Complete foveal sparing in massive premacular subhyaloid hemorrhage: Clinical insight into staged posterior vitreous detachment

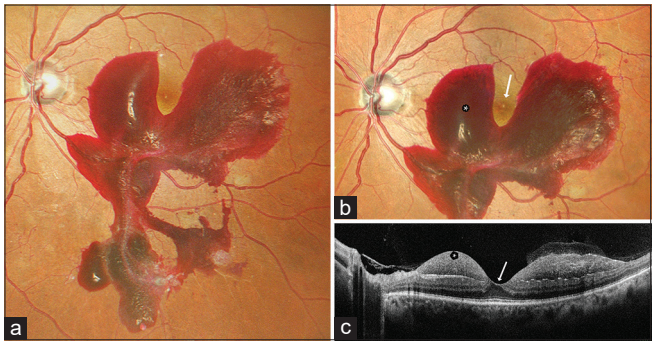


Figure 1: (a) Color fundus image showing a large premacular subhyaloid hemorrhage extending beyond the inferior arcade. (b) Posterior pole view highlighting complete foveal sparing (white arrows) despite extensive subhyaloid hemorrhage (*). (c) Optical coherence tomography demonstrating a perifoveal dome-shaped subhyaloid hemorrhagic cavity (*) with preserved foveal contour and intact outer retinal layers

A middle-aged man with poorly controlled type 2 diabetes mellitus presented with acute visual disturbance in the left eye, having best-corrected visual acuity of 20/20. Fundus imaging revealed a large premacular subhyaloid hemorrhage extending beyond the inferior arcade [Fig. 1a], with complete foveal sparing despite extensive accumulation of blood [Fig. 1b]. Optical coherence tomography demonstrated a perifoveal dome-shaped subhyaloid hemorrhagic cavity with preservation of the foveal contour and intact outer retinal layers [Fig. 1c].

The distinct distribution pattern is consistent with the known sequence of posterior vitreous detachment, wherein vitreous separation begins in the perifoveal region before involving the fovea, leaving persistent vitreo-foveal adhesion that may restrict hemorrhage from tracking into the foveal center.[1]

The striking anatomical configuration of foveal sparing despite extensive premacular hemorrhage highlights the *in vivo* mechanical influence of staged posterior vitreous detachment and vitreoretinal interface dynamics in determining the spread of subhyaloid hemorrhage.[2]

Authors' contributions

Dr. Shraddha Raj Shrivastava: Concept, Design, Data acquisition, Literature search, Manuscript preparation. Dr. Manish Nagpal: Concept, Manuscript review, Manuscript editing.

Declaration of patient consent

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 The patient understands that his name and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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