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Spontaneous closure of a full thickness macular hole

Jasmin Zvorničanin, Edita Zvorničanin, Zlatko Mušanović



Department of Ophthalmology, University Clinical Center Tuzla, Tuzla, Bosnia and Herzegovina

A primary full-thickness macular hole (FTMH) is defined as an idiopathic disruption of all the retinal layers in the fovea (1). Optical coherence tomography (OCT) enables better understanding of various macular disorders, and provides new FTMH classification based on two OCT features: the size, and the presence of vitreomacular traction (VMT) (2). The presence of VMT can be a significant prognostic factor, since FTMH, with the presence of VMT, tends to be smaller in diameter (1). Treatment options include: observation, pars plana vitrectomy and intravitreal ocriplasmin application (1, 2). A 64-year old man was referred with low vision in his right eye, noted five days earlier. Clinical examination revealed visual acuity (VA) of 20/80 in the right eye and 20/20 in the left. Anterior segment examination of both eyes was unremarkable. The measured intraocular pressure was 15 mmHg bilaterally. Fundus examination of the right eye revealed the presence of FTMH, while the left eye was normal. Optical coherence tomography showed FTMH of 213µm diameter and significant VMT in the right eye, and a normal OCT finding in the left (Panel A). The patient was scheduled for surgical treatment. Fifty-six days after the initial examination, and twelve days before the scheduled surgery, the patient noted significant spontaneous visual improvement. A control examination revealed VA of 20/20 in both eves. Fundus examination of the right eye presented complete vitreous detachment (PVD) and a small residual foveal depression, while the left eve remained normal. Control OCT examination showed complete spontaneous closure of the FTMH, with a small residual superficial defect and without VMT (Panel B). At the six-month follow up examination, he presented with preserved VA and stable OCT findings. The presence of PVD is reported to be related to the increased size of the FTMH (1). However, a small early FTMH has the capacity to repair itself after complete VMT separation via proliferation of retinal glia cells (2). Spontaneous FTMH closure has previously been reported in up to 3.5% of cases (3). Therefore, it is important to undertake a detailed preoperative examination in all patients with FTMH, even with persistent VMT.

Key words: Vitreomacular traction syndrome • OCT • Vitreoretinal surgery.

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Correspondence: zvornicanin_jasmin@hotmail.com Tel.: + 387 61 134 874; Fax.: + 387 35 303 250

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