소아재활

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

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

### P 3-17

# Medical consultation on special education class for students with severe and multiple disabilities

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## **Objective**

this study is to report on the process and results of the medical consulting program for students who are currently enrolled in special classes in general schools.

## Subjects

twenty-six students with severe and multiple disabilities were enrolled in 8 general schools (3 middle schools, 5 elementary schools) in the western Incheon metropolitan city for last year.

## **Methods**

1) visiting consultation: medical team visited all 26 students (12 female, 14 male; average age,  $15.54 \pm 3.96$  years) who were studying at special classroom in general school. Their general characteristics, medical conditions were assessed. 2) health examination: the health examination was conducted for 10 students who were permitted by the parents. The somatosensory evoked potential study, visual evoked potential study, auditory evoked potential study, gross motor function measure (GMFM), medical research council (MRC) score, modified Bathel index-korean version (K-MBI), basic blood chemistry, spine scannogram, and video-fluoroscopic swallow study (VFSs) were conducted.

#### Results

1) general characteristics: total 26 Subjects consist of Rett syndrome 3 cases, lennox gastaut syndrome 3 cases, genetic disorder 2 cases, cerebral palsy 5 cases, hypoxic brain damage 2 cases, hydrocephalus 2 cases, unknown 9 cases. 2) the results of visiting consultation: all students are unable to ambulate independently and nearly total dependent ADL state. Students' medical complications (Fig. 1) were speech problem 26 cases (100%), major joint contractures 24 cases (92.3%), scoliosis 21 cases (80.7%), dysphagia 21 cases (80.7%), seizure disorder 19 cases (73.0%) constipation 16 cases (61.5%), torticollis 4 cases (15.3%). 3) the results of health examination: 6 students has abnormal blood chemistry, if overlapping is allowed (unknown origin infection 3 cases,

dyslipidemia 2 cases, renal dysfunction 1 case, hypoalbuminemia 1 case, anemia 1 case). The mean GMFM score was 28.7±17.71, the MRC score was 30.33±4.79 out of 60, the mean K-MBI score was 2.40±5.79 out of 100. The somatosensory evoked pathway dysfunction 5 cases, visual evoked pathway dysfunction 2 cases, auditory evoked pathway dysfunction 1 case, if overlapping is allowed. The cobb's angle for scoliosis was 31.55±31.59 degree in whole spine scannogram. The functional dysphagia scale score were 42.71±25.21 out of 100 by VFSs.

#### **Conclusions**

All students had very low functional state and severe, various medical complications. They needed medical and rehabilitative intervention. We suggest that participation by physiatrist is necessary to set the educational goal according to individual functional status, cognitive state and learning ability. Regular medical consultation will be needed for persistent healthcare services, but it is realistically difficult. Telemedicine or videoconference between physiatrist and teacher periodically could be another choice for medical consultation.

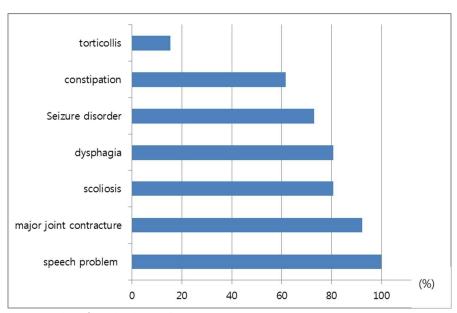


Fig 1. Students' medical complications