

## Abstract

*Purpose:* To report our findings on morphological assessment of the vitreomacular interface and intraretinal architecture using SD-OCT before and after delamination of epiretinal membranes in patients with advanced proliferative diabetic retinopathy (PDR). *Design:* Retrospective, noncomparative, interventional case series.

*Participants:* 14 patients with tractional retinal detachment (TRD) secondary to proliferative diabetic retinopathy had vitrectomy and membrane delamination.

*Intervention:* Pars plana vitrectomy (PPV) and delamination of pre-retinal membranes for tractional retinal detachment secondary to proliferative diabetic retinopathy (PDR) operated by two surgeons over one year period. *Main outcome measures:* LogMAR distance visual acuity (VA), optical coherence tomography findings, including automated central 1-mm subfield retinal thickness (CFT), integrity of photoreceptor inner and outer segments (IS/OS) function, integrity of external limiting membrane (ELM), presence of epiretinal membrane (ERM), subretinal fluid (SRF) and cystoid macular oedema (CMO). Two-trained masked observers independently graded the OCT findings.

*Key words:* SD-OCT, epiretinal membrane, proliferative, diabetic retinopathy.