Hip displacement in children with cerebral palsy in Latvia

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Introduction Hip displacement is common among children with cerebral palsy. It may trigger the development of contractures, pain or scoliosis and eventually lead to deterioration of the quality of life of the patient. In Latvia research regarding hip displacement in children with cerebral palsy has not been undertaken.

Purpose To get better understanding of the incidence of hip displacement in children with cerebral palsy in Latvia, and its relationship to Gross Motor Function Classification System (GMFCS) level and type of cerebral palsy.

Method The study is based on a retrospective review of 50 medical records of patients with cerebral palsy who had radiologic investigations of the hips between October 2016 and September 2017. The data was statistically analyzed.

Results The median age of subjects was 5 years. GMFCS level I was diagnosed in 8%, level II – 14%, level III – 20%, level IV – 22%, level V – 36% of cases. Tetraplegic cerebral palsy was present in 66%, diplegic – 18%, hemiplegic - 12%, and other types in 4% of patients. Hip displacement was found in 28% of patients, and more often was diagnosed in children with GMFCS level V (44%), tetraplegia (33%) and diplegia (33%).

In most cases, clinical examination did not reveal any deviations in hip range of motion.

Conclusions Hip displacement is an important issue to consider in the treatment of patients with cerebral palsy. It is most common in children with GMFCS level V, tetraplegia and diplegia. Range of motion in hip joints cannot be a reliable indicator of hip displacement in children with cerebral palsy. That is why radiologic hip surveillance is important in this group of patients.

Figure 1. Left hip subluxation.

Figure 2. Hip displacement and GMFCS level

Figure 3. Hip displacement and the type of cerebral palsy