any grade intraventricular hemorrhage, and being small for GA (< 10th percentile) .

Results: 324 neonates and 293 mothers were included. Mean birth weight was 1128 240 grams, and mean gestational age 29.7 1.9 weeks. 103 (29.9%) achieved any stage ROP, and 24 (7.4%) severe ROP. After adjustments by logistic regression, BW (OR 0.997; 95%CI: 0.996-0.998; $p < 0.001$), occurrence of preeclampsia (OR 0.263; 95%CI: 0.133-0.519; $p < 0.001$) and use of antenatal steroids (OR 0.573; 95%CI: 0.332-0.991; $p = 0.046$) were independently risk factors for any stage ROP. Only maternal preeclampsia (OR 0.182; 95%CI: 0.040-0.882; $p = 0.027$) and BW (OR 0.997; 95%CI: 0.995-0.999; $p = 0.001$) showed significance for severe ROP.

Conclusions: We suggest that maternal preeclampsia is a protector factor for ROP.

1222

ASSESSMENT OF THE CONTRIBUTION OF CYTOKINE PLASMATIC LEVELS TO DETECT RETINOPATHY OF PREMATURITY

R.C. Silveira, J.B. Fortes Filho, R.S. Procianoy

*Universidade Federal do Rio Grande do Sul/
Hospital de Clinicas de Porto Alegre,
Porto Alegre, Brazil*

Objective: To evaluate the association of plasmatic levels of IL-6, IL-8, IL-10, IL-1 β , and TNF- α with the presence of any stage of ROP or with ROP stages 3 or more in very low birth weight preterm infants with clinical early-onset sepsis.

Design/methods: From July 2005 to October 2007, inborn preterm infants with birth weight ≤ 1500 grams and gestational age ≤ 32 weeks with clinical early-onset sepsis were included in a prospective cohort study. We excluded patients that died before 6 weeks of life, had major malformations or congenital infections. Plasma was assayed for IL-6, IL-8, IL-10, IL-1 β , and TNF- α in the same sample collected for sepsis work up. ROP was diagnosed in screening assessments in NICU. The highest stage of ROP was considered.

Results: We enrolled 74 patients (mean gestational age: 29.5 ± 0.2 weeks; mean birth weight: 1110 ± 230 grams) that were followed from birth to hospital discharge; 49 (66.2%) had no ROP and 25 (33.8%) had any stage ROP (17 had stages 1 or 2, and 8 had stage 3 or more). All median cytokine plasmatic

	Perinatal Mortality %	Survival %		
		501-1500 grams	500-1000 grams	1001-1500 grams
2007	4,53	90,63	75	95,9
2008	3,39	88,60	77	95,5
2009	4,43	88,00	73	93,4

Table 1, Perinatal mortality (%) and neonatal survival (%) with BW ≤ 1500 grams.

[Table 1]

Conclusions: The survival of VLBW neonates is considered to be equal to other European Union countries.

1221

PREECLAMPSIA PROTECTS VERY LOW BIRTH WEIGHT INFANTS FROM RETINOPATHY OF PREMATURITY

R.S. Procianoy, J.B. Fortes Filho, R.C. Silveira

*Universidade Federal do Rio Grande do Sul/
Hospital de Clinicas de Porto Alegre, Porto Alegre,
Brazil*

Objective: To study the influence of maternal preeclampsia on the occurrence of ROP.

Design/methods: A prospective cohort study was conducted from 2002 to 2009 including all preterm neonates with birth weight (BW) $\leq 1,500$ g and gestational age (GA) ≤ 32 weeks. Main outcomes were the occurrences of any stage and severe ROP. Maternal variables were: age, number of prenatal attendances, hours of membrane rupture, use of antenatal steroids, occurrence of preeclampsia and essential hypertension, mode of delivery and prior preterm birth. Postnatal variables were: BW, GA, gender, multiple gestation, 5 minute Apgar score, use of oxygen by nasal CPAP or mechanical ventilation, use of erythropoietin, indomethacin and surfactant, need of blood transfusions, occurrence of sepsis, meningitis, persistent ductus arteriosus,

levels were similar between no ROP and ROP patients. Only low birth weight and low gestational age were significantly associated with any stage and severe ROP.

