

preventive strategies should be initiated to curb this rising prevalence of allergies.

#### 450 WHAT DO CHILDREN WITH CONGENITAL HEART DISEASES DO WHEN THEY GROW UP

doi:10.1136/archdischild-2012-302724.0450

SC Antoniadis, A Antoniadou, O Panagiotopoulos, E Milopetri, P Kleanthous, E Dionyssopoulou. *Diagnostic Center for Pediatric Cardiology, Athina, Greece*

**Background** Advances in the diagnosis and interventional-surgical management of congenital heart diseases had as a result a considerable number of patients reaching the adolescent and young adult life.

**Aims** The aim of this study was to investigate the influence of the heart problem on the psychosocial-sexual and family life, careers and employment rate of patients with congenital heart disease.

**Methods** We studied according to a protocol with a closed questionnaire as well as the medical files of 441 children with congenital heart diseases.

**Results** From the 158 male patients aged 15–35 years, 98(62%) had simple heart lesions, 21(13.3%) combinations of simple heart lesions and 39(24.7%) complex heart problems, 93(59%) had surgical-interventional management. Between them 130(82.2%) had no psychosocial-sexual problems related with age, whereas 13(8.3%) with complex heart lesions had not normal social and sexual life. From the 146 female patients aged 14–32 years, 93(63.7%) had simple lesions, 25(17.12%) combinations of simple heart lesions, and 28(19.17%) complex heart problems, 56(38.3%) had surgical-interventional management. From them 136(93.15%) had no problems related with age whereas 10(6.85%) had, from the 23 pregnancies, 10(43.5%) operated mothers, 21(91.3%) babies born without problems. From the 114 patients studied for their careers and employment rate, 59(59.8%) were high school graduates, 43(37.7%) university graduates, 9(7.9%) technical school graduates, 103(90.4%) were employed, 11(9.6%) couldn't work because of the heart problem.

**Conclusions** Simple heart lesions and their combinations doesn't cause specific problems whereas complex heart diseases, especially if the result of the operation is not the expected one, cause.

#### 451 THE EFFECT OF PRETERM BIRTH ON ATTENTIONAL NETWORKS IN ADULTS

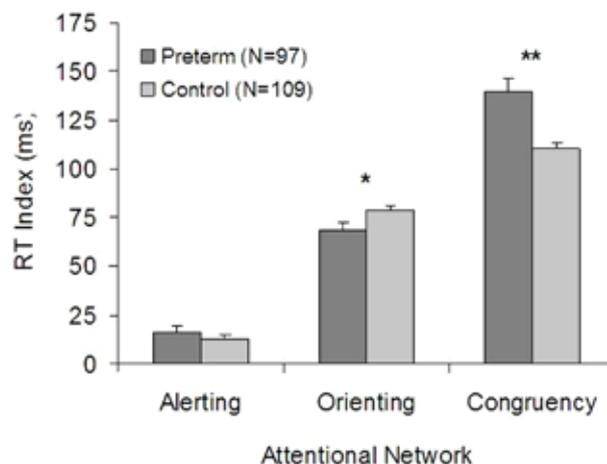
doi:10.1136/archdischild-2012-302724.0451

A von Muhlenen, N Baumann, D Wolke. *University of Warwick, Coventry, UK*

**Background** Preterm birth has been associated with an increased risk of cognitive, behavioral and psychiatric problems. In this study we examine how these problems are linked to specific attentional networks.

**Methods** Based on a sample from the Bavarian Longitudinal Study we compared a cohort of 97 survivors born very preterm (< 32 weeks gestational age, GA) or very-low-birth-weight (VLBW < 1500g) in 1985/86 (mean birth weight, 1318g; mean GA at birth, 30.2 weeks; 52% male) with 109 controls from the same population in Bavaria (mean birth weight, 3414g; mean GA at birth, 39.7 weeks; 48% male). We looked at performance in the attention network test, developed by Fan et al. (2002, *Journal of Cognitive Neuroscience*), in three anatomically defined attentional networks: alerting, orienting and executive control.

**Results** The figure shows the RT index, representing efficiency for each attentional network. The VLBW group showed a large and highly significant deficit in the executive network and a smaller but significant deficit in the orienting network, but no deficit in the alerting network. Although RTs were generally longer for VLBW, the RT index result did not change when using RT ratio scores.



Abstract 451 Figure 1 RT Index

**Conclusions** The results show that VLBW is linked to specific attentional deficiencies, especially those involving executive control. These results are discussed in the light of the literature on VLBW and attention.

#### 452 ASSOCIATIONS BETWEEN BEHAVIORAL AND SLEEPING DISORDERS IN PRETERM CHILDREN TO CATCH UP IN HEIGHT AND WEIGHT

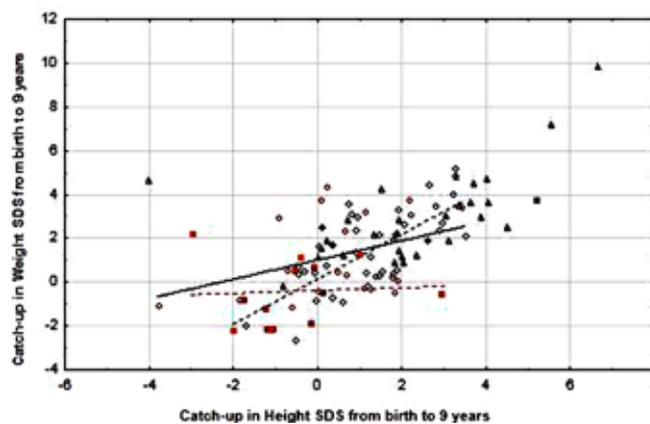
doi:10.1136/archdischild-2012-302724.0452

<sup>1</sup>E Deschman, <sup>1</sup>M Vanpee, <sup>1</sup>L Legnevall, <sup>2</sup>A Kistner. <sup>1</sup>*Inst of Women and Child Health;* <sup>2</sup>*Inst of Molecular Medicine and Surgery, Stockholm, Sweden*

**Aim** To study an association between sleeping (SP) and behavioural disorders (BP) in preterm children to catch-up growth and weight.

**Design and Methods** 105 children (8.5–10 years): 39 born preterm (< 32 weeks), at term 30 born SGA and 36 born AGA (Controls) were studied. Eight Preterms were born SGA and 31 were born AGA. BP was defined as hyperactivity and concentration problems, SP as hard to fall asleep and wakening during night. Pearson Chi-Square or Student t-test were used.

**Results** The Preterm group displayed a higher incidence of SP (23% vs 10% and 3% p=0.026) and BP (38% vs 10% and 8%, p=0.001).



Abstract 452 Figure 1 BP in relation to catch up growth

○ Preterm AGA no BP ● Preterm AGA with BP ◇ Control no BP