

## EARLY NEONATAL OUTCOME AFTER DELIVERY IN PRE-ECLAMPTIC PREGNANCIES: TWO YEAR RETROSPECTIVE STUDY

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**Aim.** To retrospectively analyze early neonatal outcome and the results of hearing screening by otoacoustic emission after delivery in pre-eclamptic pregnancies during two years in tertiary perinatal setting.

**Methods.** The data were derived from medical records. Numerical variables were analyzed by Student t-test or Wilcoxon rank-sum test when appropriate, while  $\chi^2$  test was used for frequencies.

**Results.** There were 5405 liveborns in the years 2003 and 2004 in our institution, 261 (4,8%) of whom were born after pre-eclamptic pregnancies. The outcome of newborns was not dependent on the severity of pre-eclampsia. The control group consists of 4840 term and 305 (5,9%) preterm newborns, while the investigated group consist of 224 term and 37 (14,2%) preterm newborns ( $\chi^2=24,55$ ;  $P=0,00001$ ). Pregnancies were more often terminated by Cesarean section in the investigated group for term (86/224 vs. 906/4840;  $\chi^2=52,6$ ;  $P=0,00001$ ) as well as for preterm newborns (24/37 vs. 144/305;  $\chi^2=17,83$ ;  $P=0,00001$ ). Birth weights, birth lengths, gestational ages, 1 and 5 minute Apgar scores, early neonatal mortality rate, incidence of hypotrophic and hypertrophic newborns, incidence of low Apgar scores, perinatal infections, birth trauma, and congenital malformations was not different in term and in preterm newborns of both groups. Twins were more often born in the group of term infants of the investigated group ( $\chi^2=18,25$ ;  $P=0,00001$ ). Hyperbilirubinemia was more frequent in term newborns of the control than of the investigated group ( $\chi^2=11,19$ ;  $P=0,0008$ ). More term newborns after pre-eclamptic pregnancies were unresponsive during the first hearing screening examination (45/224 vs. 734/4840;  $\chi^2=3,99$ ;  $P=0,046$ ).

**Conclusions.** Prematurity rate was increased after pre-eclamptic pregnancies regardless of the severity of pre-eclampsia. Pre-elamptic pregnancies were more often terminated by Cesarean section in term and in preterm deliveries. Term twins were more often born in the pre-eclamptic group. The incidence of hyperbilirubinaemia was lower in the pre-eclamptic group of term infants. Unresponsiveness during first examination of otoacoustic hearing screening was found more frequently in the pre-eclamptic group.