CASE REPORT

A BULLOUS VARIANT OF CENTRAL SEROUS CHORIORETINOPATHY TREATED WITH SCLEROTOMY

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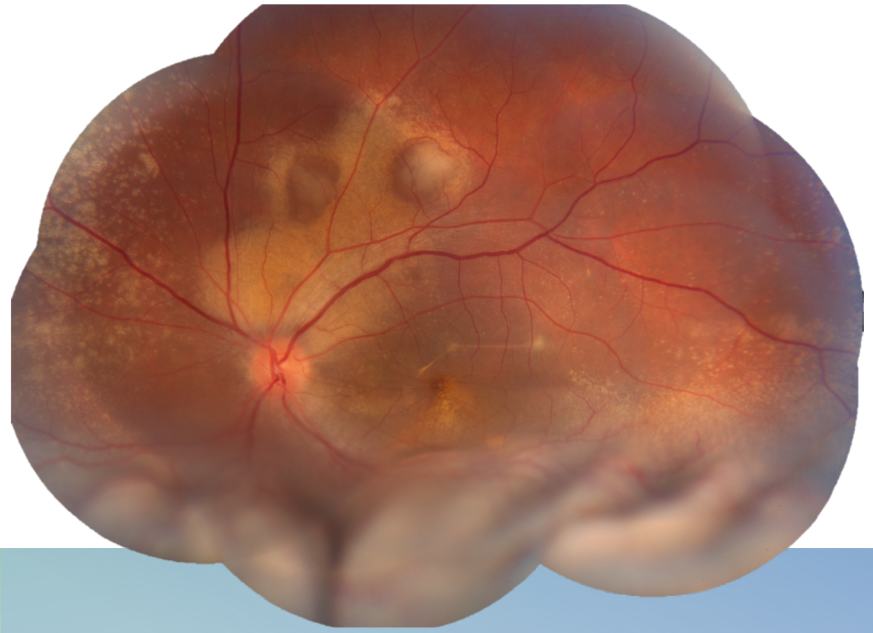

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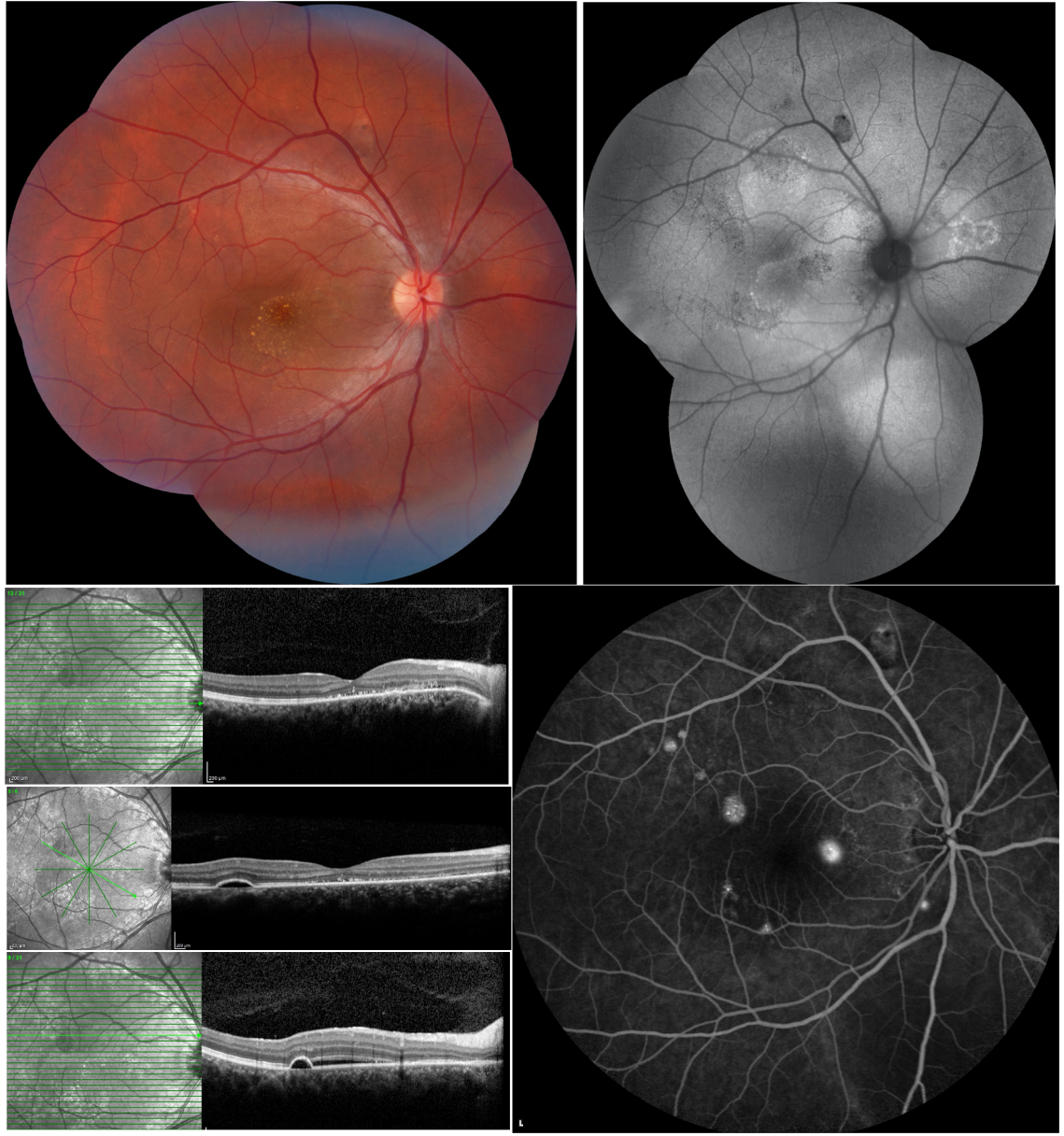
PURPOSE: To report a case of an atypical and severe variant of Central Serous Chorioretinopathy (CSC) with good outcome after surgical approach.

