A rare presentation of an atypical herpes simplex virus retinitis in an immunocompetent patient following an episode of fever

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Key words: Atypical retinitis, HSV, Post-fever retinitis, Acyclovir, Polymerase chain reaction

A 20-year-old male, presented with sudden onset decreased vision (DV) in both eyes (OU) since one week. He had a history of having been treated elsewhere for fever and cervical lymphadenopathy 15 days back with complete resolution. Best corrected visual acuity (BCVA)-OU was counting fingers close to face (CFCF). Slit lamp examination-OU revealed anterior chamber reaction-2+, vitreous cells-2+ with normal intraocular pressure (IOP). Fundus-OU revealed normal optic disc, dull foveal reflex, and multiple sinusoidal outer retinal lesions arising from the disc upto mid-periphery with intraretinal hemorrhages [Fig. 1a and b]. Investigations including blood smear, serology for syphilis, toxoplasmosis, human immunodeficiency virus (HIV), chest X ray and mantoux test were all normal. Other possible causes of post-fever retinitis were ruled out. Aqueous humor (AH) polymerase chain reaction (PCR) was positive for herpes simplex virus-2 (HSV-2) genome and negative for others. Fluorescein angiography (FA) showed normal choroidal and early arterial phase, perivascular leakage, and disc staining in the recirculation and late stage [Fig. 2a-f]. He was initiated on intravenous (IV) acyclovir 500 mg, 8th hourly for 10 days followed by oral acyclovir which was continued for 6 weeks along with tapering dose of oral prednisolone. At 1 week, lesions showed early signs of resolution [Fig. 3a and b]. At 3 weeks follow-up, BCVA-OU was maintained at CFCF. Anterior segment was quiet, fundus showed healed lesions

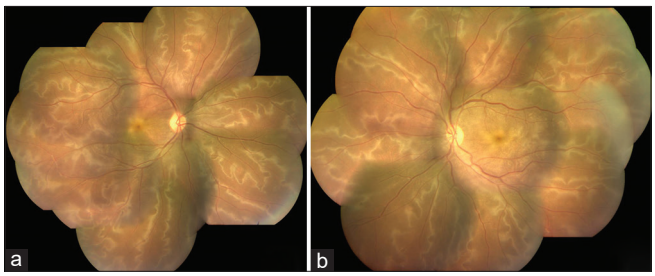

Figure 1: (a) Color fundus montage photograph of the right eye showing distinct ribbons of sinusoidal outer retinal lines radiating outwards from the posterior pole appearing like a "White oak leaf" distinct from the retinal vessels and involving the fovea. There is loss of foveal reflex. (b) Color fundus montage photograph of the left eye showing a similar pattern and distribution of radiating white lines. There is evidence of a small segment of perivascular cuffing seen along the inferior retinal vein. There is loss of foveal reflex suggestive of macular edema

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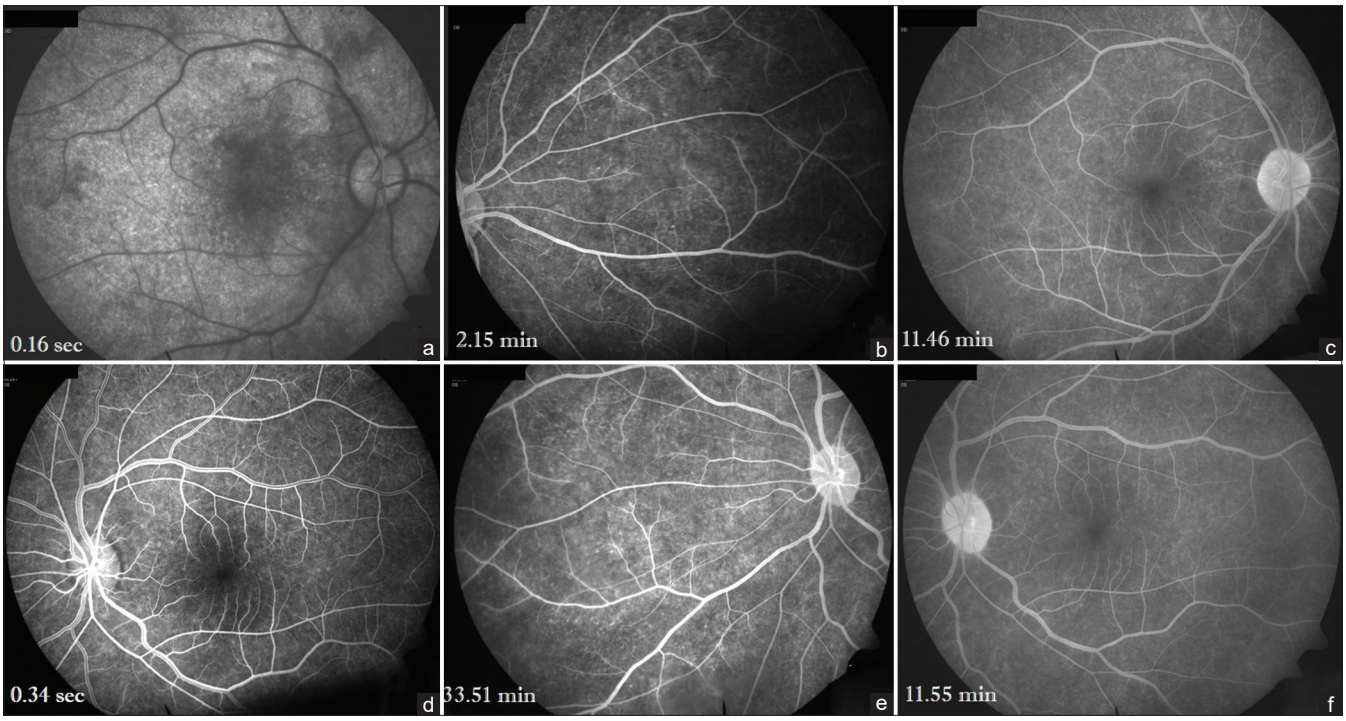

