Keywords: Intraocular pressure, Preterm, African Babies, Rebound tonometer

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High incidence of retinopathy of prematurity blindness among babies born at private hospitals in Nigeria capital city- A growing concern

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Background: There are about 2,500 preterm admissions annually in Abuja, many of them in private hospitals and requiring screening for retinopathy of Prematurity (ROP). However, very few institutions provide ROP screening and treatment services and the risk of blindness from ROP is, therefore, likely to be high as a result of grossly inadequate ROP services. We report 5 cases of ROP blindness in the Federal Capital Territory (FCT), Abuja

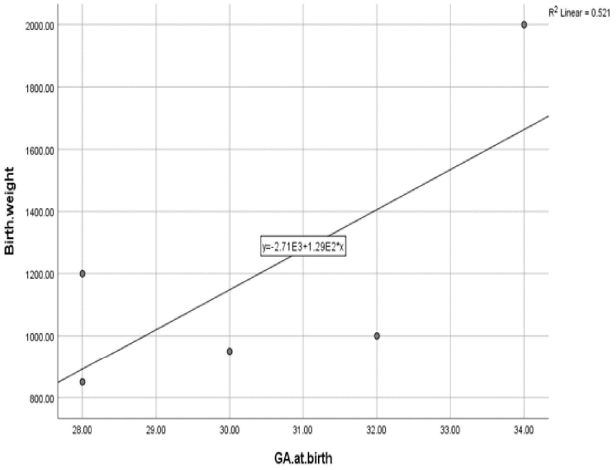

Figure 1: Pearson's correlation between Birth weight and gestational age Correlation coefficient: 0.722 (strong positive correlation) P-Value 0.169

Methods: Records of all preterm babieswho became blind from ROP and were referred to our facility between 2020 and 2023 were extracted, information obtained included age at presentation, birth weight, gestational age and whether ROP screening was done.Data was analyzed using SPSS version 26 (IBM SPSS Statistics for Windows, Version 26.0. Armonk, NY: IBM Corp)

Results: Five (5) children were seen.Three of them were males.The meangestational age was 30.4±2.6 weeks (range 28 – 34 weeks). Mean birth weight was 1,200 ± 465g(range 850 – 2000g). Mean age at presentation was 11.4 ± 7.4 months. All 5 children received neonatal care at private hospitals (Table 1). Positive correlation exists between the birth weight and gestational age (Figure 1)

Discussion: Africa has been called the new frontier of ROP blindness,[1] with an average of 2,500 preterm admissions annually in the FCT, rapidly expanding neonatal care and the grossly inadequate ROP screening services, Abuja will likely become the new frontier of ROP blindness in Nigeria.
As survival improves due to better neonatal care, the number of babies blind from ROP is likely to increase except ROP screening and treatment services also expand.
All the 5 blind children in our series received neonatal care in private hospitals and had no ROP screening. Ademola-Popoola *et al*[2] also found in

Table 1: Summary of children blind from ROP

Sex	Birth weight (grams)	Gestational Age (weeks)	ROP screening	Stage of ROP	Days on oxygen
M	2000	34	No	5	30
F	950	30	No	Right-4b; Left-5	14
M	1200	28	No	5	14
F	850	28	No	5	10
M	1000	32	No	5	Not know

their study that 33.3% of the children received neonatal care in private hospitals and nearly all of them were not screened for ROP.[2] Their study reported reported 18 cases of ROP related blindness in Nigeria over a 5 year period.[2]

This is worrisome considering the large number of private hospitals within the FCT providing neonatal care. There is an urgent need to increase awareness and establish comprehensive ROP services for the FCT with special focus on neonatologists especially in private hospitals to help drive ROP services in the FCT.

A study by Herrod *et al*[3] reported that ROP was estimated to be the cause of blindness for 10% of all blind children examined by ROP-involved pediatric ophthalmologists and retinal surgeons during 2019 across Africa. ≤

Jacoby *et al*[4] in South Africa reported that 7 out of 238 babies with ROP were blind while Melesse[5]in Ethiopia reported that in the 66 infants reviewed, 10 (15.2%)were blind from ROP.

Two of the blind children were advised to go for ROP screening but did not have screening done highlighting the need for proper counselling of care givers on ROP screening services.

Since ROP requiring treatment does not typically develop before 3rd week of life, this window provides a good opportunity for babies at risk to be transferred to centres providing ROP services. Better still, is to establish an easy to manage "roving" ROP screening program involving all hospitals providing neonatal services for children born 35 weeks or with birth weight 1500g. Any such planned ROP intervention in the FCT must involve the numerous private hospitals providing intensive neonatal care. Stakeholders must continue to create awareness and participate in the formulation of a policy to prevent, detect and treat ROP in a timely manner.

Conclusion: ROP, though a preventable cause of blindness remains a leading cause of blindness in children especially in the Federal Capital Territory of Nigeria. ROP services in the FCT must expand to include all private hospitals providing neonatal services in an efficient, effective and well-coordinated manner in order to prevent blindness from ROP.

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