METHODS: Case report.

RESULTS: A 31-year-old male patient was admitted with a history of progressive worsening of vision in his left eye (OS) for two months. He was using cetrolac®, melatonin and spironolactone prescribed elsewhere. He denied trauma, pain or other symptoms and had no previous ocular and systemic history. On admission, his best corrected visual acuity was 20/20 in the right eye (OD) and 20/400 in the OS. There were no changes on anterior biomicroscopy. Intraocular pressure was 12 mmHg in both eyes. The fundus examination showed no alterations OD and revealed inferior serous retinal detachment that involved the macula (RD) associated to yellowish subretinal exudation nasally and temporally. Laboratory work up was unremarkable, with negative results for HIV, syphilis and toxoplasmosis serologies. Tuberculin skin test was also negative (2mm). Patient returned for reevaluation after 1 week, complaining of worsening of visual acuity (counting fingers in the OS) and progression of inferior retinal detachment. Due to serous retinal detachment and infectious diseases being ruled out, it was prescribed oral corticosteroid therapy (initial dose of 60mg of prednisone). However, after 1 week, the patient returned reporting worsening of visual acuity in both eyes (OD 20/80 and hand motion OS). The fundus examination revealed pockets of serous RD in the macular region OD and worsening of the extension of the RD OS. Prednisone was discontinued and ocular ultrasound, autofluorescence, optical coherence tomography (OCT), fluorescein angiography and indocyanography were performed. Ultrasonography of the OS demonstrated a retinal detachment affecting the meridians from 3 to 11, extending from the posterior pole to the periphery from 3 to 8, with dense subretinal content, with a homogeneous appearance. Multimodal evaluation is shown in next slide.

