

Koroid Neovasküler Membranlı Bir Hastada Maküla Deliğinin Spontan Kapanması

Spontaneous Closure of Macular Hole in A Patient with Choroidal Neovascular Membrane

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Özet

Tam kalınlıkta maküla deliğinin kendiliğinden kapanması nadir bir olaydır ve genellikle cerrahi gerekir. Yetmişbir yaşında kadın hasta, yaşa bağlı maküla dejenerasyonu (YBMD) tanısı ile takip edilmekteydi. Dört yıl önce ani görme düşüşünden şikayet etmişti. Görme keskinlikleri sağ ve sol gözde sırasıyla 0.05 ve 1.0 idi. Optik koherens tomografi muayenesinde sağ gözünde tam kalınlıkta maküla deliği ve kuru tip YBMD saptandı. İzlem sırasında kuru tip YBMD'nin yaş tipe değiştiği ve koroid neovasküler membran(KNVM)'in geliştiği belirlendi. Maküla deliği kendiliğinden kapanmış ve aktif KNVM ve epiretinal membrana rağmen görme keskinliği artmıştı. Koroid neovasküler membran maküler deliğin kapanmasını kolaylaştırabilir ve ameliyattan önce kendiliğinden kapanma için gözlem bu iki kombine patolojiye sahip hastalar için bir seçenek olabilir.

Anahtar Kelimeler:Koroid neovasküler membran, Maküler delik, Optik koherens tomografi

Abstract

Spontaneous closure of a full thickness macular hole is a rare event and usually surgery is needed. A 71 year-old-woman had been followed with the diagnosis of age related macular degeneration (AMD). Four years ago she had complained with sudden vision drop. Visual acuities were 0.05 and 1.0 in right and in left eyes, respectively. On optical coherence tomography examination full thickness macular hole and dry type AMD were detected in her right eye. During follow up it was determined that dry type AMD had changed to wet form and choroidal neovascular membrane (CNVM) had developed. The macular hole had spontaneously closed and visual acuity increased despite active CNVM and epiretinal membrane. Choroidal neovascular membrane may facilitate macular hole closure and observation for spontanous closure before surgery may be an option for patients that have these two combined pathologies.

Keywords:Choroidal neovascular membrane, Macular hole, Optical coherence tomography

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INTRODUCTION

Macular hole (MH) is a generally round-shaped neuro-sensory defect in the foveal region that includes vertically all layers of the retina. It causes painless central vision loss and metamorphopsia in patients. Spontaneous closure of a full thickness MH is a rare event and usually surgery is needed (1). Here we present spontaneous closure of macular hole in a patient with choroidal neovascular membrane (CNVM).

CASE PRESENTATION

A 71-year-old woman had been followed with the diagnosis of age related macular degeneration (AMD). Visual acuities were 0.2 in the right eye and 1.0 in the left eye. She had active CNVM (**Figure 1**) and intravitreal ranibizumab

regimen was applied and CNVM was treated. Her left eye was normal (**Figure 2**). Four years ago she had complained with sudden vision drop. Visual acuities were 0.05 and 1.0 in right and in left eyes, respectively. On OCT examination full thickness MH and dry type AMD were detected in her right eye (**Figure 3**) and surgery was suggested, but the patient denied surgery. During the follow-up MH gradually enlarged to 800 micrometers in diameter, an epiretinal membrane was detected and vision dropped to counting fingers (CF) from 1 meter distance (**Figure 4**). Ten months ago it was determined that dry type AMD had changed to wet form again and CNVM had developed. The MH had spontaneously closed and visual acuity increased to CF from 2 meters despite active CNVM and epiretinal membrane (**Figure 5**). Intravitreal ranibizumab treatment was started again for CNVM.

