

Idiopathic Macular Holes Following Pars Plana Vitrectomy for Retinal Detachment

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PURPOSE

To report on clinical features, and postoperative results of idiopathic macular holes (IMH) occurring following pars plana vitrectomy (PPV).

METHODS

Retrospective chart review of five patients (age, 61.2 ± 9.6 , range 47-74), with IMH stage 1-3 (diameter 259 ± 35 , range 223-293), which developed after PPV for rhegmatogenous retinal detachment complicated by PVR (n? 4), and diabetic tractional retinal detachment (n? 1). ERM/ILM were not peeled from the macula during initial surgery. Axial length was 25.65 ± 2 mm (range 25.03-29.55).

RESULTS

IMH occurred 10.2 ± 5.9 months after initial PPV. An ERM was present in all cases. 20-G (3 cases) and 25-G (2 cases) PPV with ERM and ILM peeling were carried out with gas tamponade. After 7.2 ± 3.0 months from IMH surgery, IMH was closed/flat in 4 cases and open/flat in 1. Best-corrected visual acuity improved from 1.02 ± 0.48 (20/200) (range 0.5-1.5, 20/63-20/630) to 0.7 ± 0.21 (20/100) (range 0.4-1, 20/50-20/200) ($p=0.15$). No intra or postoperative complications were observed.

CONCLUSION

IMH following PPV are rare, occur in eyes with axial length exceeding 25 mm, and are associated with residual ERM. PPV with ERM and ILM peeling along with gas tamponade can successfully close the IMH.