Experts contradict established classification

Michael J. Shapiro^{1,2} · Michael P. Blair^{1,3} · Jose M. Garcia-Gonzalez^{1,4}

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Dear Editor,

We thank the authors for the rigorous methods used to evaluate the photographic diagnosis of aggressive posterior retinopathy of prematurity (APROP) [1]. We found the results important and notable. In the attempt to quantify inter-expert agreement of APROP, the authors found that there was poor agreement and most interestingly some cases were concurrently diagnosed as APROP:present and plus disease:absent. Formally, this contradicts the revisited International Classification of Retinopathy of Prematurity (R-ICROP) [2]. R-ICROP defined APROP: “the characteristic features of this type of ROP are its posterior location, prominence of plus disease, and the ill-defined nature of the retinopathy.” Plus disease was a required feature for the diagnosis of APROP. Although the authors provide some explanations, I found the first two incompletely developed and difficult to understand. It is plain that the experts participating in this study deviated from R-ICROP, and it is may be helpful to consider this event.

Historically, R-ICROP was a consensus statement from a committee of experts. The term APROP was coined and presented as a special form of ROP as part of the R-ICROP; it was a response to unclassifiable ROP that often resulted with

blindness. Before R-ICROP, the lack of classic stages in cases of APROP caused confusion and frequently delayed diagnosis and treatment, allowing retinal detachment. R-ICROP included some photographic examples, a loose description, and allowed treatment of the confusing cases that had plus disease. This was a safe modification since plus disease in ROP is the strongest indicator for treatment. This R-ICROP definition was a success and blindness from APROP was reduced.

We suggest that this deviation of experts from the definition of APROP a decade after publication of R-ICROP is a sign of progress. After a decade of experience we see that R-ICROP missed the early phase of APROP (or pre-APROP) that occurs prior to the development of plus disease. This phase is different from the later phase; for example, the early phase may not be reliably determined at a single visit and may not always require immediate treatment. Nonetheless the early phase of APROP is critical to identify and manage in order to better prevent blindness. Aside from missing early (or pre-) APROP, R-ICROP generally lacked clear criteria for APROP. For example, the retinopathy is described as “ill-defined”. If APROP is to be useful for clinical trials or telemedicine it may be helped by clearer criteria. Now would be a great time for that effort.

✉ Michael J. Shapiro
Michaelj.shapiro@gmail.com

Conflict of interest The authors declare that they have no conflicts of interests.

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- ¹ Retina Consultants, Ltd, 2454 E. Dempster St., Suite 400, Des Plaines, Illinois 60016, USA
 - ² Department of Ophthalmology and Visual Science, University of Illinois at Chicago, Chicago, IL, USA
 - ³ Department of Ophthalmology and Visual Science, University of Chicago Medicine, Chicago, IL, USA
 - ⁴ Department of Ophthalmology Cook County Hospital, Chicago, IL, USA
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