Optic disc pit maculopathy and its spectrum of management

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Optic disc pit maculopathy (ODPM) encompasses serous macular detachment and retinoschisis.[1] There are no discrete

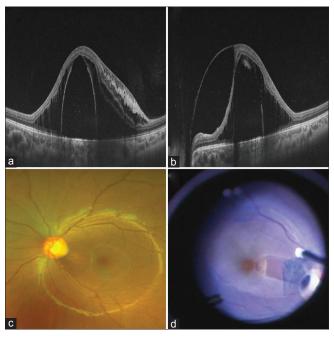


Figure 1: Case 1 (a) SSOCT left eye showing retinoschisis involving multiple retinal layers; and (b) neurosensory detachment extensing up to the temporal edge of the pit; (c) Colour fundus photograph of left eye showing optic disc pit and associated serous retinal detachment; (d) PPV with ILM peeling and flap being tucked in the pit

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recommendations as to the best management option. Here, we describe three cases of ODPM managed differently in various situations.

Our first case was a 15-year-old girl was diagnosed with ODPM with best-corrected visual acuity (BCVA) of counting finger at 1 m in left eye [Fig. 1a-c]. A 23-gauge pars plana vitrectomy (PPV), brilliant blue dye (BBG) assisted ILM peeling and tucking of the free ILM flap into the ODP was done [Fig. 1d].

The second case was a 34-year-old woman with BCVA of 20/200 in the affected right eye [Fig. 2a]. SSOCT exhibited associated foveal thinning [Fig. 2b]. So, fovea-sparing ILM flap was fashioned such that 2/3rd disc diameter of ILM was left attached over the fovea [Fig. 2c].

Our third case was 21-year-old women with previously failed surgery (PPV with conventional ILM flap) for ODMP right eye [Fig. 3b]. ILM flap was not visible on SSOCT over the ODP [Fig. 3a]. Autologous ILM transplantation and gas tamponade was performed using the ILM harvested from the nasal retinal [Fig. 3c].

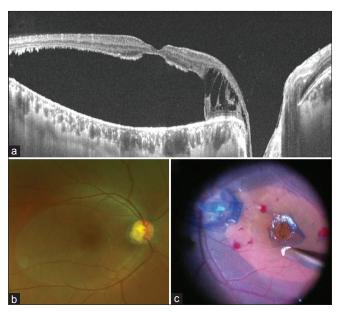


Figure 2: Case 2 (a) SSOCT image of the right eye showing retinoschisis with neurosensory detachment at the macula and severe foveal thinning; (b) Color fundus photograph of left eye showing optic disc pit and associated macular retinal detachment; (c) Modified technique of foveal-sparing ILM peel being done to avoid the risk of macular hole; ILM flap created was tucked in the pit

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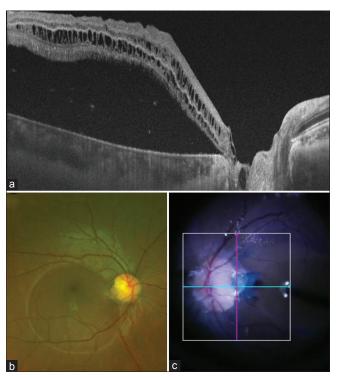


Figure 3: Case 3 (a) SSOCT image of the right eye showing retinoschisis with persistent neurosensory detachment at the macula; (b) Color fundus photograph of right eye showing optic disc pit maculopathy that failed to resolve after first surgery; (c) ILM transplantation being done over the pit using the ILM harvested from the nasal retina

All cases reported complete resolution of fluid with a BCVA >20/80 in all cases during the mean follow-up of 9 months.

Discussion

Pars plana vitrectomy and gas tamponade are considered to be the most effective steps in ODPM surgery. ^[2,3] ILM peeling eliminates traction, ^[4,5] ensures complete hyaloid removal, and the flap over the pit intercepts the fluid from vitreous cavity (Case 1). But there is risk of macular hole formation ^[4] in cases where the retina is extremely thinned out. A foveal-sparing ILM peel can be considered in such cases (Case 2). In refractory cases (Case 3), if no resolution is noted even after ≥12 months autologous ILM transplantation has been reported to be an effective treatment option. ^[2,4]

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Conflicts of interest

There are no conflicts of interest.

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