

Shalkevich Y.L., Boldiusova A.A.

CEREBRAL PALSY

Tutor: senior lecturer Menjinskaya-Voitova A.V.

*Department of Foreign Languages
Belarusian State Medical University, Minsk*

Cerebral palsy is a group of permanent movement and posture development disorders caused by damage that occurred in the developing fetal or infant brain, before or during birth. It is characterized by abnormal muscle tone, impaired motor coordination, and activity limitation. The symptoms of cerebral palsy are not usually obvious just after birth and normally become noticeable since early age.

A healthy motor development depends on intact corticospinal pathways; in cerebral palsy, early brain injury disrupts these pathways, leading to spasticity, dyskinesia, or ataxia depending on the location and extent of the lesion. The disease has been known for centuries, and now its understanding is improving due to modern discoveries in neuroimaging and perinatal care.

The classification includes spastic forms (such as diplegia, hemiplegia, quadriplegia), dyskinetic, ataxic, and mixed forms. These motor disorders are often complicated by associated conditions such as epilepsy, which occurs in up to half of patients, cognitive impairment, speech disorders due to oromotor involvement, lack of sight and hearing and secondary orthopedical complications including hip dislocation, scoliosis, and joint contractures.

The treatment includes physical therapy, pharmacological management, and surgical interventions. Physical therapy is aimed at normalizing tone and facilitating motor development. Massage and physiotherapeutic modalities are used to encrease these efforts. Pharmaceutical treatment provides temporary muscle relaxation. Surgical intervention is indicated when conservative measures are insufficient. Orthopedic surgeries correct bony deformities including hip dislocation and scoliosis. Optimal outcomes depend on early diagnosis, consistent rehabilitation, and timely surgical referral.

Cerebral palsy is associated with a number of systemic and functional complications, including nutrition, communication, orthopedic, cognitive impairments, which require additional rehabilitation methods.

Collaboration between different specialists is crucial for comprehensive treatment of cerebral palsy. An integrated approach with multidirectional rehabilitation methods allows significantly improve the quality of life of children with cerebral palsy and reduce the severity of concomitant disorders.