

ABSTRACT

Background: Retinopathy of prematurity (ROP) is a common blinding disease in children in the developed world despite current treatment, and is becoming increasingly prevalent in the developing world. Improved survival of preterm neonates has increased the incidence of retinopathy of prematurity (ROP) in India.

Objective: To know the incidence of ROP in preterm infants with birth weight \leq 1500 grams to 2000gms with risk factor and/or gestational age \leq 32 to 35 weeks with risk factors and to correlate between development of ROP and the risk factors.

Methods: A longitudinal study of 100 infants weighing \leq 1,500 grams to 2000grams and/or GA \leq 32 to 35 weeks at birth was conducted. The main clinical outcomes were the incidence of any stage of ROP and severe ROP. The variables considered for the study were: birth weight, gestational age, oxygen, occurrence of sepsis, transfusion, apnoea,.

Results: The incidence of ROP in this study was found to be 27%. 22.22% babies were in stage 1, 59.26% were in stage 2 and 3.70% was in stage3 ROP, and 14.82% developed APROP.

The mean birth weight of the ROP babies was 1280gm, Lower birth weight was significantly associated with increased incidence with

<1500gms (p = <0.001) of ROP. The incidence of ROP was 48.15% in babies weighing \leq 1500gm at birth.

The mean gestational age of the ROP babies was 32 weeks, The incidence of ROP was 36.36% in babies born \leq 32 weeks of gestational age. Gestational age was found to be a significant risk factor for the development of ROP (p=0.011).

CONCLUSION:

The present study reflects the problem of ROP in a tertiary care centre. Early examination was significantly associated with chances of early detection of ROP and hence all babies should have their first screening within the first four weeks after birth. In our opinion, the effective management of ROP requires a team effort of the neonatologist, ophthalmologist and the NICU staff. Regular screening programme with a criteria of birth weight <1500 gms and gestational age <32 weeks or both and babies more than 1500 gms and >32 weeks with other risk factors should be screened at the discretion of the neonatologist and ophthalmologist. Along with regular screening, an effective control of oxygen delivery, reduction of apneic spells and their early recognition and effective management.

Key Words: Retinopathy of prematurity, Birth weight, Gestational age, Risk factors.