**Bilateral perifoveal exudative vascular anomalous complex (PEVAC)**

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Abstract:

Introduction: In 2011, Querques et al. described a new spectrum of unilateral isolated juxtafoveal aneurysmatic lesion: perifoveal exudative vascular anomalous complex (PEVAC). Clinical aspects related to its cause and treatment are still unclear. This paper aims to describe three cases of bilateral PEVAC attended in a referral hospital in southern Brazil, as well as to verify its characteristics and follow-up.

Methods: Retrospective case series based on medical reports of patients with bilateral PEVAC attended at Sadalla Amin Ghanem Eye Hospital, in Joinville (SC), Brazil. All patients underwent complete ophthalmological exam, color fundus photography and optical coherence tomography (OCT). 2 patients performed fluorescein angiography (FA) and one had also OCT angiography imaging (OCT-A).

Results: all 3 patients were male, with average age of 74,3 years old (range 72-77 years old) and were followed-up from 3 to 27 months. 2 patients had well controlled type 2 diabetes mellitus. Best corrected visual acuity varied from 20/30 to 20/50. Fundoscopy revealed isolated juxtafoveal intraretinal lesion in 4 eyes, with microhemorrhage and aneurysmatic dilatation. In 2 eyes, diagnosis was made by OCT. There wasn’t leakage during FA. OCT showed well defined lesion, with hyperreflective walls in 6 eyes, and intraretinal cystoid spaces in 3 of them. OCT-A showed blood flow inside the complex and retinal capillary rarefaction surrounding the lesion. One patient underwent anti-VEGF intravitreal therapy, without improvement.

Discussion: PEVAC was first describe as a unilateral retinal vascular abnormality. In this present report, we found out that it may be bilateral, which was not previously described and may have visual stability. It’s possible that PEVAC is more frequent than it´s been related until now. The pathogenesis and its systemic and ocular associations remain unclear.

Key words: perifoveal exudative vascular anomalous complex, macular telangiectasia, diabetic retinopathy.