There were no significant differences in the mortality risk scores PRISM, PIM y PELOD. Mortality of patients with CRRT after cardiac surgery was higher 43% than the mortality of the rest of patients 29% ($p=0,051$). Factors associated with mortality were age less than 12 months, weight less than 10 kg, hypotension, high PRISM score and low creatinine and urea at the beginning of the CRRT, and hemofiltration (without dialysis). In the multivariate study the only factor associated with mortality was the hypotension at the beginning of CRRT (Hazard Ratio: 4.01; CI 95%:1.2-13.4; $p=0.024$).

Conclusions: A 5 % of children after cardiac surgery require CRRT. Mortality of these patients is higher than other critically ill children who require CRRT. Hypotension at the beginning of the CRRT is the most important factor related to mortality.

158

RENAL FUNCTION AND SIZE AT THE AGE OF 7 YEARS OF EXTREMELY LOW BIRTH WEIGHT INFANTS

P. Kwinta¹, M. Klimek¹, A. Grudzień¹, M. Jagła¹, D. Drożdż², J.J. Pietrzyk¹

¹Department of Pediatrics, ²Department of Nephrology, Jagiellonian University Medical College, Cracow, Poland

Background: Prematurity is considered to be an important risk factor of renal disorders in adulthood. However, there is little reliable evidence about the correlation between ELBW and the development of renal complications at school age.

Aim. Assessment of renal function, renal size and the risk of hypertension at the age of 7 years of the regional cohort of ELBW children born in 2002.

Material and methods: 40 children born as ELBW infants with mean birthweight 869g (SD:121) and mean gestational age 27.6 weeks (SD: 1.9) were evaluated at the age 6.7 years (range 6.3-7.4 years). Serum Cystatin C, microalbuminuria, renal ultrasound and 24-hour ambulatory blood pressure measurements were performed.

Results: Mean serum Cystatin C level was 0.63 mg/l (range: 0.45-0.78 mg/l) and mean estimated GFR was 124 ml/min/1.73m² (range: 98-176). Renal problems were found in 9/40 (22.5%) children including: mild hypertension ($n=5$), microalbuminuria ($>20\text{mg/g}$ of creatinine) ($n=3$) and low renal volume on ultrasound ($n=5$).

Conclusions: The prevalence of renal problems in 7 year old children born as ELBW infants is considerable, although Cystatin C levels in all assessed children were within normal range. Obtained eGFR values may suggest compensatory hyperfiltration of kidneys, which might result in increased frequency of renal complications at later age. So, it is important to include systematic renal evaluation in the follow-up programs of ELBW infants.

Project supported by Polish Ministry of Science (NN407170734)

159

HEALTH AND SCHOOL PERFORMANCE: LONGITUDINAL FINDINGS FROM PROJECT HEALTHY PATHWAYS

C.B. Forrest¹, K. Bevans¹, A.W. Riley²

¹Pediatrics, Children's Hospital of Philadelphia, Philadelphia, PA, ²Population and Family Health Sciences, Johns Hopkins University, Baltimore, MD, USA

Background/aim: Although the connections between health and school performance are well accepted, data on the specific mechanisms that account for this relationship is remarkably scant. The aim of this study was to characterize the longitudinal associations between child health and academic achievement among 4th-8th graders followed for 3 years in 3 school districts in the USA.

Design/Methods: Project Healthy Pathways, an NIH-funded study, enrolled 2,091 4th-6th grade students (90% with complete data) and used a cohort sequential design to monitor changes over 3 years in their health, as reported by children (ACASI) and parents (mailed questionnaires), and their performance on standardized achievement tests and annual grade point averages.

Results: Both the quantity and pattern of children's health significantly predicted achievement test scores and grade point average. Although health declined for many children during entry into adolescence, about 20% experienced large decrements in health. These children were more likely girls, had low self worth, and experienced early puberty. Significant positive predictors of school performance were good nutrition habits, good coping, adequate levels of sleep, and feeling connected with adults, and negative predictors included feelings of stress,