

Prevalence of Retinopathy of Prematurity and Its Associated Risk Factors in Pre-Term Neonates - A Cross-Sectional Study Conducted in a Tertiary Care Hospital, Ahmedabad

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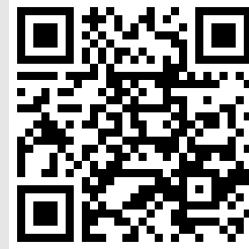
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Abstract

Background: In this study, we wanted to estimate the prevalence of ROP in preterm neonates, to evaluate risk factors associated with the development of ROP in preterm neonates and to determine the treatment outcome of ROP in neonates. **Material & Methods:** This cross-sectional study was conducted for two years in the neonatal intensive care unit of a tertiary care centre. All data were collected in pre-structured and predesigned proforma, and prior informed consent was taken. To analyse the qualitative data, Fisher exact test or chi-square test was used as the test of significance. A P-value of < 0.05 was considered statistically significant with a confidence interval of 95 %. **Results:** Proportions of ROP increased significantly with an increase in gestational age. Oxygen therapy correlated significantly with the development of ROP. Hyperbilirubinemia requiring phototherapy (80 %), sepsis (73 %), NEC (Necrotizing Enterocolitis) (35 %), HMD (Hyaline Membrane Disease) (41 %), PDA (Patent Ductus Arteriosus) (25 %) and IVH (Intraventricular Hemorrhage) (3.5 %) were found to be statistically significant for ROP development. Laser treatment was found to be very effective in regression of ROP. **Conclusions:** By preventing prematurity, controlling, or minimizing risk factors and meticulous ophthalmic screening of at-risk preterms, it may be possible to reduce the incidence of ROP. Since ROP is essentially asymptomatic in the early stages, carefully timed retinal examination, and treatment of at-risk infants for ROP by an ophthalmologist are necessary.

Key words: Retinopathy of prematurity, Risk factors, Incidence, Stages, Birth weight, Gestational age