

IMAGES IN MEDICINE

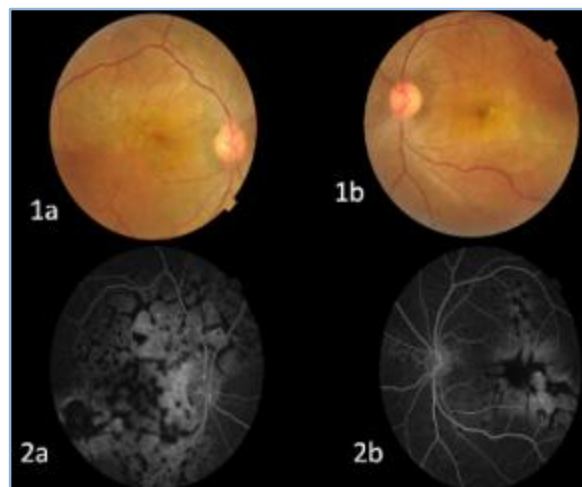
HYPERTENSIVE CHOROIDOPATHY AS AN UNCOMMON CAUSES OF VISUAL LOSS IN PREGNANCY

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INTRODUCTION: HISTORY: A 30 year old lady in her 32 weeks gestation period was referred to our ophthalmology clinic with chief complaints of diminution of vision in both eyes for 4 months duration. Her medical history was suggestive of uncontrolled hypertension. On Ophthalmic evaluation she had best corrected visual acuity of 20/200 in both eyes with normal color vision. Her pupils were bilaterally equal in size and normally reacting to light. The intraocular pressure was within normal range and anterior segment evaluation was within normal limits. Dilated fundus evaluation revealed only arterio-venous crossing changes, mottled retina and resolving hard exudates in both eyes [Fig 1a, & 1b]. The fundus picture could not explain the severity of vision loss in the patient which prompted us for further workup.



Photograph 1a, 1b, 2a & 2b

Differential Diagnosis: The differential diagnosis which struck us were chronic hypertensive retinopathy, Systemic lupus Erythematosus, hyper viscosity syndromes, disseminated intravascular coagulation, retinal venous obstruction and radiation retinopathy.

Further Workup: We planned a fundus fluorescein angiography (FFA) in the patient after confirming her normal renal function tests. FFA clinched to the diagnosis where we found multiple areas of retinal pigment epithelium clump and atrophy (Elschnig spots), forming from the focal acute white retinal pigment epithelium lesions. The triangular patches of atrophy resulted from the occlusion of larger-calibre choroidal vessels. [Fig. 2a & 2b]

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DISCUSSION: The FFA findings in our patient were very classical of hypertensive choroidopathy including Elschnig spots and siegrist streaks which are relatively uncommon. Anton Elschnig, an Ophthalmology professor first described such areas of impaired choroidal perfusion in 1903 until 1933.^{1,2} Hypertensive effects on choroid are different from those on the retina due to the difference (anatomical and functional) between the retinal and choroidal vasculature.

The choroidal arterioles have sympathetic innervations and hence are more susceptible to vasoconstriction. Due to the presence of fenestrated capillaries and lack of blood-ocular barrier in the choroid, there is free passage of macromolecules. There is increased susceptibility to elevated perfusion pressures due to absence of auto regulation. Hayreh observed that the presence of NSRDs was correlated to the degree of choroidal circulation disruption.³

We explained her poor visual prognosis and reinforced the need of strict control of hypertension. This clinical image tries to warn every obstetrician and ophthalmologist to ensure comprehensive ophthalmological evaluation at the early stages of pregnancy.

REFERENCES:

1. Libicky H. A personal sketch of Professor Anton Elschnig. Survey of Ophthalmology 26: 266-8, 1982.
2. Morse PH. Elschnig's spots and hypertensive choroidopathy. American Journal of Ophthalmology 66: 844-52, 1968.
3. Hayreh SS, Podhajsky PA, Zimmerman B. Ocular manifestations of giant cell arteritis. American Journal of Ophthalmology. 125:509-20, 1998.

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