

## RESTORATION OF WALKING SKILLS WITH USE OF KINESITHERAPEUTIC EXERCISES ON LOKOMAT SYSTEM AT CHILDREN WITH A CEREBRAL PALSY

**Alimova M Z and Alimova V S**

Tashkent Pediatric Medical Institute, Tashkent Medical Academy, Uzbekistan

**R**ehabilitation of children with a cerebral palsy (CP) remains a relevant problem because CP results heavy disability. On the basis of the Center of social adaptation of children complex medico-psycho-pedagogical correction at a cerebral palsy is applied. Complex services contain medical examination, determination of rehabilitation potential of children, psychology classes (Montessori therapy, sensotherapy, a fairy tale therapy, music therapy), classes of special teachers (sand art therapy, services of an office of early intervention), a hydrokinetic therapy physiotherapy exercises, massage and classes on the robotic Lokomat system. Lokomat allows preventing progressing of pathology at early stages of rehabilitation. 40 children aged from 4 up to 10 years with the diagnosis of a cerebral palsy, a spastic diplegia were an object of a research. In the 1st group 15 children were practicing on the Lokomat system without preliminary complex medico-psycho-pedagogical correction (GMFCS IV-V). In the 2nd group 25 children before training on the Lokomat system received complex medico-psycho-pedagogical correction, massage and a hydrokinetic therapy and were doing physiotherapy exercises (GMFCS III-IV). Each course of a training consisted of 15–20 classes. The children of 2nd group moderately expressed increase of muscular force, decrease in level of a spasticity of a muscular tone was noted; the volume of free active movements has authentically increased. The best results were noted at the children who have begun training at the earliest age. Especially it should be noted that children of the 2nd group have improved the indicators after several repeated rehabilitation courses (GMFCS II). Results of the conducted research have shown that use of the robotic Lokomat system in early rehabilitation of children with a cerebral palsy after complex medico-psycho-pedagogical correction, allows to accelerate process of restoration or development of skills of standing and walking

### Biography

Madina Alimova is student at Tashkent Pediatric Medical Institute. She was a participant of Student's scientific society in Tashkent Pediatric Medical Institute, held on April 15<sup>th</sup>, 2015. She also has served as volunteer in Republic Centre of Social Adaptation of Children. Her research interest lies in Pediatric Neurology, in particular, perinatal defeats of nervous system, cerebral pain and epilepsy.

alimovavs@mail.ru