

Myopic Choroidal Neovascularization: Two Case Reports

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PURPOSE

Presenting two case reports of patients with high myopia who developed type 2 neovascular membrane.

METHODS

Literature review of the last 3 years on choroidal neovascularization and high myopia.

DISCUSSION

High myopia is defined as an axial length greater than 26.5 mm or refractive error greater than -6 D. Pathologic myopia is defined as the presence of structural changes due to axial elongation in eyes with high myopia. Patients with pathological myopia are at increased risk of developing complications such as retinal detachment, macular degeneration, and CNV. This diagnosis should always be in the arsenal of diagnostic hypotheses for ophthalmologists, due to the severity of this disease for the visual prognosis of patients as presented in this study.

RESULTS

Report of two patients with a history of progressive vision loss for 3 weeks, unilaterally, with a previous history of high myopia. The first patient had a corrected visual acuity of counting fingers at 1 meter in the right eye (OD) and 20/30 in the left eye (OS). Fundoscopy evaluation revealed nasal tilting of the optic nerve, reduced brightness macula, greenish hue with sectoral elevation in the right eye. Optical Coherence Tomography (OCT) showed the presence of hyperreflective material above the retinal pigment epithelium (RPE), classified as a type 2 choroidal neovascular membrane (CNV), with minimal subretinal fluid. The second patient had a corrected visual acuity of 20/50 in OD and counting fingers at 30 centimeters in OS, presented with 2+/4+ vitreous and intraretinal hemorrhage in OS, with macular edema and reduced macular brightness. OCT revealed the presence of hyperreflective material and subretinal fluid causing retinal detachment in the macular region. Both patients underwent intravitreal injection of Ranibizumab, with improvement in macular edema and visual acuity for the first three months. Reaching visual acuity up to this moment of counting fingers at 5 meters while still maintaining an anti-VEGF injection regimen.

IMAGES

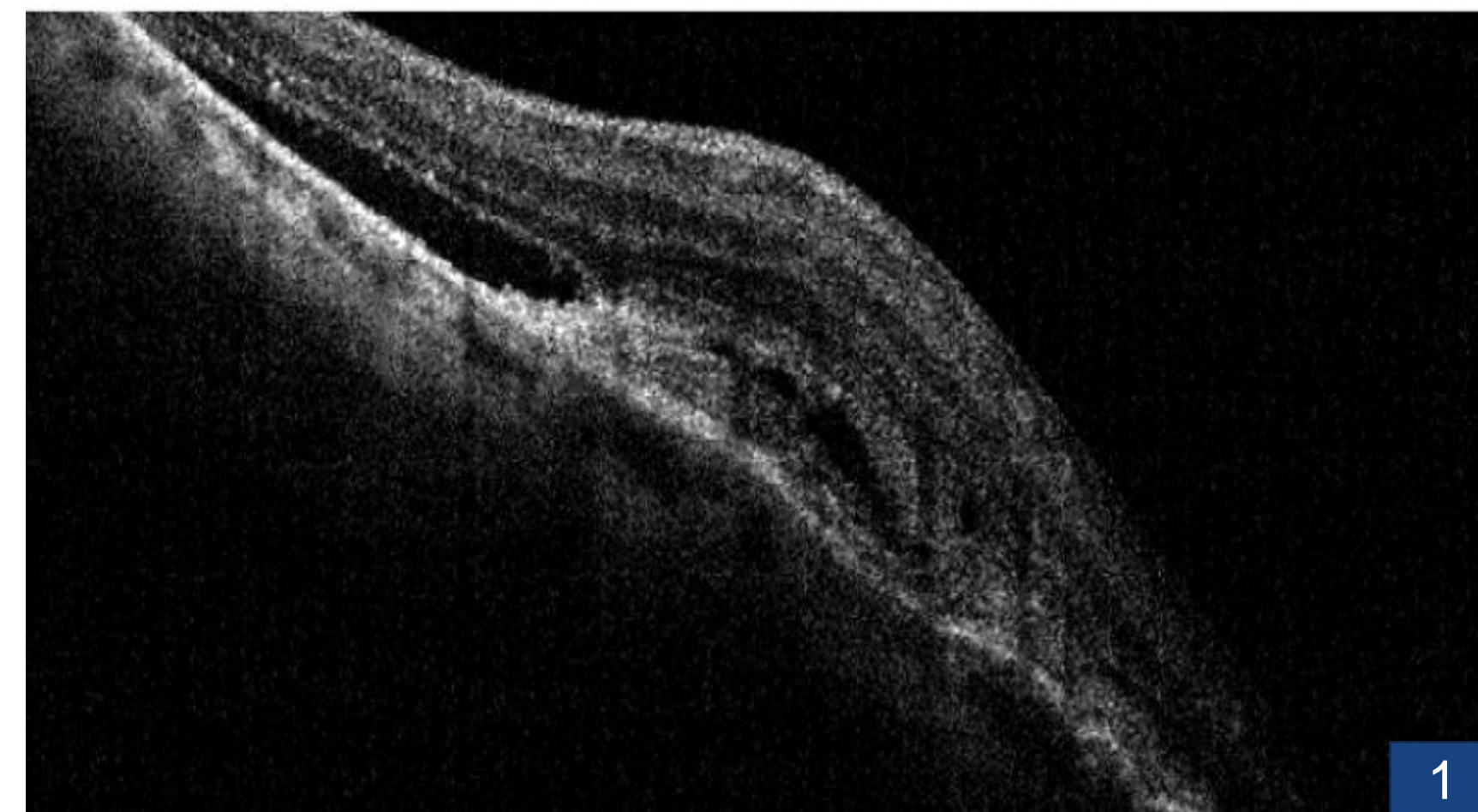


Image1: The first image depicts an optical coherence tomography in macular section of the first patient, showing subretinal fluid, presence of hyperreflective membrane above the RPE, and loss of normal retinal conformation.



Image 2: The second image is of the second patient and shows the presence of intraretinal hemorrhage suggestive of the presence of neovascular membrane and choroidal neovascularization. In other sections, there is the presence of subretinal fluid.