

**Prognostic Factors of Pars Plana Vitrectomy
in Treatment of Lamellar Macular Holes**

Thesis

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Summary

Lamellar macular holes (LMHs) are a clinical entity first described by Gass in 1975 as a result of rupture of cystoid macular edema and considered as a partial thickness defect of the macula caused by separation between outer and inner retinal layers .

OCT evaluation is important for diagnosis of LMH and its classification into tractional LMH which associated with epiretinal membrane (ERM) and degenerative LMH which associated with lamellar hole associated epiretinal proliferatio (LHEP) and absence of ERM.

It is noticed that the majority of patients with LMH experience mild to moderate central visual loss and/or metamorphopsia, and the lesion remains stable on OCT over the years, so many physicians follow up these patients in the long term without surgery Vitrectomy is considered if there is decrease in visual acuity or progressive thinning of the fovea during follow up period.

Our current study aims to investigate and analyze factors that determine functional and anatomical outcome of vitrectomy for lamellar macular hole.

We used SD- OCT as a preoperative evaluation of lamellar macular hole, differentiation between tractional or degenerative types and the following data was evaluated:

1. Presence of epiretinal membrane (ERM)
2. presence of epiretinal Proliferation (LHEP)
3. Ellipsoidal zone disruption
4. Minimum retinal thickness
5. Lamellar macular hole diameter(inner diameter & outer diameter)

Our results demonstrated that presence of epiretinal membrane (ERM), absence of epiretinal Proliferation (LHEP), intact IS/OS junction , minimum foveal thickness more than 100 μm and good initial VA all are favorable prognostic factors for good post operative surgical outcome.