

Choroidal neovascularization in a case of angioid streaks

Presentation

A 21 year old male patient reported in 2003 with complaint of diminution of vision in left eye since 1 month. Best corrected visual acuity OD was 20/20 and 20/120 OS. Fundus evaluation revealed angioid streaks in both eyes with scarred Choroidal neovascularization (CNV) in left eye [Fig. 1]. He was followed up regularly at intervals of 3 months. In 2010, he noticed blurring of vision in the right eye. BCVA was 20/30 OD. Fundus examination revealed presence of CNV which was confirmed on OCT [Fig. 2]. He was administered 3 intravitreal injections (IVT) of ranibizumab at intervals of 1 month each following which the lesion resolved and the visual acuity in right eye improved to 20/20 [Fig. 3]. One

year later, the patient again experienced metamorphopsia with drop of BCVA to 20/30 OD. On examination the lesion appeared same as the previous follow-up and the OCT also did not suggest any fresh activity. However the fluorescein angiography revealed leakage nasal to the fovea suggestive of a recurrence from the CNV [Fig. 4]. This was treated successfully with 2 injections of ranibizumab, with the patient maintaining 20/20 OD for a period of 1 year on the last follow-up [Fig. 5].

Discussion

Angioid streaks are the result of crack like dehiscences in thickened, calcified and abnormally brittle collagenous

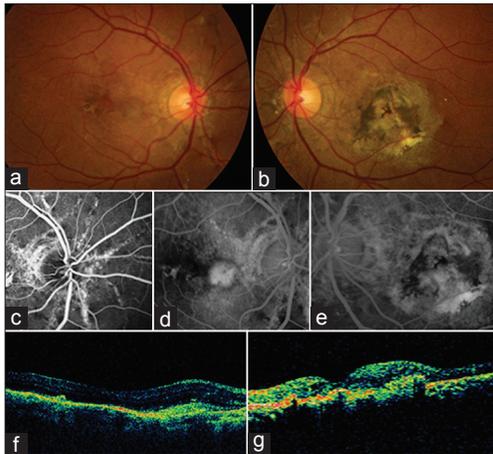


Figure 1: Fundus photograph and angiography (a, b, c) showing BE angioid streaks with a typical peripapillary ring and radiating pattern; hyperfluorescence nasal to the fovea OD (d, f) suggestive of previously regressed membrane; scarred lesion OS (b, e, g)

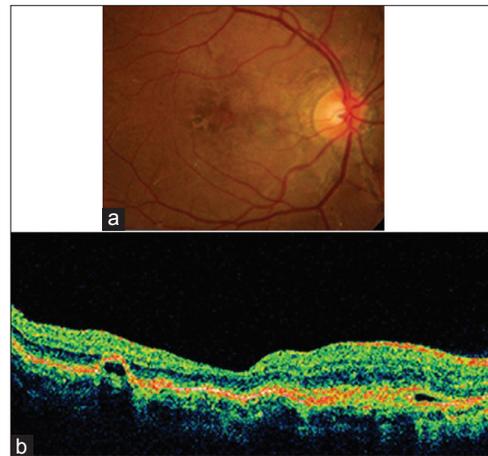


Figure 2: Photographs (a, b) showing mild increase in retinal thickness nasal to the fovea with subsensory fluid

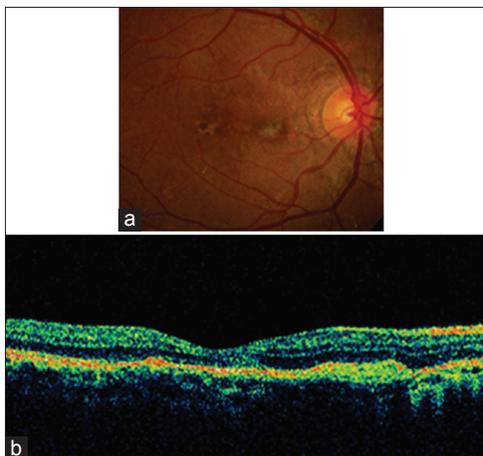


Figure 3: Resolution of subsensory fluid and scarring (a, b) following 3 intravitreal injections of Ranibizumab

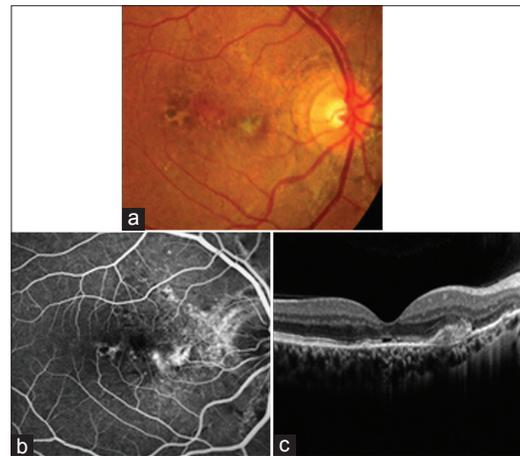


Figure 4: Fundus photograph OD (a), fluorescein angiography showing leakage nasal to the fovea (b) with OCT showing presence of a previously treated membrane without any surrounding fluid (c)

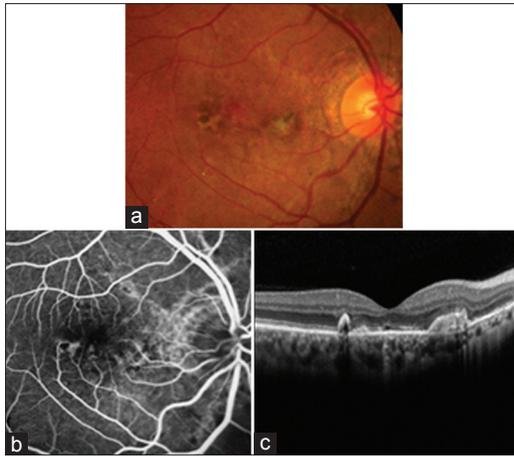


Figure 5: Resolution of leak on the fluorescein angiography following 2 injections of anti-VEGF therapy (b, c)

and elastic portions of Bruchs membrane.^[1] CNV is by far the most common cause of visual loss which can be monitored by fluorescein angiography and OCT. Laser photocoagulation has been shown to halt the progression of extrafoveal CNVs,^[2] but for subfoveal and juxtafoveal lesions multiple IVT injections of anti-VEGF drugs are the mainstay of treatment.^[3] However, a subset of these patients are known to have recurrences, hence they should be advised to undergo self-assessment using an Amsler grid to detect recurrences.

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