

Unilateral Frosted Branch Angiitis – A Rare Presentation

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Abstract

Frosted branch angiitis (FBA) is a rare vasculitis involving the large retinal vessels with characteristic perivascular exudation leading to appearance of frosted branch of a tree. It can be idiopathic or associated with a host of ocular and systemic diseases. Here, we report a case of 64-year-old male with unilateral FBA and chronic rhegmatogenous retinal detachment (RD). Systemic investigations failed to reveal any associated pathology. The patient was started on oral steroids in view of ongoing inflammation and planned for pars plana vitrectomy. Visual prognosis remained poor in view of disc pallor and chronicity of RD.

Key words: Frosted branch angiitis, Fundus photography, Rhegmatogenous retinal detachment

INTRODUCTION

Frosted branch angiitis (FBA) is a rare retinal vasculitis with perivascular sheathing of veins and arteries.^[1,2] Although bilateral and common in younger age, unilateral cases in extremes of age are also known to occur. It can be classified as idiopathic or associated with ocular and systemic disease such as cytomegalovirus retinitis, toxoplasmosis, Behcet's disease, lymphoma, or leukemia.^[2] Visual prognosis depends on the underlying pathology and worsens with complications such as macular edema, retinal tear, retinal detachment (RD), or optic atrophy.^[2,3]

CASE PRESENTATION

A 64-year-old male came to the clinic with sudden onset diminution of vision in the left eye for the past 2 months. On examination, visual acuity of the right and left eye was 6/6 and 1/60, respectively. Anterior segment examination was unremarkable in the right eye whereas the left eye showed 2+ cells in anterior chamber with no posterior synechiae. Fundus examination was normal in the right

eye whereas the left eye showed optic disc pallor, extensive perivascular sheathing at posterior pole suggestive of diffuse retinal vasculitis arranged in frosted branch pattern [Figures 1 and 2]. There was chronic rhegmatogenous RD involving macula with subretinal band running inferior to fovea and superior to optic disc. Retinal tear was localized in the superotemporal quadrant anterior to the equator.

Complete hemogram, peripheral blood smear, erythrocyte sedimentation rate, serum angiotensin converting enzyme,

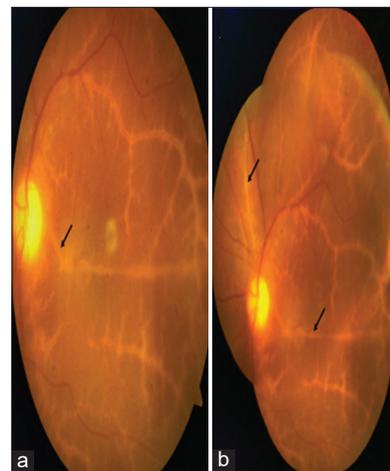


Figure 1: Fundus photograph of the left eye posterior pole (a) and montage (b) showing pale optic disc, widespread inflammation of retinal vessels predominantly veins emanating from optic disc reaching up to equator. There is subretinal band running inferior to fovea and present superior to disc (arrows). Diagnosis of frosted branch angiitis was made in the left eye

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Figure 2: Fundus photograph of the right eye showing normal optic disc and cup. Retinal vessels and macular including fovea appear normal

Mantoux test, chest X-ray, anti-nuclear antibody, and venereal disease research laboratory were within normal limits. Based on this, a diagnosis of idiopathic variant of FBA was made, and the patient was started on oral steroid (1 mg/kg) and was planned for pars plana vitrectomy with silicone oil injection.

DISCUSSION

The earliest description of FBA dates to 1976 with several case descriptions over the past decades.^[1,2,4,5] FBA may

present as unilateral or bilateral non-occlusive vasculitis.^[2] Moreover, retinal breaks are also rarely seen.^[3] Our case appears unique in two aspects related to its unilateral occurrence in elderly male with chronic RD. A thorough workup failed to reveal any systemic association in our patient. In our case, active periphlebitis and optic disc pallor probably suggest recurrent inflammatory episodes leading to retinal break formation and subsequent RD. Visual prognosis was guarded in view of chronic RD and macular subretinal bands.

CONCLUSION

FBA is a rare non-occlusive vasculitis. Although oral steroid can be used in idiopathic cases, secondary etiologies always need to be ruled out. Early identification and prompt treatment helps to avoid the visual complications.

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