Maternal risk factors associated with retinopathy of prematurity among patients in East Avenue Medical Center from 2010 to 2015

Ida Fidelis Denosta and Carina Cruz-Quimbo
East Avenue Medical Center, Quezon City, Philippines

Objectives: This study aims to determine the maternal risk factors associated with the development of retinopathy of prematurity (ROP).

Design & Setting: A retrospective cohort study was designed and was done in a tertiary government hospital.

Patients: This study included admitted premature neonates in neonatal intensive care unit (NICU) who underwent ROP screening. All patients with congenital abnormality of the eyes were excluded in the study.

Methodology: List of admitted premature patients who underwent ROP screening was collected within the study period. Demographic data was collected from the patient's medical records.

Statistical Analysis: Descriptive statistics were presented for categorical outcome measures. Wilcoxon rank sum test was used to compare two averages. Chi-square test, Yates’ chi-square test and Fisher’s exact test were used to compare proportions. Univariate and multivariate regression analyses were used to estimate crude and adjusted odds-ratios, corresponding 95% CI and based on p-value≤0.05 showing statistical significance.

Result: This study showed 57% cases of ROP, majority with stage 1 (66%), mostly female infants (53.4%; p<0.001), mildly asphyxiated (51.2%, p=0.290; 77.2%, p=0.117) and were small for gestational age (57.3%; p<0.001). On the average, these infants underwent one day of either invasive or non-invasive mechanical ventilation, two days with FiO2 of >0.5 litres per minute, had two blood transfusions, and with shorter hospital stay (17 vs. 26 days; p<0.001). The average age of mothers who delivered infants with ROP was 26 years old, multipara (59.2%), and underwent normal spontaneous delivery (67%). About half reported adequate prenatal check-ups (53.8%), and diagnosed with urinary tract infection (40.1%).

Conclusion: Data showed that mothers with urinary tract infection and preeclampsia are more likely to deliver infants with retinopathy of prematurity thus significant maternal risk factors of ROP.

Biography
Ida Fidelis Denosta has completed her degree (Bachelor of Science) Major in Psychology from the Far Eastern University. She commenced schooling at the Lady of Fatima University-College of Medicine in 2006 where she graduated as Doctor of Medicine and did her Post-Graduate Internship at Fatima University Medical Centre. She just completed her residency training in Pediatrics at East Avenue Medical Center last December 2016 as an Assistant Chief Resident. She is a Member of the Philippine Medical Association, Manila Medical Society and currently affiliated with ACE-QC Medical Centre and Caloocan City North Medical Center as a Junior Consultant in the Department of Pediatrics.

idadenosta@yahoo.com.ph

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