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

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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 done in a tertiary government hospital. 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-values<0.05 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 1 day of either invasive or non-invasive mechanical ventilation, 2 days with FiO2 of > 0.5 liters 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 of Bachelor of Science Major in Psychology in Far Eastern University. She commenced schooling at Our Lady of Fatima University-College of Medicine where she graduated as Doctor of Medicine. She completed her residency training in Pediatrics at East Avenue Medical Center in last December 2016 as an Assistant Chief Resident. She is a member of the Philippine Medical Association, Manila Medical Society and currently affiliated with Caloocan City North Medical Center as a Junior Consultant in the Department of Pediatrics.

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