

Abstract

Adult functional outcome of those born small for gestational age. Twenty-six-year follow-up of the 1970 British Birth Cohort

RICHARD STRAUSS

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Studies have documented cognitive impairment in children who were born small for gestational age (SGA), but they have not demonstrated differences in IQ or other cognitive scores. Long-term studies of such children are needed to assess functional outcomes not measurable with standardised testing. The objective of this study was to determine the long-term functional outcome of infants born SGA in a prospective cohort study.

A total of 14 189 term infants born in the United Kingdom on 5th to 11th April 1970 was studied as part of the 1970 British Birth Cohort; 1064 infants were SGA (birthweight less than the 5th centile for age at term). Follow-up at 5, 10, 16, and 26 years was achieved in 93%, 80%, 72%, and 53% of the 1064 infants, respectively. Main outcome measures included school performance and achievement, which were assessed at 5, 10, and 16 years of age. At age 5 years, standardised testing included the Copy Design Test, the English Picture Vocabulary Test, the Human Figure Drawing Test, and the Profile Test. Reading, spelling, and vocabulary tests were administered at 10 years of age. Vocabulary and spelling tests, and questionnaires about social and emotional attitudes were administered at 16 years of age. Questionnaires were mailed to all cohort members for whom an address was available at the 26-year follow-up. Years of education, occupation, income, marital status, level of disability, satisfaction with life, and self-reported height were assessed by the 26-year questionnaire.

At 5, 10, and 16 years of age those born SGA demonstrated small but significant differences in academic achievement. In addition, teachers were less likely to rate those born SGA in the top 15th centile of the class at 16 years of age (13% versus 20%; $p < 0.01$) and more likely to recommend special education (4.9% versus 2.3%; $p < 0.01$) compared with those born at normal birthweight (NBW). After adjusting for confounders, at age 26 years, adults who were SGA did not demonstrate any differences in years of education, employment, hours of work per week, marital status, or satisfaction with life. However, adults who were born SGA were less likely to have professional or managerial jobs (8.7% versus 16.4%; $p < 0.01$) and reported significantly lower levels of weekly income (mean [SD], 185 [91] versus 206 [102] £; $p < 0.01$) than adults who were born at NBW. The interaction between parental social class and SGA on long-term outcome was also assessed. Being born SGA remained a significant predictor of long-term professional and economic attainment independent of social class. Even in families with at least one professional parent, those who were born SGA were less than 50% as likely to become professionals or managers compared with those who were born at NBW (OR 0.41; 95% CI 0.17 to 0.98; $p < 0.05$). Nevertheless, overall the deficits in professional economic attainment due to being born SGA were relatively small compared with the impact of parental social class. In addition, social class was associated with long-term differences in satis-

faction with life, while SGA was not. Adults who were born SGA also reported significant height deficits compared with those who were born at NBW (mean [SD] z score, -5.5 [0.98] versus 0.08 [1.02]; $p < 0.001$). Similar results were also obtained after adjusting for social class, sex, region of birth, and the presence of fetal or neonatal distress.

In this cohort, adults who were born SGA had significant differences in academic achievement and professional attainment compared with adults who were born at NBW. However, there were no long-term social or emotional consequences of being SGA; these adults were as likely to be employed, married, and satisfied with life.

Hilary Hart

Notices

Prechtl's Method of Qualitative Assessment of General Movements

Magdeline College, Cambridge, UK. July 18–21, 2000

Professor Heinz Prechtl is the lead tutor of this course on Prechtl's method of functional assessment of the young nervous system. This course is designed for Neonatologists, Paediatricians, Paediatric Neurologists, Therapists, and other professionals working in the field of Infant Neurology. The course fee is £550, which includes all lectures and full-board accommodation. For an application form and further details, please contact: Marilyn Dowdye, Department of Child Health, Lower Ground Floor, Royal Free Hospital, Pond Street, London NW3 2QG. Tel: 020 7830 2440, fax: 020 7830 2003.

Developmental Neurology Course

Royal Free Hospital and Bobath Centre, London, UK. July 28–29, 2000

The tutors of this course are Professor Heinz Prechtl and Professor Christa Einspieler. This course is specifically designed for Paediatric Physiotherapists, Occupational Therapists, and other professionals interested in developmental neurology. The course content includes: ontogenic adaptation, development of posture and tonus, transformation of the nervous system at 3 months, behavioural states and their development, the principles of neurological assessment. The course fee is £150. An application form and further details can be obtained from Caroline Carey, Occupational Therapy Department, Lower Ground Floor, Royal Free Hospital, Pond Street, London NW3 2QG. Tel: 020 7830 2632, fax: 020 7830 2160.