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Letter to Editor

Spontaneous closure of the large idiopathic full-thickness macular hole

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Dear Editor,

Idiopathic full-thickness macular hole (FTMH) represents an interruption in all retina layers from the internal limiting membrane to the photoreceptors, is unrelated to any other ocular or systemic conditions, and usually affects older women¹. Disruption of the macula and fovea causes poor vision, metamorphopsia, and central scotoma. Optical coherence tomography (OCT) is used in the diagnosis, classification, management results, and follow-up. While spontaneous closure of traumatic MH in a few weeks following the trauma is a frequent event in the literature, the spontaneous closure of stage III and IV idiopathic MH is only sporadically reported^{2,3}. Standard procedures to close the MH and enhance visual function include sutureless, small incision vitrectomy, and internal limiting membrane peeling. Herein we report a case of a 76-year-old woman who presented with spontaneous closure of stage II idiopathic FTMH documented by OCT after the patient refused surgery and missed the advised regular follow-up due to the COVID-19 pandemic.

A 76-year-old woman with underlying hypertension and no history of ocular trauma presented in December 2019 with a right

painless blurring of vision for two months. Visual acuity was 1/60 in the right eye, with the best-corrected visual acuity of 3/60 in the affected eye. Anterior segment examination was within the normal limit on both eyes. Posterior segment examination of the right eye revealed FTMH (stage II) with posterior hyaloid detachment, as documented by OCT (Fig. 1A–B). The basal and minimal macular hole diameters were 607 μm and 326 μm , respectively (Fig. 1A). Surgical intervention was planned for this patient. When the patient refused the recommended surgical intervention, follow-up was advised. However, due to the COVID-19 pandemic, the advised follow-up of the patient was paused. The patient returned 31 months later (in July 2022) and reported improved central vision. Her visual acuity in the right eye was 6/6 with correction. Visual acuity in the unaffected eye was also 6/6 with correction. Repeated OCT showed that the MH was closed, and the retinal detachment resolved (Fig. 1B). Restoration of the macula's morphology is also observed with a slight pigment epithelium thickening at the foveolar level (Fig. 1B). After seven months of follow-up, the MH is still closed, and the corrected visual acuity is now stable.

FTMH is subclassified by the hole size, as determined by OCT, and the presence or absence of vitreomacular traction (VMT)⁴. Small FTMHs are those with a diameter of less than 250 μm , medium FTMHs have an aperture size of 250–400 μm , while large FTMHs have a larger aperture of 400 μm ⁴. A recent review reported that the incidence of spontaneous closure is between 4% and 11.5% and that spontaneously closed FTMHs were most commonly small (<250 μm) and without VMT⁵.

In conclusion, the spontaneous closure of idiopathic FTMHs

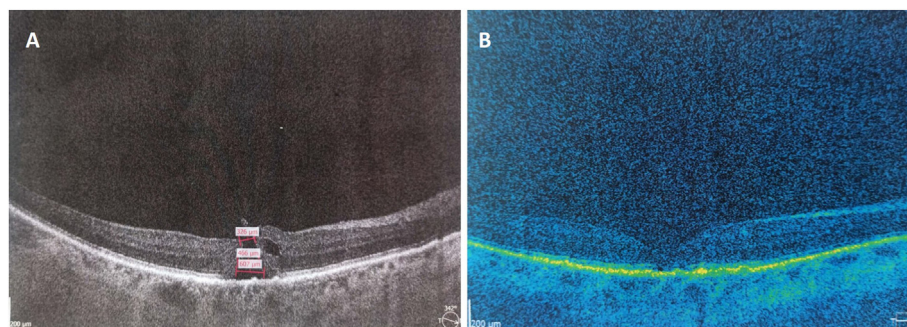


Fig. 1A–B. Right eye optical coherence tomography (OCT) section shows a full-thickness macular hole (FTMH); A: At initial presentation, the macular hole had a base diameter of 607 μm , minimum diameter of 466 μm , and hole height of 326 μm ; B: Repeated OCT section 31 months later revealed that the FTMH spontaneously closed.

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with good visual recovery is possible, even in cases with an aperture greater than 400 μm .

Declaration of competing interest

The authors have no conflict of interest associated with the current manuscript.

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Denisa Zvizdic, Faruk Nisic, Sanida Ljaljevic
*Eye Clinic, Clinical Center of the University of Sarajevo, Sarajevo,
Bosnia and Herzegovina*

Zlatan Zvizdic
*Clinic of Pediatric Surgery, Clinical Center of the University of
Sarajevo, Sarajevo, Bosnia and Herzegovina*

Semir Vranic*
College of Medicine, QU Health, Qatar University, Doha, Qatar

* Corresponding author. College of Medicine, QU Health, Qatar
University, PO Box 2713, Doha, Qatar.
E-mail addresses: svranic@anubih.ba, semir.vranic@gmail.com (S.
Vranic).

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