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Retinal vasoproliferative tumor in a high myopic patient with previous rhegmatogenous retinal detachment: case report

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Purpose

To report a case of vasoproliferative tumor in a high myopic patient with a previous laser-treated rhegmatogenous retinal detachment.

Methods

Review of the patient's medical record.

Case Report

A 48-year-old woman complaining of progressive low visual acuity in the left eye (OS) for 20 days, without associated trauma. Previous history of high myopia and rhegmatogenous retinal detachment in left eye 18 years ago, treated by laser. On examination, visual acuity of 20/20 in the right eye (OR) with spherical equivalent (SE) of -7,50DE and 20/60 in OS with SE of -6.25 DE. Biomicroscopy examination showed a transparent crystalline lens in both eyes (OU). Fundus of OR without pathological finds. Fundus of OS as shown in **Image 1**. Ultrasonography of OS ruled out tumor lesions or choroidal alterations.

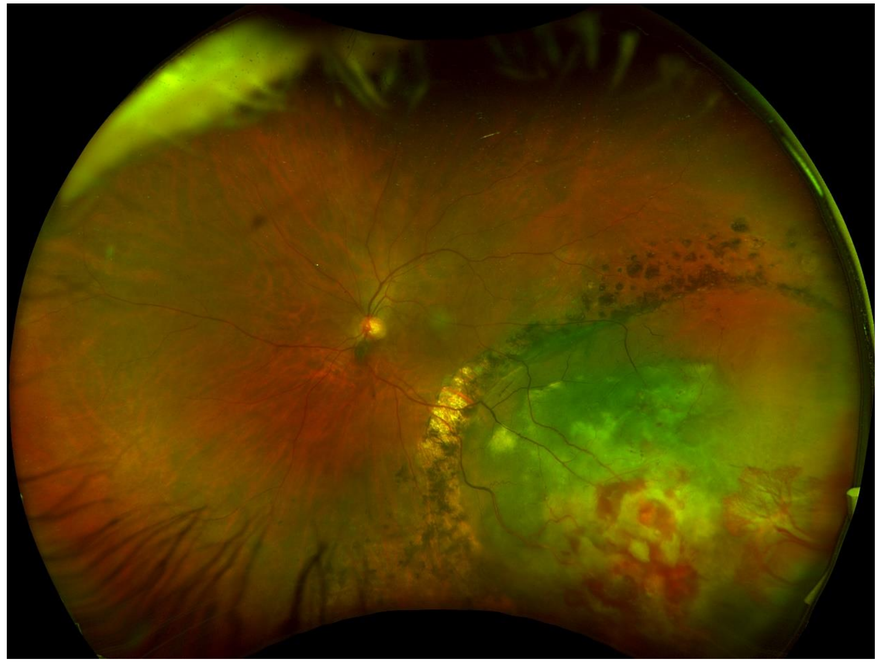

Image 1: Wide-field color retinography of OS showing retinal detachment macula off, extending to the inferior temporal region, where neovessels and an exudative area with intraretinal hemorrhage are visualized. Laser marks are noted delimiting the inferior temporal area.

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Fluorescein angiography showed neovessels in the topography of the lesion (**Image 2**), while macular OCT showed subretinal fluid (**Image 3**).

