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Sir, Intravitreal aflibercept for refractory choroidal neovascularization secondary to angioid streaks

We read with interest the report by Vaz-Pereira *et al*¹ about intravitreal aflibercept for choroidal neovascularisation in angioid streaks. We want to report our observation of one patient with refractory angioid streaks (AS) choroidal neovascularization (CNV) to bevacizumab secondary to pseudoxanthoma elasticum (PXE), which is the first case as we know to contribute to Vaz-Pereira *et al.*

PXE is a rare, inherited systemic disorder that is characterized with abnormal aggregation mineralized and fragmented elastic fibers, mainly involving the skin,

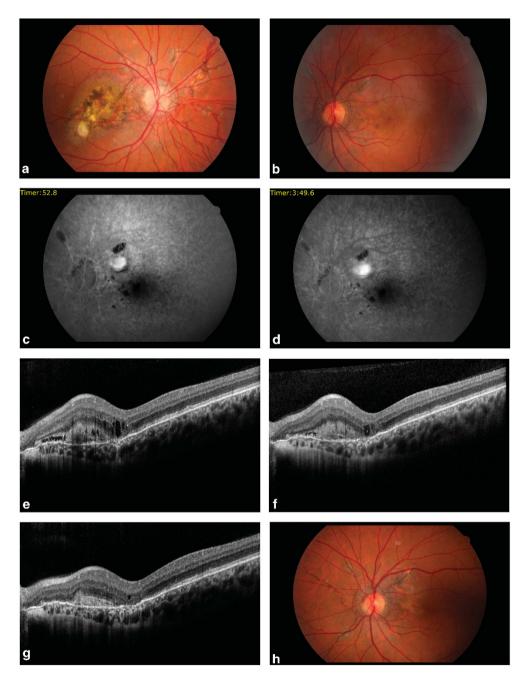


Figure 1 Fundus photograph befor aflibercept injection (a) AS with macular disciform skar in the right eye, (b) AS with multiple intraretinal hemorrhages at the extrafovea region in the left eye. (c, d) Fluorescein angiography proved extrafoveal classic CNV with an active leakage on the early and late phase in the left eye. (e) Optic coherence tomography showed intraretinal fluid before aflibercept treatment. (f) OCT revealed decreased intraretinal fluid 1 month after first injecton. (g) After loading dose there was resolution of the intraretinal fluid. (h) Fundus photograph after loading aflibercept dose showed resolution of the intraretinal hemorrhages.



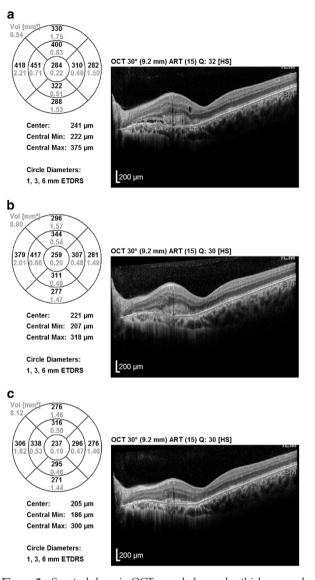


Figure 2 Spectral domain OCT revealed macular thickness and macular volume map of the patient (a) before aflibercept injection, (b) 1 month after first injecton, and (c) after loading dose.

cardiovascular system and eyes. The typical ocular manifestation of PXE is AS. CNV is the most comman and serious sight threatening complication of AS.^{2,3}

Aflibercept is a new anti-VEGF agent which binds all isomers of VEGF-A, VEGF-B, placental growth factor and prevent their activity.⁴ There are restricted information about using intravitreal aflibercept in CNV secondary to AS.^{1,5}

Case report

A 36-year-old man pateint with PXE-related AS presented with extrafoveal CNV had received five intraviteral bevacizumab injection in his left eye, his best-corrected visual acuity (BCVA) 20/2000 in right eye and 20/100 in left eye after last bevacizumab injection. Fundoscopy of right eye showed AS with macular disciform skar, and left eye revealed AS with multiple intraretinal hemorrhages at the extrafovea (Figures 1a –b). Fundus fluorescein angiography and optic coherence tomography supported the diagnosis (Figures 1c and g). BCVA increased to 20/63 and CMT and macular volume decreased after loading dose of 2 mg aflibercept (Figure 2). The first activation time of the CNV was 4 months after loading dose and the aflibercept treatment is continued.

Comment

Vaz-Pereira *et al* reported that aflibercept is very effective in treatment of AS-CNV in naive case. Our case showed that it is also so effective in refractory AS-CNV. It may be owing to higher affinity for VEGF-A and also VEGF-B and PGF as Vaz-Pereira *et al* has pointed. But in our case the first recurrence time was 4 months after last loading dose. This was shorter than what Vaz-Pereira *et al* reported. We considered that recurrence time of the AS-CNV does not just depend on used drugs but also on the width of the crack in the AS.

Conflict of interest

The authors declare no conflict of interest.

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