

Long-Term Outcomes of Dysphagia in Children with Severe Cerebral Palsy Using Videofluoroscopic Evaluation

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Abstract : Oropharyngeal dysphagia is prevalent in children with cerebral palsy (CP). There are many studies concerning this problem, however, studies examining long term outcomes of dysphagia using videofluoroscopic study (VFSS) are very rare. The Aim of this study is to investigate long-term outcomes of dysphagia in children with severe CP using initial VFSS. It was a retrospective study and chart review was done from January 2000 to December 2013. Thirty one patients under 18 years who have been diagnosed as CP in outpatient clinic of Rehabilitation Medicine, and who did VFSS were included. Long-term outcomes such as feeding method, height percentile, weight percentile, and body mass index (BMI) were tracked up for at least 3 years by medical records. Significant differences between initial and follow-up datas were investigated. The patients consisted of 18 males and 13 females, and the mean age was 31.0 ± 18.0 months old. 64.5% of patients were doing oral diet, and 25.8% of patients were doing non-oral diet. When comparing VFSS findings among oral feeding patients, oral and non-oral feeding patients, and non-oral feeding patients at initial period, dysphagia severity, supraglottic penetration, and subglottic aspiration showed significant differences. Most of the patients who could feed orally at initial period were found to have the same feeding method at follow-up. But among eight patients who required non-oral feeding initially, three patients became possible to feed orally, and one patient was doing oral and non-oral feeding method together at follow-up. Follow up feeding method showed correlation with dysphagia severity by initial VFSS. Weight percentile was decreased in patients with GMFCS level V at follow up, which may represent poor nutritional status due to severe dysphagia compared to other patients. Initial VFSS severity would play a significant role in making an assumption about future diet in children with severe CP. Patients with GMFCS level V seem to have serious dysphagia at follow up and have nutritional deficiency over time, therefore, more careful nutritional support is needed in children with severe CP are suggested.

Keywords : cerebral palsy, child, dysphagia, videofluoroscopic study

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