

Retinal arteriolar macroaneurysm associated with congenital retinal macro vessel

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To the Editor,

We read with interest the article “Intravitreal Bevacizumab and feeder vessel laser treatment for a posteriorly located retinal capillary hemangioma” by Agarwal et al. [1]. While the case is very interesting, we would like to highlight few points.

The diagnosis of retinal capillary hemangioma (RCH) in this case is debatable. The points against this diagnosis include intraretinal hemorrhages surrounding the lesion, posterior location of the lesion near macula, the absence of leakage on fluorescein angiography, and subretinal bleed after laser photocoagulation. It is very rare for RCH to develop intraretinal hemorrhages, as is their occurrence in the macular region [2]. We postulate that the lesion is in fact a retinal artery macroaneurysm (RAM). The presence of “multi-level” hemorrhages, surrounding exudation, and location of the lesion near the macula support the diagnosis of RAM. The sequence of events following laser treatment is also in accordance to that seen in

RAM. The possibility of capillary retinal hemangioma, however, cannot be ruled out as there are supplying retinal arteries and draining vessels connected to that lesion. But the dark red color (in contrast to bright orange color of hemangioma) and the absence of large bright red dilated and tortuous vessels connected to the lesion point in favor of RAM. While the commonest age of presentation of RCH is 3rd–4th decade [2], RAMs are typically seen in elderly hypertensive patients. The age of the patient in this report again tilts the diagnosis in favor of RAM. Whether the patient was hypertensive has not been mentioned. Presence of arteriovenous crossing changes seen in the inferotemporal retinal vein may indicate pathology related to systemic hypertension. It may be interesting to see if hypertensive changes were seen in the other eye also.

The authors have mentioned the abnormal vasculature emanating from the inferotemporal arcade and crossing the foveal avascular zone in the case report, which is also visible in Fig. 1 (in the case report). This is typical of congenital retinal macrovessel (CRM). CRM is an aberrant branch of a retinal vessel crossing the macula and horizontal raphe [3]. Commonly CRM is a vein, but it may arise from an artery as well and is usually asymptomatic [3]. Visual loss in patients with CRM has been attributed to various associations like serous detachment [4], mere presence of blood vessel [3], or a small distorted foveal avascular zone [5].

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RAMs have been described in the presence of CRMs [6–8]. Due to hyper-dynamic retinal circulation and the absence of autonomic control in CRM, these patients may be predisposed to develop RAM at a relatively younger age. Laser and/or intravitreal anti-vascular endothelial growth factor therapy works well in patients with RAM as was seen in this patient.

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