ABSTRACT

RISK FACTORS ASSOCIATED WITH RETINOPATHY OF PREMATURITY IN THE NEONATAL INTENSIVE CARE UNIT (NICU) IN A TERTIARY HOSPITAL IN DAVAO CITY: A RETROSPECTIVE STUDY

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Objective: To determine the risk factors associated with retinopathy of prematurity among preterm infants 24-36 weeks by Ballard Score in a private tertiary hospital.

Design: Retrospective

Setting. Tertiary Hospital in Davao City

Participants: A total of 114 cases who met the inclusion criteria were included in the study.

Main Outcome: Patients with Retinopathy of Prematurity or with Immature Retina

Results: There were 114 cases with 67 (58.77%) diagnosed immature retina and 47 (41.23%) with Retinopathy of Prematurity. Inferential analysis showed that gestational age, birthweight and Apgar scores both for 1 and after 5 minutes were seen to be significantly related to ROP outcome (λ^2=22.456; p=.000; (λ^2=24.329; p=.000; t=-2.675; p=.018; t=-2.490; p=.046). Higher percentage of infants have developed ROP for those with 24-26 and 27-29 gestational age at birth and those with birthweight less than. Infants with diagnosed ROP have lower average of Apgar scores obtained both for 1 and 5 minutes respectively. Sepsis diagnosed through blood culture, Cardiac disease, pulmonary disease and neonatal jaundice were found to be significantly and positively associated to ROP screening test result (λ^2=5.090; p=.024; λ^2=20.041; p=.000; λ^2=25.568; p=.000; λ^2=26.631; p=.000). Moreover, higher percentage of the Infants with blood transfusion, surfactant use, mechanical ventilation and oxygen supplement have positive ROP screening test result significantly (λ^2=38.751; p=.000; λ^2=5.387; p=.032; λ^2=33.493; p=.000; λ^2=21.223; p=.000) with longer days of oxygen supplement developed more likely ROP. Oxygen supplementation of all of the infants with comorbidities were not seen to be associated with ROP outcome.

Conclusion: Gestational age, birthweight, and Apgar scores, comorbidities including sepsis diagnosed through blood culture, cardiac disease, pulmonary disease and neonatal jaundice, infants with blood transfusion, surfactant use, mechanical ventilation and oxygen supplement and with those longer days of oxygen supplementation developed more likely ROP.

Keywords: *Retinopathy of Prematurity, Birthweight, Comorbidities*