

Pars Plana Vitrectomy with Binocular Indirect Ophthalmoscope

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PURPOSE

Describe our experience with two-port vitrectomy, using binocular indirect ophthalmoscopy (BIO) as visualization system, in management of several vitreoretinal pathologies.

METHODS

A retrospective chart review of patients underwent two-port vitrectomy between 1997 to 2005.

RESULTS

We reviewed 139 consecutive patients. 52% (72) were male, average age was 54 years old (range 1-70) and mean follow-up of 23.6 months (range: 4-60 months). Diagnosis were tractional retinal detachment (RD) due to diabetic retinopathy, rhegmatogenous RD, foreign intraocular body, epiretinal membrane, pars planitis and others. Median baseline Best Corrected Visual Acuity (BCVA) was 1.48 logMAR, and median final BCVA was 1.0 logMAR. As tamponade we used silicone oil in 57.5% (80), SF6 in 2.9% (4) and C3F8 in 5.1% (7). A scleral buckling was used in 19.4% (27) of patients, lensectomy in 3.6% (5). Anatomic success with one procedure was obtained in 90.7% (126). The most frequent post operative complications were macular fibrosis, papillary atrophy and glaucoma as in standard three ports vitrectomy. After the surgery, the BCVA improved in 47% (65), stable in 12% (17) and worsened in 41% (57).

CONCLUSION

Two ports vitrectomy assisted by BIO is a technique that can be used on different vitreoretinal pathologies, either as a main or as an adjuvant visualization instrument. It offers advantages versus panoramic lenses (lower cost, availability, less trauma to sclerotomies, less ports and decreased vitrectomy time) and its main disadvantage is a difficult learning curve.