Conclusions: There was no association between altered plasmatic levels of cytokines with any stage of ROP or with ROP stages 3 or more in very low birth weight infants with early-onset sepsis. Low birth weight and gestational age were important factors for ROP occurrence.

1223

EVALUATION OF ANTIPHOSPHOLIPID ANTIBODIES AND ACTIVATED PARTIAL THROMBOPLASTIN TIME IN WOMEN WITH ADVERSE OUTCOME OF PREGNANCY

N. Pashapour¹, S. Golmohammadlou², M. Khalili³

¹Pediatric, Urmia Medical Science University, Urmia, ²Gynecology, Urmia Medical Science University, Urmia, ³Immunology, Medical University Urmia, Urmia, Iran

Background: Adverse outcome of pregnancy is potentially dangerous complication of conception that affects 15-20% of pregnancies. The aim of the present study was to compare the maternal serum levels of anticardiolipin, antiphosphatidyl serine, and partial thromboplastin time between patients with adverse outcome of pregnancy and matched control subjects.

Methods: Serum anticardiolipin, antiphosphatidyl serine and activated partial thromboplastin time levels were measured in 150 women with adverse pregnancy outcome after ten weeks gestational age, and in 150 matched healthy pregnant women as control group. Data on maternal age, age of pregnancy, serum levels of anticardiolipin, antiphosphatidyl serine and activated partial thromboplastin time were collected and compared by Student's t test and χ^2 between the two groups.

Results: The total number of the study population was 300, that is, 150 cases in each group. The age of mothers were 25.86 ± 5.90 and 27.09 ± 5.63 years ($p=0.67$), and the age of pregnancies were 29.34 ± 5.12 and 28.17 ± 7.03 ($p=0.1$) weeks in the control and the patient group respectively. Serum positive levels of anticardiolipin, antiphosphatidyl serine and activated partial thromboplastin time antibodies were 14.3% versus 85.7% ($P=0.002$), 15.2% versus 84.8% ($P=0.003$), and 23.1% versus 76.9% ($P=0.001$) for the control and the patient group respectively.

Conclusion: The mean serum levels of anticardiolipin, antiphosphatidyl serine and activated partial thromboplastin time between the two groups were significantly different. According to the findings of our study, it seems that antiphospholipids are associated with adverse outcome of pregnancy in the study population.

Keywords: Antiphospholipids, , Pregnancy,

1224

EXPOSURE TO PESTICIDES AND NEUROBEHAVIORAL DEVELOPMENT IN CHILDREN- REVIEW OF EPIDEMIOLOGICAL STUDIES

J. Jurewicz

Environmental Epidemiology, Nofer Institute of Occupational Medicine, Lodz, Poland

Background: Conventional pesticides comprise a diverse group of substances intended to destroy, repel or control organisms identified as pests. Compared to studies of lead, mercury and PCBs few epidemiological studies have assessed the developmental neurotoxicity of pesticides.

Methods: Epidemiological studies focused on the neurobehavioural development of children exposed to pesticides were identified by a search of the PUBMED, MEDLINE, EBSCO, AGRICOLA and TOXNET literature bases.

Results: The results from the presented studies suggest that children exposure to pesticides may impaired development. Exposure to organophosphorus pesticides (OP) in children can caused difficulties with tasks involving short-term memory, increased reaction time, mental development and pervasive development problems. In neonates increased number of abnormal reflexes and mental and emotional symptoms in adolescents. The results of the studies investigated the association between exposure to organochlorine pesticides and neurodevelopmental problems display inconsistent results. Whereas some studies found reduction in mental and psychomotor function the other studies did not confirmed that.

Conclusions: Information derived from epidemiological studies so far indicate the need to increase awareness among people and children exposed to pesticides about the association between use of pesticides and neurodevelopmental impairment. We should simply apply the principle of prudence, just in case.