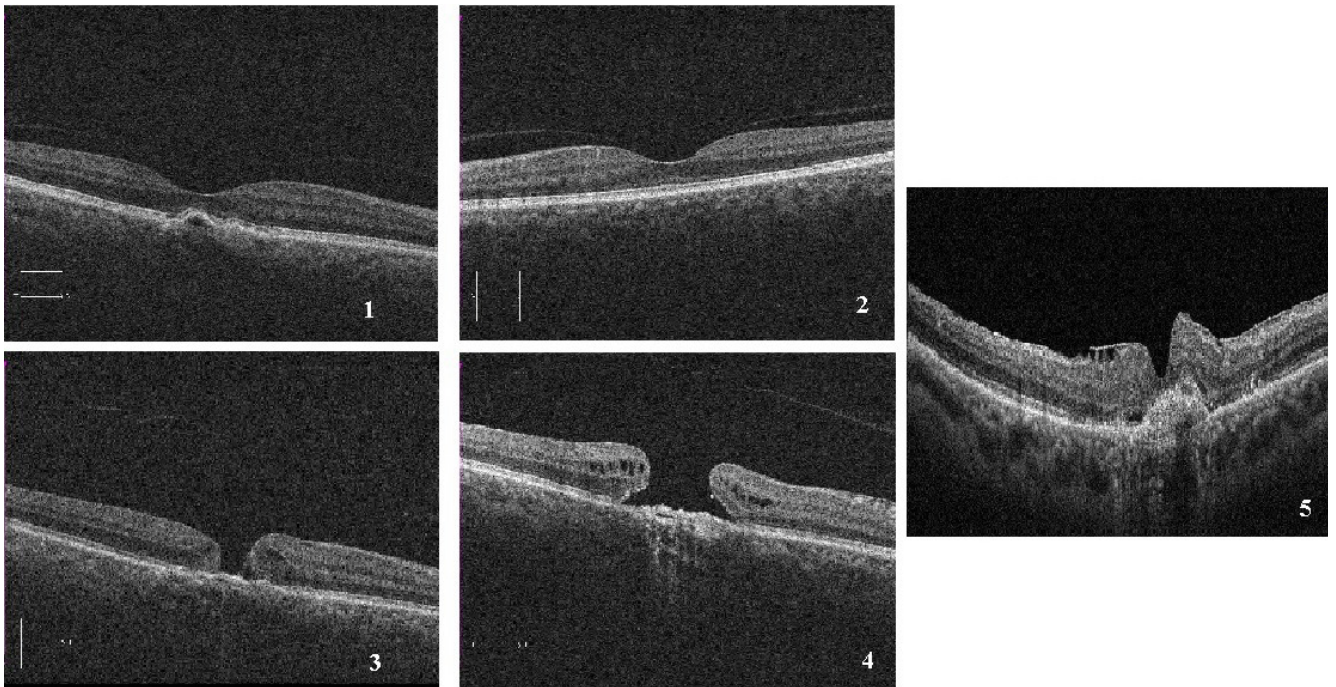


Figure 1. Spectral domain optical coherence tomography image demonstrates a small choroidal neovascular membrane and minimal pigment epithelial detachment.

Figure 2. Normal findings in the left eye in spectral domain optical coherence tomography image.

Figure 3. A small choroidal neovascular membrane and full thickness macular hole is seen in spectral domain optical coherence tomography image.

Figure 4. A large macular hole and choroidal neovascular membrane is seen in spectral domain optical coherence tomography image.

Figure 5. Spectral domain optical coherence tomography image of the right eye shows enlarged and active choroidal neovascular membrane, epiretinal membrane and spontaneous closure of MH.

DISCUSSION

Several reports have been reported about spontaneous closure of macular hole (2-4). On the other hand reports about spontaneous closure of a full-thickness macular hole in patients with CNVM are very rare (5,6). Antero-posterior traction forces that created by vitreous and tangential tractions on the surface of the retina are the most extensively accepted mechanisms regarding the pathogenesis of MH (6). The aims of vitrectomy surgery in MH are to remove these abnormal traction forces at the vitreo-macular interface and to promote glial proliferation. In our case, spontaneous closure of the MH may be caused by two possible mechanisms. CNVM may have caused buckle effect under the fovea with its mass, thus facilitated the bridging the edges of the MH closer to each other and promoted healing. Adjunctive agents such as growth factors, autologous platelets introduced into the environment by serum leaking from active CNVM may also have stimulated adjacent glial proliferation and facilitated closure (5). In a study Figuero and coworkers used autologous platelet-rich plasma as adjuvant to pars plana vitrectomy with internal limiting membrane peeling in the treatment of highly myopic macular holes and obtained complete closure in all patients (7). These two mechanisms might have also worked in combination.

In conclusion, choroidal neovascular membrane may facilitate MH closure and observation for spontaneous closure before surgery may be an option for patients that have these two combined pathologies.

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Research Contribution Rate Statement Summary: The authors declare that, they have contributed equally to the manuscript.

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