OD

OE



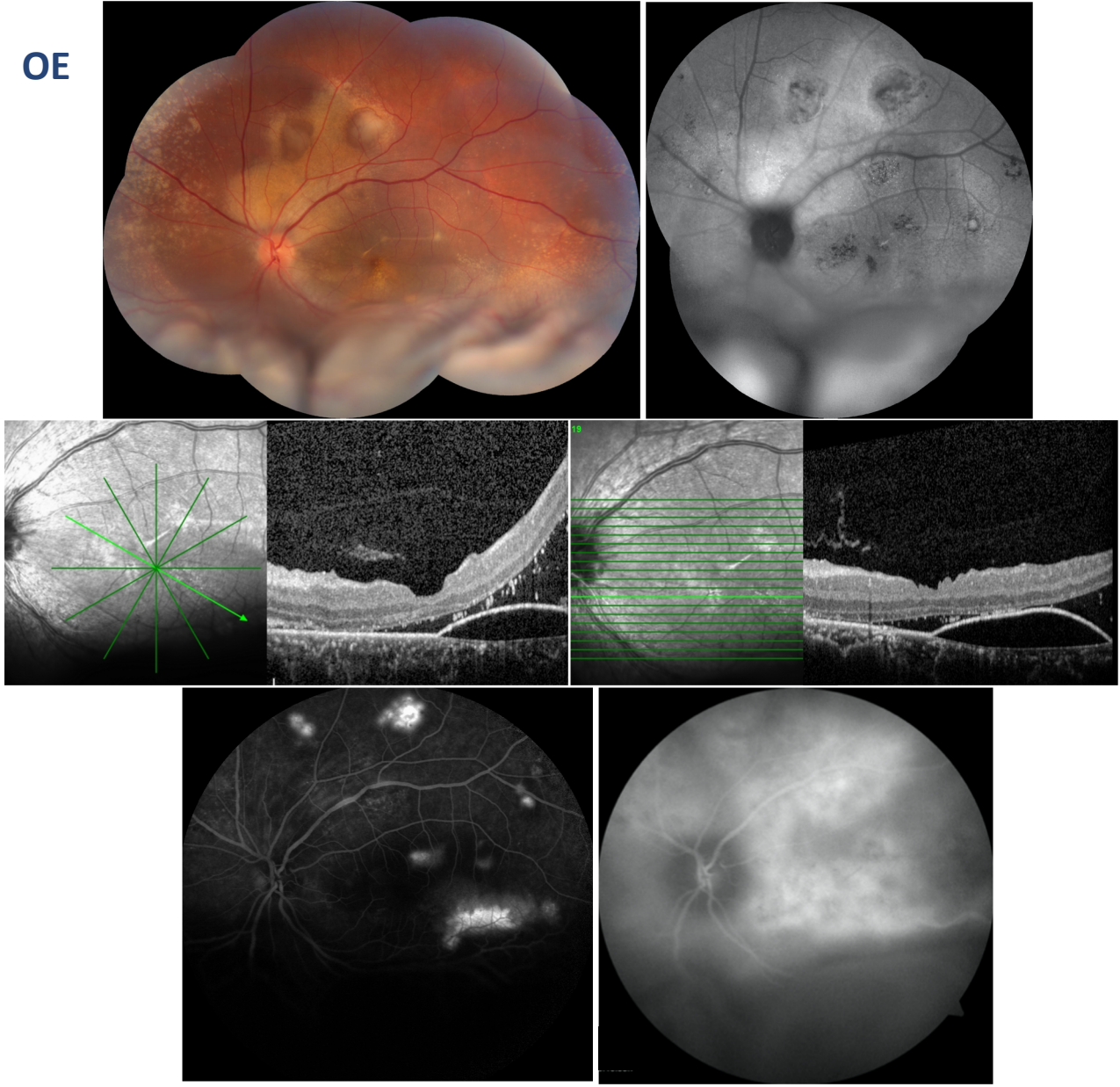


FIGURE 1. Multimodal evaluation, showing the serous retinal detachment in macular region of the rigth eye and significant inferior pockets of serous detachment in the left eye, compatible wiht the bullous variant of CSC.

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After multimodal evaluation, the diagnostic hypothesis of bullous Central Serous Chorioretinopathy was suggested. Since no conventional laser treatment was possible due to the bullous detachment, a surgical approach through sclerotomy was proposed. Four scleral windows were created in each quadrant. Patient presented good clinical evolution, showing improvement of retinal detachment in 1 week, maintaining mild subretinal fluid visualized only on OCT. The patient also showed improvament of visual acuity to 20/400 after 1 month of the surgery.

