

( $p=0.03$ ) but not on Form Constancy ( $p=0.17$ ). Compared to VLBW children without any oculomotor or visual sensory deficit, VLBW children with one or more of these deficits performed worse only one visual perceptual measure (Figure-Ground perception;  $p=.01$ ).

**Discussion** We found reduced functioning in VLBW children for binocularity, perceptual grouping, visual-spatial judgment and figure-ground segmentation. Except for figure-ground segmentation, these visual perceptual deficits remain present in the absence of oculomotor and sensory deficits.

### 327 ANTENATAL FACTORS ASSOCIATED WITH DEVELOPMENTAL DELAY IN MODERATELY PRETERM-BORN CHILDREN, RESULTS OF A COHORT STUDY

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**Background** Worldwide 6–9% of all children are born moderately preterm (32<sup>nd</sup>–35<sup>th</sup> weeks' gestation). They are at risk for developmental delay in early childhood. Knowledge on the influence of antenatal maternal, fetal, and delivery-related factors on the development of moderately preterm-born children is limited.

**Objective** To determine the association between developmental delay in early childhood and antenatal factors in moderately preterm-born children.

**Design/methods** We measured development with the Ages and Stages Questionnaire (ASQ) at age 43–49 months in 834 moderate preterms born in 2002–2003, in a community-based cohort study.

A total ASQ score > 2SD below the Dutch mean reference was considered to indicate developmental delay. Data on maternal, fetal, and delivery-related factors were obtained from medical records. We used logistic regression to estimate odds ratios (ORs) for developmental delay, adjusted for socio-demographic variables.

**Results** In univariate analyses, several fetal and maternal factors were associated with risk of developmental delay. In multivariate analyses, only pre-existent obesity (odds ratio (OR) 3.0, 95% confidence interval (CI): 1.5–5.8), multiparity (OR:2.8, CI: 1.6–4.9), Small-for-gestational-age (SGA) (OR:2.9, CI: 1.4–6.1), multiple pregnancy (OR:1.8, CI: 1.0–3.3), and male gender (OR:4.1, CI: 2.2–8.6) increased risk of developmental delay.

**Conclusions** Of all antenatal factors studied, no modifiable factors were associated with developmental delay except for SGA. Enhanced prevention of intra-uterine growth restriction, interventions aiming at reducing pre-pregnancy weight in fertile women, and reducing number of transferred embryos in assisted reproduction might offer routes to improve developmental outcomes in children eventually born moderately preterm.

### 328 VALIDATION OF ERIC - A NEW PARENTAL REPORT INSTRUMENT FOR DETECTION OF COGNITIVE DELAY IN AT-RISK INFANTS

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**Background and Aims** At 2 years, cognitive delay is the most common form of developmental disability in the preterm population (Marlow, 2004). We have established the diagnostic properties of a new cognitive developmental screen (Early Report by Infant Caregivers, ERIC), between 10–24 months.

**Methods** Participants. 362 infants aged 10–24 months, with at least one of: weight < 1500g, < 34 completed weeks gestational age, 5-min Apgar < 7, HIE. Children with impairments preventing fair assessment by ERIC were excluded. Parents/caregivers completed ERIC at home before administration of the Cognitive Scale of the Bayley Scales of Infant Development III. Delay was defined as a prematurity-corrected Bayley score < 80 (Moore et al, 2011).

**Results** Nineteen infants were delayed, with age-corrected ERIC scores lower than those without delay ( $p<0.001$ ). On ROC analysis, Area Under the Curve was 0.86, with 83% sensitivity (95% CI 66–99.9%), 79% specificity (75–83%), 19% Positive Predictive Value (PPV) (2–36%), and 98% Negative Predictive Value (NPV) (96–99.6%). The low PPV reflects low prevalence of delay (5.2%) in this sample.

**Conclusions** ERIC provides a useful diagnostic screening tool, able to rule out developmental delay in this population (NPV = 98%).

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### 329 SEVERE RETINOPATHY OF PREMATURITY (ROP) REMAINS A MARKER OF CHILDHOOD DISABILITIES: RESULTS FROM THE CAFFEINE FOR APNEA OF PREMATURITY TRIAL

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**Background** The Cryotherapy for Retinopathy of Prematurity Cooperative Group showed that the severity of ROP was a marker for functional disability at 5.5 years in infants ≤1250 g BW who were born in the late 1980s.

**Objective** To determine whether severe ROP remains a strong predictor of visual and non-visual disabilities at age 5 years in infants ≤1250 g BW who were enrolled in the CAP trial between 1999 and 2004.

**Methods** 5-year follow up of 1580 surviving CAP children with known ROP status. Severe ROP was defined as stage 4 or 5 disease or receipt of retinal therapy in at least one eye. Outcomes were disabilities in 6 domains, and including cognitive impairment (Full Scale IQ < 70), motor impairment (GMFCS level 2–5), deafness and blindness. Odds ratios were adjusted for antenatal steroids, gestational age, sex, multiple birth, and mother's education.

**Results** There were 94 survivors with and 1486 without severe ROP. Rates of visual and non-visual disabilities were significantly higher in children with severe ROP (Table 1).

Abstract 329 Table 1

Outcome	Severe ROP	No Severe ROP	Adjusted OR	95% CI
IQ < 70	15%	4.5%	4.0	1.9 to 8.4
Motor impairment	13%	2.4%	4.0	1.9 to 8.6
Deafness	13%	2.4%	4.0	1.9 to 8.6
Blindness	14%	0.1%	129	21 to 786
Any disability	45%	16%	3.5	2.2 to 5.6