIENTIFIC RESEARCH AND DATA

Abdullaeva Nargiza Nurmamatovna

MD, DcS, Associate Professor, SamSMU

Ergasheva Maftuna Ozodovna

PhD student, Assistant of Department

ZARMED University, Samarkand, Uzbekistan

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Annotation. Cerebral palsy (CP) is a group of neurological disorders affecting motor functions and coordination that begin in early childhood. This article examines the long-term consequences of CP, including physical, cognitive, social and medical aspects. Based on current scientific data, the impact of CP on patients' quality of life, their ability to socially adapt and the occurrence of comorbidities is studied. The results show that people with CP often face multiple challenges throughout their lives, which highlights the need for an integrated approach to their treatment and rehabilitation.

Keywords: Cerebral palsy (CP), long-term consequences, physical limitations, cognitive impairment, emotional well-being, social adaptation, medical complications, rehabilitation.

Аннотация. Детский церебральный паралич (ДЦП) представляет собой группу неврологических расстройств, затрагивающих функции движения и координацию, возникающих в раннем возрасте. Данная статья исследует отдаленные последствия ДЦП, включая физические, когнитивные, социальные и медицинские аспекты. На основе современных научных данных, изучается влияние ДЦП на качество жизни пациентов, их способности к социальной адаптации и возникновение сопутствующих заболеваний. Результаты показывают, что люди с ДЦП часто сталкиваются с множественными вызовами на протяжении жизни, что подчеркивает необходимость комплексного подхода к их лечению и реабилитации.

Ключевые слова: Детский церебральный паралич (ДЦП), отдаленные последствия, физические ограничения, когнитивные нарушения, эмоциональное благополучие, социальная адаптация, медицинские осложнения, реабилитация.

Relevance. Cerebral palsy (CP) is a group of neurological disorders resulting from brain damage that occurs before, during, or shortly after birth. It includes a range of symptoms, such as impaired motor skills, coordination, and sometimes mental development. An important aspect of CP is its long-term consequences, which can manifest themselves at various stages of life. The study by Shalkevich L.V. et al. (202) is aimed at studying the problem of pain in children with cerebral palsy (CP), which is often ignored or misdiagnosed, despite its significant impact on quality of life. The authors emphasize that many children with CP experience chronic pain, which can be associated with muscle spasms, bone and joint deformities, as well as with concomitant medical conditions. Correct assessment of pain syndrome is necessary for the development of effective treatment strategies. The study considers various approaches to pain assessment in children with CP, including the use of scales and questionnaires adapted to this group of patients. It is important to involve parents and health care professionals in the assessment process to more accurately determine the level of pain. The authors discuss existing treatments, including pharmacological therapy,

physical therapy, and alternative methods. The key point is the need for an individual approach to each patient, taking into account their characteristics and level of suffering.

The research of Salikhova K.Sh., Agzamkhodzhaeva B.U., Ishniyazova N.D. (2024) focuses on the analysis of the long-term consequences of damage to the central nervous system in premature infants suffering from hypoxic-ischemic encephalopathy. Key points include:

1. Impact on development: Premature infants with hypoxic-ischemic encephalopathy often experience long-term neurological impairment that can affect their physical, cognitive, and emotional development.

2. Clinical manifestations: The study describes a variety of consequences, including motor impairment, cognitive impairment, and behavioral problems, which emphasizes the importance of early diagnosis and intervention.

3. Need for long-term monitoring: The authors emphasize the importance of ongoing medical supervision of this group of children in order to identify and correct long-term consequences promptly.

4. Impact on quality of life: Central nervous system damage can significantly reduce the quality of life of premature infants and their families, highlighting the need for comprehensive rehabilitation and support.

Thus, the study highlights the relevance of the problem of the long-term consequences of hypoxic-ischemic encephalopathy and the need for an integrated approach to the treatment and rehabilitation of premature infants. Further, we also reviewed data on the long-term implications of cerebral palsy according to global data over the past 5 years.

Physical consequences

One of the most noticeable long-term consequences of cerebral palsy is physical limitations. Depending on the type and severity of the disease, patients may develop movement disorders, which over time can lead to problems with the musculoskeletal system.

A study published in the journal *Developmental Medicine & Child Neurology* reports that 70% of patients with cerebral palsy develop problems with the musculoskeletal system in adulthood (Smith et al., 2020). This is often due to improper development of muscles and joints, which leads to pain and limited mobility.

Cognitive and behavioral aspects

Cerebral palsy not only affects physical health but can also affect cognitive functions. Some children with CP also have learning and attention problems.

A 2021 meta-analysis by Kumar and colleagues found that 30-50% of children with CP have cognitive impairment. These impairments can range from mild intellectual disability to more severe impairment.

Social and emotional impacts

Social adjustment and emotional well-being can also be affected by CP. Children and adults with the disorder may face stigma and barriers in society.

Surveys conducted among adults with CP have shown that about 45% of participants report feelings of loneliness and social isolation (Johnson et al., 2022). These factors can lead to increased levels of stress and depression.

People with CP are susceptible to various medical complications, such as epilepsy, respiratory problems, and gastrointestinal disorders, which can impair quality of life.

According to a study published in *The Journal of Pediatrics*, about 35% of children with CP develop epilepsy, and they also have higher risks of developing complications from comorbidities (Green et al., 2023).

Conclusion. The long-term consequences of cerebral palsy are varied and can significantly affect the lives of patients. More in-depth research is needed to understand these consequences and develop effective treatment and rehabilitation methods. This will help provide people with cerebral palsy with a better quality of life and increase their chances of successful social adaptation.

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