DO MEMBRANE ADHESION MORPHOLOGIES OF CASES WITH EPIRETINAL MEMBRANE ON OPTICAL COHERENCE TOMOGRAPHY (OCT) HAVE ANY EFFECT ON POSTOPERATIVE FUNCTIONAL SUCCESS?

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Purpose: Comparing the diffuse and focal ERM adhesion cases on OCT with respect to surgery results of epiretinal membrane (ERM) peeling and pars plana vitrectomy (PPV).

Material and Method: Fifty seven eyes of 57 patients with ERM, which performed PPV and ERM surgeries, were evaluated retrospectively. The cases were classified as focal (Group 1) and diffuse (Group 2) with respect to OCT morphologies uncorrected visual acuity (UCVA in LogMAR values), macular thickness values measured via OCT, and surgery complications were evaluated in both preoperative and postoperative period.

Results: Age and gender distribution were recorded similar in groups. Mean follow-up period of both groups was 14.6±8.4 months. UCVA values of group 1 (n=35) and group 2 (n=22) were respectively 0.84±0.57 and 1.11±0.79 in preoperatively, and found as 0.46±0.30 and 0.75±0.48 (p=0.04) in postoperatively. Macular thickness values of group 1 and group 2 were respectively 432±126 µm and 486±138 µm in preoperatively, and changed to 281±173 µm and 318±115 µm (p=0.31) in postoperatively. In 2 cases iatrogenic tear has developed during the posterior vitreus parsing, 3 cases has developed iatrogenic hemorrhage during the ERM peeling.

Conclusion: In both preoperatively diagnosed diffuse and focal ERM adhesions groups did not have significantly differences on macular thickness values after the surgeries; in focal group UCVA values has more improvement than diffuse group. Functional success after surgery in patients with ERM can be predictable via preoperative evaluation of the OCT adhesions.