

A rare case of ruptured optic disc retinal arterial macroaneurysm and its successful management with intravitreal ranibizumab

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Key words: Fundus fluorescein angiography, indocyanine green angiography, optic disc macroaneurysm, ruptured optic disc RAM

Macroaneurysms at the optic disc is sparsely reported in literature.^[1-4] We herein report a rare case of a ruptured

optic disc macroaneurysm and its successful management with intravitreal ranibizumab. A 76-year-old hypertensive female presented with sudden diminution of vision in right eye. The best corrected visual acuity (BCVA) was counting fingers in right eye and 20/30 in left eye. Right eye showed preretinal hemorrhage obscuring the view of macula and the disc superiorly [Fig. 1a]. Left eye was normal. Fluorescein angiography of right eye revealed hyperfluorescence near superior margin of optic disc in early phase [Fig. 1b] which increased in intensity during the late phase with blocked fluorescence over the macula. [Fig. 1c] Indocyanine green angiography (ICGA) showed well defined area of hypercyanescence over the optic disc. [Fig. 1d] Left eye had features suggestive of old vascular occlusion with a dry macula. A diagnosis of optic disc retinal artery macroaneurysm (RAM) was made. A strict control of systemic hypertension was advised and anticipating spontaneous clearance of hemorrhage she was asked to review after one month. However, there was no clearance of preretinal hemorrhage at one month and vision maintained at counting finger. Thus, she underwent intravitreal injection ranibizumab (0.05 ml) in right eye. One month later, BCVA in improved to 20/200. Right eye showed involuted RAM over the optic disc with a streak of preretinal hemorrhage superior to the disc [Fig. 2a]. Multicolor image

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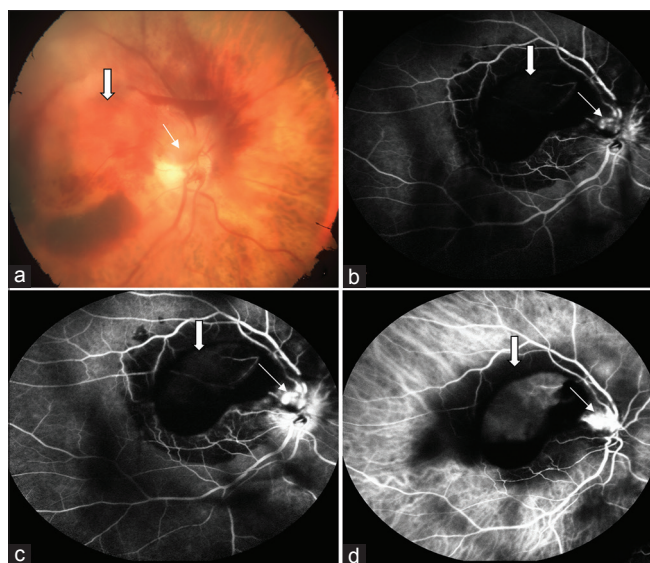


Figure 1: Colour fundus photograph (a) of right eye showing preretinal hemorrhage over the macula (block arrow) and the superior part of optic disc (line arrow). Fundus fluorescein angiography in early venous phase (b) and in late venous phase (c) showing blocked fluorescence over the macula (block arrow) with a small area of hyperfluorescence on the supero-temporal part of disc (line arrow) which increased in intensity over time. Indocyanine green angiography (d) showing blocked fluorescence over the macula (block arrow) and a well-defined area of hypercyanescence over the superior part of disc (line arrow)

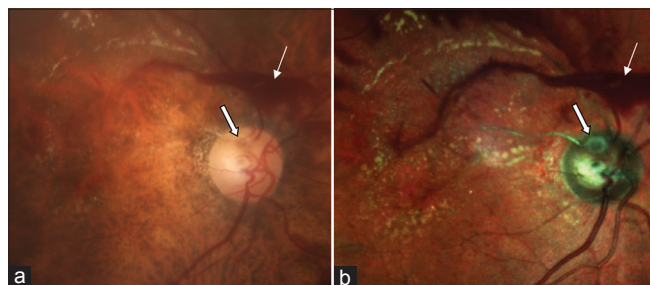


Figure 2: CFP (a) of right eye showing involuted retinal arterial macroaneurysm of the disc (block arrow) and pre-retinal hemorrhage superior to the optic disc (line arrow). Multicolor image (b) highlighting involuted retinal arterial macroaneurysm of the disc (block arrow) and pre-retinal hemorrhage superior to the optic disc (line arrow)

highlighted the involuted RAM and resolving preretinal hemorrhage clearly [Fig. 2b].

Discussion

Cho *et al.* have hypothesized that anti-VEGF in RAM reduces vascular permeability and activates coagulation cascades leading to involution.^[5] However, there is no report of its use in optic disc RAM in published literature. Our case suggests that Anti-VEGF can have a role in management of optic disc RAM which is non-resolving.

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Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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