



Prematurity in Infant of HIV-Positive Mother

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PURPOSE
 This case focuses on the importance of early treatment of a high-risk ROP infant, who was born from HIV-positive mother, to reduce the possibility of childhood blindness.

CASE ILLUSTRATION
 We present a case of premature male infant who was born at 29 weeks' gestation with a birth weight of 1,100 g from a HIV-positive mother. He was diagnosed with respiratory distress syndrome and received continuous positive airway pressure treatment for 21 days. At 31 weeks of gestation age (GA), a comprehensive eye examination revealed tortuosity and dilatation of posterior pole vessels. It was apparent on examination that both eyes exhibited stage 3 ROP in zone 1 with plus disease. He received intravitreal Bevacizumab injection therapy at 34 weeks of GA. Follow up after 4 weeks showed a regression on both eyes. Fortunately, the result showed the baby was HIV-negative.

DISCUSSION
 Mothers with HIV infection are more likely to deliver premature infant thus significant maternal risk factors of prematurity.¹ Our case showed premature delivery from HIV-positive mother. It has been known for decades that treatment with high oxygen saturation level in the first few weeks of preterm infants may cause ROP.² In our case, CPAP treatment was given for 21 days and we suspect that ROP might be caused by improper oxygen therapy. The literature suggests that intravitreal bevacizumab (IVB) monotherapy is uniformly successful for stage 3+ ROP.^{3,4} This case showed regression of ROP after IVB as monotherapy.

Figure 1. Before the intravitreal injection of Bevacizumab. Tortuosity (black arrow) and dilatation (white arrow) of posterior pole vessels.

Figure 2. 4 weeks after the intravitreal injection of Bevacizumab. This picture shows the regression of ROP.

CONCLUSION
 ROP needs recognition, understanding and awareness among multidisciplinary, such as ophthalmologists, pediatricians, neonatologists, and gynecologists. Childhood blindness due to ROP could be prevented by an early retinal examinations and treatment. Intravitreal anti-VEGF injection is an effective choice for the treatment of ROP.

KEYWORDS Retinopathy of prematurity, HIV-positive mother, anti-VEGF injection, retinal regression

REFERENCES

- Denosta, I.F., Quimbo, C.C. 2017. Maternal risk factors associated with retinopathy of prematurity among patients in East Avenue Medical Center from 2010 to 2015. *Pediatr Ther.* 7:2(Suppl)
- Shahidullah, M., Dey, A.C., Ahmed, F. et al. 2017. Retinopathy of prematurity and its association with neonatal factors. *Bangabandhu Sheikh Mujib Medical University Journal.* 10(1)
- Beharry, K.D., Valencia, G.B., Lazzaro, D.R. et al. 2016. Pharmacologic Interventions for the Prevention and

