

소아재활

게시일시 및 장소 : 10 월 19 일(토) 08:30-12:30 Room G(3F)

질의응답 일시 및 장소 : 10 월 19 일(토) 11:00-11:30 Room G(3F)

## **P 3-5**

### **Influence of Communication Ability on the School Adaptation of Children with Cerebral Palsy**

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#### **Objectives**

Schools play a critical role in child development. Children with cerebral palsy (CP) with speech and language impairments have more difficulties in adaptation to school compared to typically developed children(TD). This study investigated whether School Adjustment Scale (SAS) showed difference between children with CP and TD, and which communication-related factors were correlated with SAS responses.

#### **Subjects and Method**

A total of 23 children with CP (male 10, female 13) participated in this study. Inclusion criteria was the ages between 8 and 12 years who were currently attending the third to sixth grades of elementary school, and Communication Function Classification System (CFCFS) level 1 to 3 who can answer to SAS. Thirty TD (male 15, female 15) who are currently attending the third to sixth grade of elementary school were also recruited. School adaptation assessment using SAS, language test, speech data collection, and Quality of Communication Life Scale (QCL) were evaluated in children with CP. Only case interview and SAS were tested in TD. SAS consisted of four sub-categories (academic attitude/rule observance, relationships with peers, relationships with teachers, and school satisfaction). Each question was measured in four-point scale (1 to 4 points). Language Scale for School-aged Children (LSSC) was evaluated as a language test. In addition, conversation was recorded and told to adults (age, 20 to 36) who had no experience in speech therapy or hearing training to measure the level of speech intelligibility and acceptability. QCL-Korean version is a validated questionnaire to test quality of life in communication aspect. Mann-Whitney U-test was conducted to compare the SAS between CP and TD. Spearman's rank correlation analysis and stepwise logistic regression were conducted to assess the factors influencing the SAS.

#### **Results**

The SAS scores of children with CP were significantly lower than those of TD in all sub-categories except school satisfaction ( $p < .05$ ). Communication-related factors correlated with most of SAS scores, especially QCL scores were more relevant than language and speech abilities. QCL total score was strongly correlated with SAS total scores ( $R^2 = .767$ ,  $p < .01$ ), academic attitude/rule observance ( $R^2 = .700$ ,  $p < .01$ ) and school satisfaction ( $R^2 = .317$ ,  $p < .01$ ). Non-communication QCL items were strongly correlated with peer relationship ( $R^2 = .650$ ,  $p < .01$ ), but communication QCL items were strongly correlated with teacher relationship ( $R^2 = .495$ ,  $p < .01$ ).

### **Conclusion**

The SAS scores of children with CP were significantly lower than those of TD. Although speech and language abilities correlated with most of SAS scores, QCL scores were more correlated and non-communication QCL scores were also correlated with peer relationship of SAS. In the aspect of school adaptation, the functional communication interventions as well as speech and language skills should be considered in speech therapy in children with CP.