
THE CLINICAL EARLY OUTCOMES OF TREATMENT OF PREMATURE BABIES

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The development of technology to care of very low birth-weight infants is the cause of survival of these patients. In intensive care the mortality of premature infants unit with birth weight <1000 was decreased from 64% to 40% and with birth weight 1001-1500 g was decreased from 40% to 27%. But it is known, that decrease of mortality in some group of this patients creates other serious problem - the quality of future life. The purpose of this study was to determine how low grade of prematurity would influence on rate intraventricular haemorrhage (IVH), retinopathy of premature (ROP) and bronchopulmonary dysplasia (BPD). In this study were including 120 survival patients of intensive care unit with birth weights <1500 g, who were treated in 1998 year. The most serious clinical problems were ICG, BPD and ROP. Diagnosis of ICG was based on the dates of head ultrasound scan. Findings described according to Papile's grading criteria. Diagnosis of BPD was performed according with criteria described by Northway. Diagnosis of ROP was based on dates of indirect ophthalmoscopy examination. Grades of ROP were defined according to international classification. The patients were allocated in two groups: group A (n=32) with birth weight <1000 g (mean 867 g; range 620-1000), gestation age <28 weeks (mean 25,4; range 22-28) and group B (n=88) with birth weight 1001-1500 g (mean 1229; range 1030-1500), gestation age 29-32 weeks (mean 29; range 28-32). Hypotheses of difference for nominal data were tested with the χ^2 test. There were statistically significant between patients of group A and B in the incidence of BPD, severe ICG and ROP. In group A 8 patients (25%) had ICG 3-4 grades and 4 patients (4%) of group B had ICG 3-4 grade ($p < 0,05$). ICG 2 grade had 3 patients (9%) and 10 patients (11%) in groups A and B respectively. Group A contain of: 8 patients (25%) with ICG 1 grades and group B - 26 patients (29%). In group A 7 babies (21%) suffered from BPD 2-3 and nobody in group B. There were 7 cases (21%) of the severe ROP (3-4 grade) in group A only. These results suggest that a low gestational age associated with high incidence of severe perinatal injure central neuroses and respiratory systems. Further development technology of care of premature newborn babies should reduce the incidence of cerebral and lung lesions and thus guarantee a better quality of survival.

CARDIOINTERVALOGRAM IN HEALTHY FULL-TERM NEWBORN BABIES AT THE FIRST 24 HOURS OF LIFE

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Objective. *To reveal a specialties of cardiointervalogram (CIG) in healthy full-term newborn babies at the first 24 hours of life.*

Methods. *31 healthy full-term newborn babies were studied (mean birth weight $3,558 \pm 420,6$ gr, mean body height $50,5 \pm 1,7$ cm). Within the first 24 hours of life a continuous recording of cardiointervalogram was being carried out. On processing the readings 3 types of CIG were determined (Types I, II, III). They were different not only visually but could also be differentiated according to 3 main indices: variation range (DX), amplitude of mode (Amo) and coefficient of monotony (Cf.mon).*

Results. *It has been established that all three types of CIG are recorded in healthy full-term newborn babies within the first 24 hours of life. There are no quality differences in the characteristics of the types of CIG depending on the time passed from the moment of birth to the beginning of the recording. However within the first two hours of life the presentation of 3 types of CIG is markedly changing: by the end of the second hour of life Type III of CIG is dominating, its duration increasing from 5,2 % to 65,0 % ($p < 0,01$). In the following 6 - 24 hours of life the proportions achieved by the end of the second hour remain unchanged.*

Conclusions. *The data obtained could be used as the criteria of the normality in assessing the severity of cardiovascular and central nervous system defects in the newborn babies with perinatal pathology.*