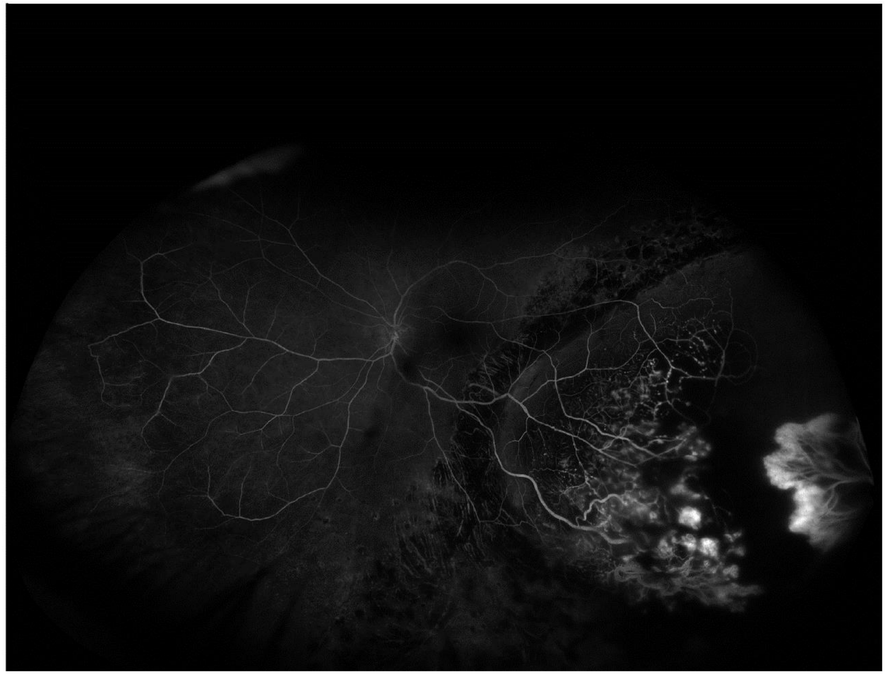

Image 2: Fluorescein angiography of OS showed areas of leakage, suggestive of neovessels, in the topography of inferior temporal retinal detachment.

Intravitreal injection of anti-VEGF in OS was started for retinal vasoproliferative tumor. After 14 days, retinal finds and visual acuity were similar. Therefore, a surgical approach with cryotherapy, inferior temporal drainage and primary retinopexy was indicated. The procedure was successfully performed and the patient evolved satisfactorily. In the 3rd postoperative month, patient's visual acuity was 20/20 (OR) and 20/25 (OS) and retina remained attached (**Image 3**).

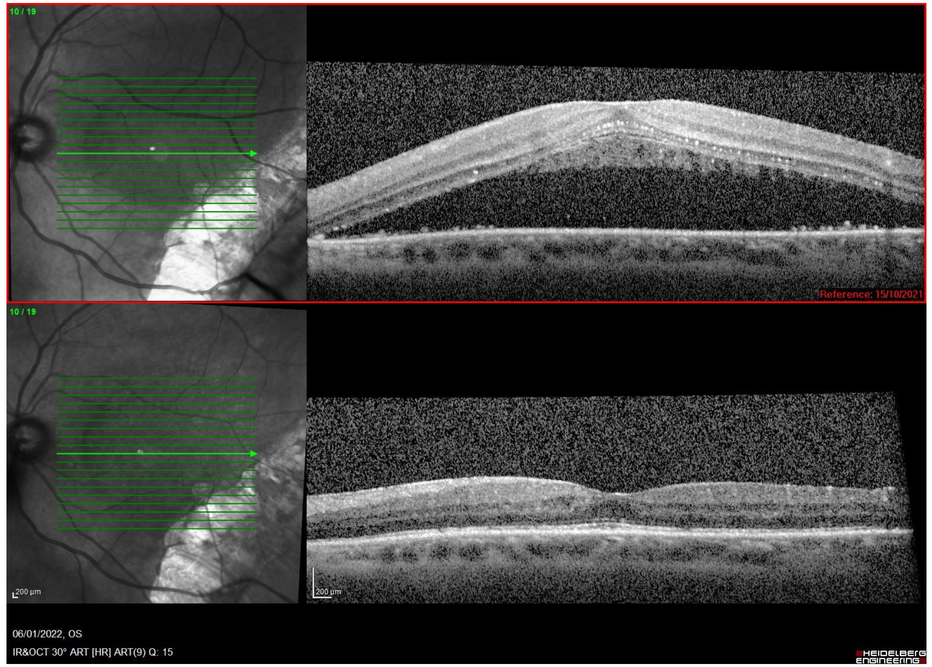

Image 3: Macular OCT pre and post treatment.

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Discussion

Retinal vasoproliferative tumor is an acquired disease characterized by vascular lesions, usually located in the pre-equatorial and inferotemporal regions, which can cause exudates, macular edema and epiretinal membrane[1]. Approximately 75% of cases are idiopathic and 25% are secondary to other ocular diseases such as uveitis, retinal detachment, congenital toxoplasmosis and Coats disease[2]. The treatment, when indicated, can be performed by cryotherapy, laser, surgical excision, radiotherapy and intravitreal injections of antiangiogenics, alone or in combination[3].

The clinical case illustrates an old rhegmatogenous retinal detachment that lately developed to retinal vasproliferative tumor, due to probable local hypoxic stimuli. Surgical treatment was necessary given the unsatisfactory response to clinical treatment. The importance of clinical follow-up of patients after retinal detachment and laser-surrounded ruptures is highlighted.

References

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