ANTI-VEGF AND DOME SHAPED MACULA: A CASE REPORT.



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PURPOSE

To describe a case of dome shaped macula (DSM) with subretinal fluid (SRF) in both eyes (OU) with low visual acuity and the use of Anti-VEGF in one eye with a response in the contralateral eye

INTRODUCTION

The DSM was first described by Gaucher in 2008, with a prevalence of 10% in patients with high myopia¹.

Caillux described 3 types of DSM: Circular, oval horizontal and oval vertical¹. Some disease can be associated with DSM as REP alterations, macular holes and foveoschisis. SRF without choroidal neovascularization is common and usually followed by low visual acuity, however, 31% of SRF are solved without treatment¹.

The pathogenesis remains uncertain, nevertheless some theories are accepted. Gaucher suggest that choroidal abnormalities and thickening located in DSM are mechanical and vascular damage combined by excessive scleral thickening within staphyloma². In the fluorescein angiography, appears as pinpoint leakage in the late phase associated with atrophics alterations of RPE, resembling central serous chorioretinopathy^{3,4}.

Although some cases are solved without intervention, some treatments have ben proposed, such as spironolactone, half-fluence photodynamic therapy and focal laser. Recent reviews suggests that intravitreal injection of ANTI VEGF does not improve the SRF of DSM, while others assert benefits.



Fig. 1 and 2: OCT of right and left eyes, respectively.



Fig. 3 and 4: OCT of right and left eyes, respectively.

eye (OD).

After 01 month of the injection, the OCT showed improvement of the SRF in OU, despite the fact the injection had been performed only in the OD. The BCVA was 20/25 and remained for the next 6 months (Figures 3 and 4).

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CASE REPORT

A 52-year-old female patient, with high myopia complaining of low visual acuity in OU in the past 6 months, presenting VA of 20/64 with best corrected visual acuity (BCVA).

The initial fundoscopy revealed myopic fundus without other abnormalities. The Optical Choerence tomography (OCT) presented DSM with SRF in BE (Figures 1 and 2).

The patient was in use of spironolatone (75mg per day) for dermatologic reason in the last 5 years.

Therefore, injection of Anti-VEGF was performed in right

DSM is a prevalent alteration in eyes with high myopia and SRF is an important reason of Low VA. As treatment for the SRF, the conservative methods are expectant or the use of spironolactone. In our case report, Anti-VEGF injection was performed in one eye (OD). The improvement of the SRF was observed in OU suggesting a systemic effect of the drug as the left eye has had the same results in comparison to the OD, in spite of expectant conduct.

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DISCUSSION

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1.Choroidal findings in dome-shaped macula in highly myopic eyes: a