Surgical Retina

SPONTANEOUS CLOSURE OF LAMELLAR MACULAR HOLES AND RELEASE OF ASSOCIATED TRACTIONAL EPIRETINAL MEMBRANES

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PURPOSE: To document two cases of spontaneous closure of lamellar macular holes (LMH) and spontaneous release of related tractional epiretinal membranes (ERM) studied by spectral-domain optical coherence tomography (SD-OCT).

METHODS: Observational cases report.

RESULTS: A high myope 59 years-old female presents with long-standing decreased visual acuity and metamorphopsia in left eye. Best corrected visual acuity (BCVA) was 0.1 in left eye and a foveal round reddish lesion, macular glistening, and partial posterior vitreous detachment (PVD) were evident on fundus examination. SD-OCT showed an idiopathic tractional ERM and LMH associated with significant distortion of internal retinal layers. Substantial release of tractional forces induced by ERM and progressive LMH closure were observed during close SD-OCT follow-up. Complete spontaneous closure of LMH, self-peeling of ERM and restored normal foveal contour followed ten months after first observation – BCVA improved to 0.7 and complete PVD was noticed. A 60 years-old female with complaints of floaters in left eye presents a BCVA of 0.9 and partial PVD. SD-OCT displayed a tractional ERM and associated LMH with splitting of inner retinal layers in a lenticular shape. Slow progressive closure of LMH and relief of tractional forces induced by ERM were documented by SD-OCT. Spontaneous LMH closure and ERM self-peeling were observed 5 years after first evaluation.

CONCLUSION: Although rare, spontaneous LMH closure can occur when traction forces exerted by ERM are released. In adults, ERM spontaneous release results from pulling forces exerted by the vitreous on retinal surface during PVD.