Increasing trend of retinopathy of prematurity- An understated consequence of improved premature survival including late preterms

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Introduction: Retinopathy of prematurity (ROP) is a vasoproliferative retinal disorder affecting preterm infants. It is one of the preventive causes of childhood blindness. ROP afflicts over 3,00,000 infants worldwide. Incidence of ROP has been reported to be 24-47%.

Objectives: The Primary objective is to study the incidence and outcome of ROP in early and high risk late preterm and Secondary objective is to study associated risk factors contributing to development of ROP.

Methods: The Inclusion criteria is all babies born <34 weeks of gestation and/or <15000 grams. Babies >34weeks to 36+6 weeks and/or weighing 1500-2000 grams with risk of developing ROP. Screening done by indirect ophthalmoscopy at CGA 4 weeks or 31weeks whichever is later.

Results: 358 patients enrolled. 125 babies diagnosed with ROP. Incidence of ROP was 34.9%. 62 had stage I ROP(49.6%). 44 had stage II(35.2%). 14 had stage III(11.2%). 5 babies had APROP(4%).Birth weight and ROP had a positive significant correlation (p=0.016). Lower gestational age had higher incidence and more severe ROP(p=0.0001). Oxygen administration, RDS, invasive ventilation had definite correlation with ROP p=0.0398, p=0.05 and p=0.0013 respectively. Apnea, anaemia and hyperbilirubinemia association not significant.14 babies required laser treatment. These babies were followed up and screened for regression.

Discussion: The incidence of ROP in India and worldwide was comparable to our study. 61 babies weighing above 1500 grams were diagnosed with ROP. According to AAP screening guidelines, we would have missed the babies who weighed more than 1500 grams with stormy neonatal course. Safe level of oxygen usage has not been defined. Assisted ventilation and RDS were independent risk factors which was comparable to other studies.

Conclusions: Incidence of ROP is on the rise because of increased survival of ELBW and VLBW. Lower the gestational age and birth weight higher is the incidence of ROP and more severe disease.

Biography

Laxmi S Hadalagi, after completing MBBS in the year 2002 at my hometown, she perceived paediatrics as she was very much interested in this field and completed my postgraduation in reputed medical college of Karnataka i.e Bapuji and Chigati Government Hospital, Davangere, Karnataka. Seeing many neonates suffering from birth asphyxia, she always questioned herself, Is there no treatment available to prevent damage of these growing brains???This zeal took her towards doing Fellowship in Neonatal and Perinatal Medicine and started working at a Tertiary Care Unit catering to peripheries, started Therapeutic Hypothermia with Cerebral Function Monitoring and Erythropoietin to reduce neuronal damage. This has given them satisfactory results internms of mortality and neurodevelopmental outcome. She had been to Georgetown University Hospital, Washington DC, 2015, as GIANI Scholar Awardee(By AAP and NNF), appreciating her research work and community level works. She is now working as Unit Incharge, examiner for Fellowship exam for Doctors and Nurses in Neonatology, also Board of Advisor for Public-Private Partnership(VIJINAP 2016) to upgrade our government hospitals to meeting health demands of our society. Conduct regular workshops/CME for doctors and nurses to keep them updated.

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