Colloidal drusen: a neglected enemy

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PURPOSE

The purpose of this case report is to highlight the importance of differentiating large colloidal drusen from the usual drusen of age-related macular degeneration. Colloidal drusen are often neglected or underdiagnosed.

INTRODUCTION

Drusen are extracellular deposits located between the basal lamina of the retinal pigmented epithelium (RPE) and the inner collagenous layer of Bruch's membrane. Large colloidal drusen (LCD) are located below the RPE, and are characterized by multiple cupuliform detachments of the RPE with attenuation of the ellipsoid zone overlying the drusen.(1)Although drusen occurs more frequently in people over 50 years of age, some drusen patterns such as colloidal drusen can occur earlier. These lesions are usually large (200-300 microns), yellowish, bilateral, with hyperpigmented edges spread throughout the posterior pole and periphery.(2)

CASE REPORT

A 59-year-old white woman with hypertension and hypothyroidism, with no family history of ophthalmology. On examination, best-corrected visual acuity was 20/30 in the right eye and 20/40 in the left eye. Biomicroscopy was unremarkable. Tonometry 12 mmhg in both eyes.In indirect ophthalmoscopy, presence of multiple large yellowish deposits in the posterior pole and middle periphery in both eyes, suggestive of colloidal drusen. The patient under study has a medical history of drusen reported at the age of 45, with progressive worsening. Optical coherence tomography (OCT) shows drusen and cupuliform detachment of the retinal pigment epithelium. In addition to fragmentation of the ellipsoid zone near the drusen.

DISCUSSION

Large colloidal drusen develop more frequently in middle-aged women, without a family history of retinal problems.(1) These drusen have less risk of choroidal neovascularization or significant loss of mean visual acuity when compared to macular degeneration related to age (AMD). (2) In addition to the funduscopic clinical examination, non-invasive multimodality examinations such as retinography, OCT, autofluorescence are essential for the diagnosis and precise monitoring of this pathology in order to carry out the early detection of potentially serious and disabling complications in these individuals.(2)

BIBLIOGRAPHY

1: Guigui B, Querques G, Leveziel N, Bouakkaz H, Massamba N, Coscas G, et al. Spectral domain optical coherence tomography of early onset large colloid drusen. Retina. 2013;33(7):1346-50.2: Roberti N, Dias J, Novais E, et al. Large colloid drusen analyzed with structural en face optical coherence tomography Análise de drusas grandes coloidais através de OCT en face estrutural. Arq Bras Oftalmol. 2017;80(2):122-4

Figure (A) Color retinography showung coloidal drusen,;(B) Fundus Autofluorescence (FAF); (C) OCT presenting drusen and cupuliform detachment of the retinal pigment epithelium