Figure 2: (a-f) Fundus fluorescein angiography (FFA) images. Right eye: FFA Choroidal phase (a) shows normal study. The nasal midperiphery shows a faint perivascular leakage in the recirculation phase (b). The late stage shows minimal perifoveal staining and disc staining (c). Left eye: FFA late arterio-venous (d) shows normal study. Nasal midperiphery shows a faint perivascular leakage in the recirculation phase (e). The late phase shows minimal perifoveal staining and disc staining (f)

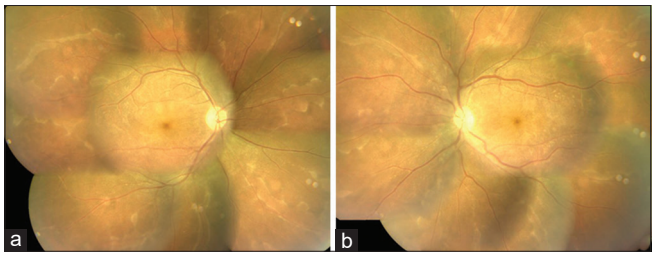

Figure 3: Right eye (a) and Left eye (b) montage color fundus picture while on treatment (one week review) showing the fading of the outer retinal lines appearing as radiating artefactual bands

with disc pallor [Fig. 4a and b]. Visual evoked potential revealed delayed latency suggestive of an early onset optic neuropathy. Magnetic resonance imaging (MRI) brain was unremarkable. At 3-month follow-up, ocular and systemic condition was stable.

Discussion

Our patient, a young immunocompetent male with atypical HSV-2 retinitis post-fever, did not fit into any of the reported manifestations associated with non-necrotizing herpetic retinitis (NNHR) or post-fever retinitis.[1-4] Serpiginoid pattern of lesions, commonly described with TB, is reported uncommonly with herpes viruses.[5] Investigations ruled out TB. Our case indicates that herpetic retinitis can present in phenotypic patterns not commonly described in literature and PCR can be diagnostic in such situations.

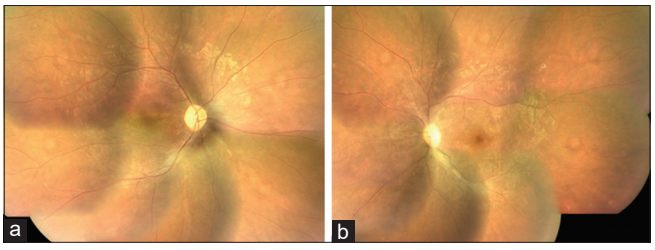

Figure 4: Right eye (a) and Left eye (b) montage color fundus picture at 3 weeks follow-up on treatment showing resolution of the retinal transparency with complete disappearance of the outer retinal lines and restoration of the foveal reflex. Note – absence of residual pigmentary changes in the retinal pigment epithelium (RPE) and significant optic disc pallor.

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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Nil.

Conflicts of interest

There are no conflicts of interest.

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