Images in Medicine

Bilateral exudative retinal detachment with choroidopathy in malignant hypertension

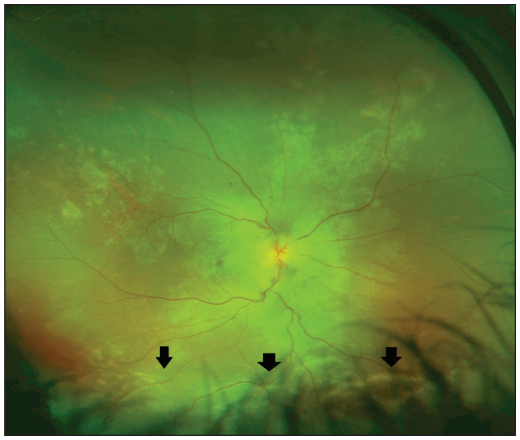

FIG 1. Ultrawide field fundus image (Optos™, Inc, Marlborough, MA, USA) of the right eye shows blurring of optic disc margin (optic disc oedema), and hard exudates at the macula. Extensive patches of choroidal depigmentation as well as areas of hyperpigmentation surrounded by depigmentation (Elschnig's spots) are seen at the temporal and superior fundus. Inferiorly, the retinal vessels are elevated with retinal folds, suggestive of a retinal detachment (black arrows). The greenish hue in the image is an artefact of Optos™ imaging, which gives pseudo-colour imaging unlike the conventional fundus cameras which provide natural reddish fundus image, due to choroidal vascularity and the colour of retinal pigment epithelium.

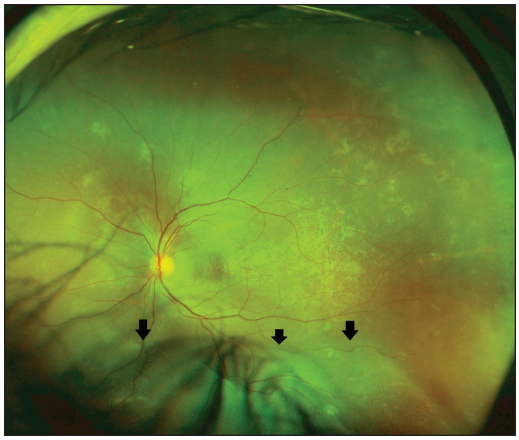

FIG 2. Ultrawide field fundus image (Optos, Inc, Marlborough, MA, USA) of the left eye shows areas of choroidal depigmentation as well as areas of hyperpigmentation surrounded by depigmentation (Elschnig's spots) at the temporal and superior fundus. Inferiorly, the retinal detachment appears as a wavy membrane with loss of choroidal details (black arrows). The greenish hue in the images is an artefact of the imaging system.

A 12-year-old boy presented with headache and decreased vision in both eyes for 1 month. There was no anterior chamber or vitreous inflammation. Intraocular pressures of both eyes were normal. Visual acuity was 1/60 in either eye. The fundus showed bilateral disc oedema, extensive patches of choroidal depigmentation, and areas of hyperpigmentation surrounded by depigmentation (Elschnig's spots). Inferiorly, the retinal vessels were elevated and retinal folds were present, suggestive of exudative retinal detachment (black arrows, Figs 1 and 2). His blood pressure was 160/110 mmHg. Doppler ultrasound of the abdomen revealed a small right kidney with renal artery stenosis. The left kidney was normal. The blood pressure was controlled on multiple drugs. After 2 months, the exudative retinal detachment resolved and the patient gained visual acuity of 6/18 in either eye.

Bilateral exudative retinal detachment with choroidopathy can be an important initial presenting feature of malignant hypertension, even in the absence of classical features such as soft exudates (cotton wool spots) and intraretinal haemorrhages. All such cases should be investigated for causes of secondary hypertension.

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