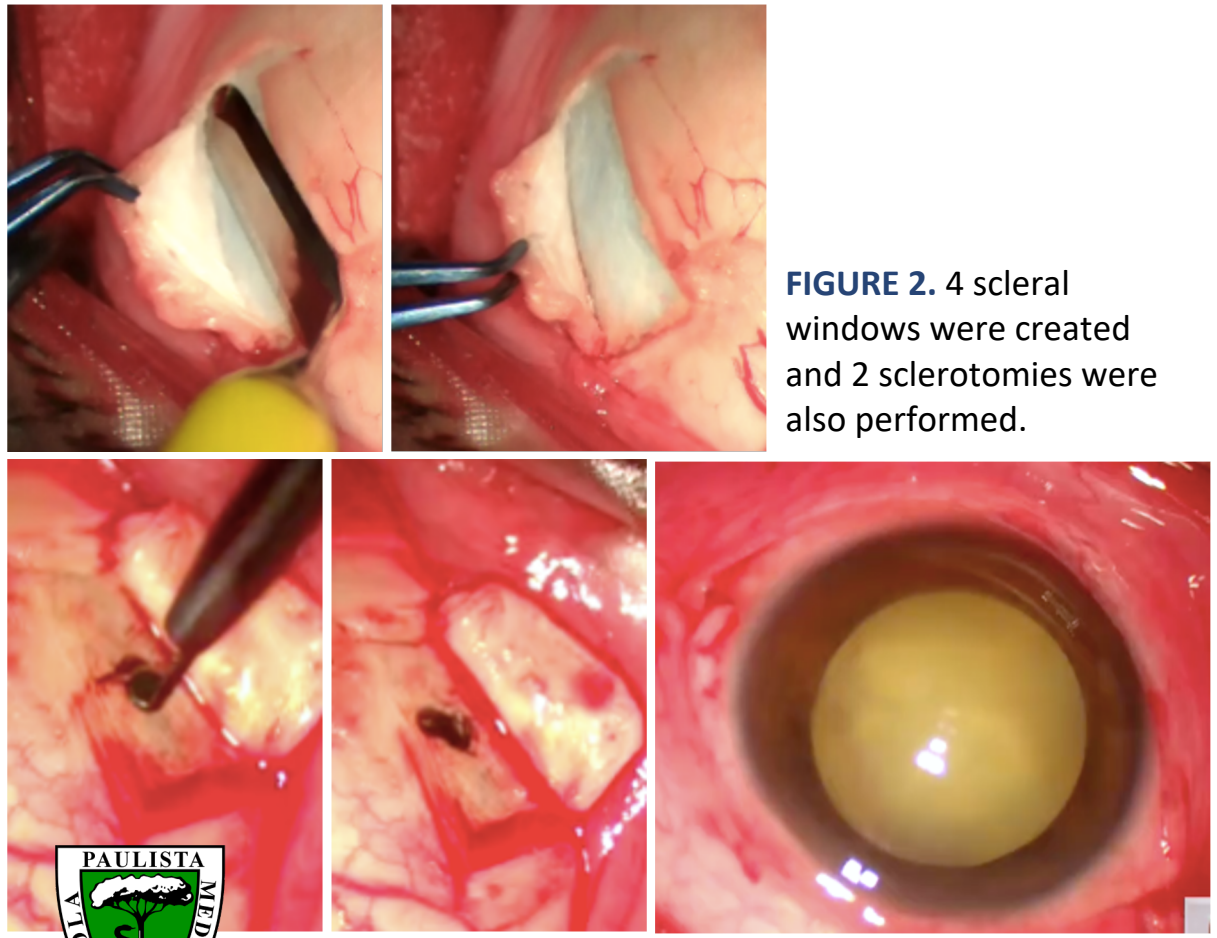

FIGURE 2. 4 scleral windows were created and 2 sclerotomies were also performed.

