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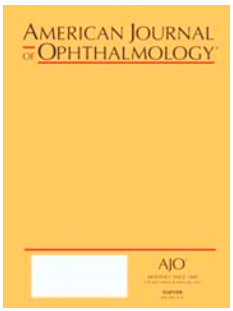

Role of lamellar hole-associated epiretinal proliferation in lamellar macular holes

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ABSTRACT

Purpose: To compare the morphologic and functional characteristics and response to surgery of lamellar macular holes (LMHs) with and without lamellar hole-associated epiretinal proliferation (LHEP) and standard epiretinal membrane (ERM).

Design: Retrospective observational case series.

Methods:

Setting: Vitreoretinal clinical practice.

Study population: Eigthy-four eyes of 84 patients. The included eyes must present an irregular foveal contour and schitic or cavitated lamellar separation of neurosensory retina on spectral-domain optical coherence tomography (SD-OCT) and an area of increased autofluorescence on blue- fundus autofluorescence (B-FAF). Twenty-six eyes underwent pars plana vitrectomy (PPV).

Main outcome measures: Logarithm of minimal angle of resolution (logMAR) best-corrected visual acuity (BCVA) and evolution of morphologic characteristics.

Results: Standard ERM alone, LHEP alone and concomitant ERM and LHEP were found in 51.2%, 13% and 35.7% of the cases, respectively. A substantial stability of functional and morphologic parameters throughout the follow-up period was observed in the eyes that did not undergo surgery indipendently from the associated epiretinal material. The most significant change, observed in the preoperative period, in the eyes that underwent surgery, was the thinning of the central foveal thickness (CFT, P <0.001). In the operated eyes, logMAR BCVA continuosly improved during the postoperative period (P=0.006), CFT was found increased and diameters of the hole were found reduced since the first month after operation (P<0.001).

Conclusions: In eyes with LMHs, presence of LHEP without any trace of standard ERM is rare. The presence of LHEP does not seem to influence the natural course of the disease and the response to surgery.