referral policies in case of breech position during pregnancy.

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Early motor development and intelligence at school age in moderately-late preterm children

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Background: Better understanding of the relation between early motor development and later cognition in moderately-late preterm children may help pediatric professionals to identify first signs of cognitive deficits in this vulnerable group of children.
Objective: To determine the association of early motor development (i.e. between birth and 5 years of age) with cognition at early school age (i.e. intelligence quotient [IQ] at age 7) among moderately-late preterm children.
Methods: We included a sample of moderately-late preterm children who participated in the Longitudinal Preterm Outcome Project, that were tested at age 7 (N=248). We measured verbal, performance and total IQ using the Wechsler Intelligent Scale for Children, 3rd edition. From birth until 4 years of age, Well-Child-Care professionals assessed developmental milestones in both the fine and gross motor domains. We calculated age-scores, based on these milestones: a child was awarded a fail if at least one milestone at a specific time-point was not attained. At ages 4 and 5 years parents completed the Ages and Stages Questionnaire (ASQ), from which we used the continuous fine and gross motor domain scores.
Results: Our sample included 137 males (55.2%) and mean gestational age was 33.9 weeks. After adjustment for gestational age, sex and socio-economic status, we found failing in the gross motor domain at 2, 4 and 5 years to be associated with verbal, performance and total IQ at age 7. In the fine motor domain, we found failing at 4 and 5 years to be associated with verbal, performance and total IQ, also after adjustment for our covariates. Inclusion of these assessments for both domains and our covariates into a single model showed only fine motor development at ages 4 and 5 to be associated with IQ.
Conclusion: Early motor development is associated with IQ at age 7. In early life, pediatric professionals could use milestones to identify children at increased risk that might benefit from early interventions. Our study warrants further research into the relationship of early motor development with other domains of cognitive function.

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Children with specific language impairment are more likely to reach motor milestones late

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Background and aims
Delayed language development without an obvious cause is considered an isolated developmental disorder and is called specific language impairment (SLI). SLI is probably the most prevalent developmental disorder in childhood with a generally cited prevalence of 7 %. This study aimed to investigate whether SLI is always an isolated disorder or if children with SLI also have delayed motor development.
Methods
We used data of an earlier study with a prospective nested case-control design in which developmental data were collected from child healthcare files. Cases were children (4-11 years) with diagnosed SLI. They were matched by sex and date of birth with control children attending mainstream education. Data of both groups on seven gross and six fine motor milestones which had been registered in the Dutch Developmental Instrument between the ages of 15- 36 months were retrieved from child healthcare files.
McNemar tests were performed to test for differences in reaching motor milestones at the age norm between the case and control group.
Results
Data from 253 children in each group were available. A significant difference was found between both groups in the proportion failing to reach three of the seven investigated gross motor milestones at the age norm ($p < 0.05$). The proportion of children not reaching the motor milestone at the age norm was significantly higher for four of the six fine motor milestones in children with SLI compared with control children ($p < 0.05$).
Conclusion(s) with key message
More children with SLI are late in reaching motor milestones than children without SLI. This means that it is debatable whether SLI can be regarded as a “specific” impairment which is not associated with other developmental problems.
Statement or main question
When a child is suspected of having SLI the diagnostic process should not be limited to the language abilities of the child, but a broader assessment is needed.

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