PO28-93284
Neuropsychological outcomes of preterm birth in children with no major neurodevelopmental impairments in early life
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Objective: To investigate cognition, social adaptive functioning, behavior, and emotional development in the preschool period, and to determine the effects of the age of onset of walking on those developmental areas, in children born preterm without major neurodevelopmental impairments (NDI) early in life.

Methods: Fifty-eight children born preterm without major neurodevelopmental impairments were recruited. The Korean versions of the Wechsler Preschool and Primary Scale of Intelligence or the Bayley Scales of Infant Development, the Social Maturity Scale, the Child Behavior Checklist (CBCL), Conners’ abbreviated Parent Rating Scale, the Childhood Autism Rating Scale and a speech developmental test were done. The participants were divided into two groups: early walkers (group A) and late walkers (group B).

Results: The full-scale intelligence quotient (IQ) and performance IQ were significantly lower in group B than in group A, while the verbal IQ did not differ significantly between the groups. Children of group B had greater risks of cognitive deficits than children in group A, especially in performance skills. The social quotient (SQ) was significantly lower in group B than in group A (p<0.05). The rates of mild or significant deficits based on SQ and CBCL did not differ significantly between the groups. Four children of group A and one child of group B had attention/hyperactivity problems.

Conclusions: Problems in cognition, social adaptive functioning, emotional and behavioral development can occur in children without major NDI early in life. Late walkers had significantly lower scores in cognition and social adaptive functioning than early walkers.

PO29-93684
Neuropsychologic profiles of children born preterm with periventricular leukomalacia
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Objective: To investigate the neurodevelopmental outcome and neuropsychologic profiles of children with periventricular leukomalacia (PVL).

Participants and Method: One hundred children born preterm with PVL on brain MRI who had done neuropsychologic evaluation were recruited. The severity of PVL was graded; mild, moderate and severe. Wechsler Preschool and Primary Scale of Intelligence or Wechsler Intelligence Scale for children or the Bayley Scales of Infant Development, the Social Maturity Scale, the Child Behavior Checklist, Conners’ abbreviated Parent Rating Scale and the Childhood Autism Rating Scale were tested.

Results: Seventy-six children had cerebral palsy (CP) with or without intellectual disability (ID), and 10 children had ID and 14 children had normal psychomotor development. Forty one children had epilepsy and 3 children had severe visual impairment. Twenty children had behavioral problems and the most common abnormal behavior was attention and hyperactivity problems. The severity of PVL was significantly related with major neurodevelopmental impairment (NDI) such as CP, ID and epilepsy and also the GMFCS level and the cognitive impairments and also social adaptive functioning but not the behavioral problems. The performance skills were significantly lower than verbal skills in these children.

Conclusions: The major long term sequelae of PVL were CP and ID. The severity of PVL was significantly related with GMFCS level, cognitive and social adaptive functioning but not behavioral problems. Attention and hyperactivity problems were most common behavioral problems.

PO30-98645
Adaptation and evaluation of the Nordic Orofacial Test-Screening (NOT-S) in Latvian
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Background: It is necessary to introduce Latvian health care specialists with internationally recognized instrument for the assessment of orofacial function to improve the communication among them.

Aim of study: To adapt the NOT-S into Latvian and to evaluate its validity and reliability.

Methods: First, the translation of NOT-S was prepared taking into account the requirements of the test developers. In total, 64 children and adolescents between the ages of 4 and 19 years participated in the study: 31 of them with CP in the study group and 33 of them practically healthy in the control group. The participants were examined by the researcher and five invited speech therapists. The study group was assessed twice while the control group only once. Ethical approval was given by the Ethical Committee of Riga Stradins University.

Results and Conclusions: The results showed high internal reliability (α=0.8) and almost good kappa values in inter-rater agreement – 0.44 –0.54 and in test-retest agreement – 0.74. Discriminant validity showed that there exists statistically significant difference between the study group and the control group, the study group’s participants with low level of functioning and participants with high level of functioning. The mean NOT-S test scores for the control group where 0.94 ± 0.93 (amplitude 0–3) and for the study group where 4.32 ± 2.63 (amplitude 0–10). Examining NOT-S in Latvian high validity and reliability of the test were acquired.