Issues Regarding the Accepted Screening Guidelines for Retinopathy of Prematurity

The article by Azad et al. in this issue raises some important global issues regarding the accepted “American screening guidelines” for retinopathy of prematurity (ROP). It is well established that in many developing countries vision-threatening ROP occurs in infants born after 32 weeks’ gestational age and with birth weights greater than 1,500 g.¹ This may be attributed to differences in oxygen delivery and monitoring, a greater prevalence of known risk factors, or other currently undetermined risk factors. The authors conclude that a reliance on the “third criterion” (ie, neonatologist referral of sick infants who were believed to be at high risk for ROP) will usually identify these at-risk infants. The problem is that many developing countries have manpower and equipment shortages and are already overstressed in their ability to screen infants using the standard birth weight and gestational age guidelines.

In my experience, it is extremely unusual for an infant outside of these criteria to develop ROP requiring treatment. Therefore, the “third criterion” does not play a critical role in identifying infants at high risk for developing ROP in the United States. In contrast, Azad et al. report infants with birth weights in the range of 2 to 3 kg and gestational ages greater than 34 weeks who developed ROP resulting in severely reduced vision or blindness. These findings are more typical of the infants in Terry’s original description of this disease, once called retrolental fibroplasia because of its devastating end stage.²

The consequences of globalization on healthcare delivery need to be studied and conclusions reached regarding the usefulness of currently accepted diagnostic and screening criteria. ROP serves as an example of a well-studied disease whose pathogenesis is influenced by difficult to control external factors that must be considered before establishing universal screening criteria.

REFERENCES


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