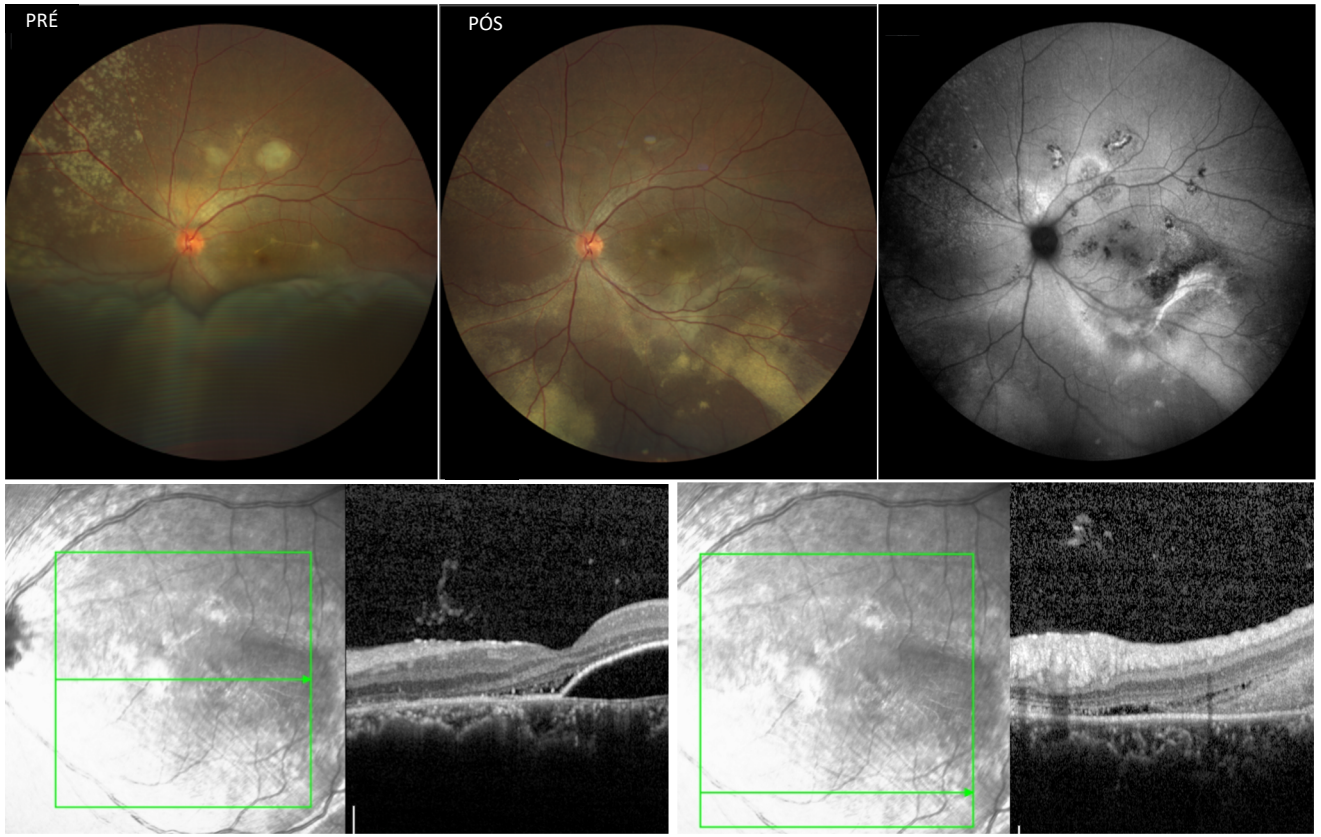

FIGURE 3. 2 month follow-up, showing improvement in retinal detachment.

DISCUSSION: CSC affects mainly male individuals, from the third to fifth decades of life, with unilateral, mild to moderate vision changes, in recurrent crises. The pathogenesis of CSC remains not entirely known. Spaide et al demonstrated the existence of choroidal vascular changes that would lead to increased flow or choroidal hypertension. Recently, Imanaga et al demonstrated that patients with CSC had increased scleral thickness compared to controls. Other subsequent studies corroborated this result, proving a possible association of CSC with scleral thickening. These studies raised a new theory that increased scleral thickness may play an important role in the pathogenesis of the disease. The thicker sclera would contribute to restricting venous efflux through the vorticose veins, which have part of their course intrascleral, consequently compromising choroidal circulation. Therefore, there would be a possible pathophysiological correlation between CSC and uveal effusion. Uveal effusion is treated with scleral window surgery, initially described in 1983 by Donald Gass. Several studies demonstrated the safety and effectiveness of this technique. There are also some case reports demonstrating the effectiveness of this procedure for complicated cases of CSC, as we show in this rare case of bullous variant of CSC.

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