

## LONG-TERM OUTCOME OF VITREOUS SURGERY FOR PROLIFERATIVE DIABETIC RETINOPATHY

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**Background.** Proliferative diabetic retinopathy (PDR) is one of the most prevalent causes of blindness in developed countries. This retrospective study evaluated the long-term visual outcomes and complications of vitrectomy resulting from various PDR complications.

**Methods.** A review of 436 eyes (367 patients) treated with pars plana vitrectomy for complications of PDR was conducted for the period of 1992 to 1997 at the Veterans General Hospital-Taipei.

**Results.** Indications for surgery were: (1) vitreous hemorrhage, 263 eyes (60.3%); (2) vitreous hemorrhage and tractional retinal detachment, 86 eyes (19.7%); (3) tractional retinal detachment, 80 eyes (18.3%); (4) combined tractional and rhegmatogenous retinal detachment, 2 eyes (0.5%); (5) progressive fibrovascular proliferation, 5 eyes (1.1%). Best postoperative visual acuity was improved for 274 eyes (63%), unchanged for 27 eyes (6%), and worse for 135 eyes (31%). Postoperative results yielded 203 eyes (46.6%) that had final vision of 3/60 or better, and 102 eyes (23.4%) that had 6/30 or better. The most common intraoperative complication was iatrogenic retinal tear (11.1%) while the most common postoperative complication was recurrent vitreous hemorrhage (23.4%).

**Conclusions.** More than half of the cases with complications of proliferative diabetic retinopathy could be effectively treated with vitreous surgery.

**Keywords:** proliferative diabetic retinopathy, vitreous surgery.

### INTRODUCTION

Proliferative diabetic retinopathy (PDR) is one of the leading causes of blindness in developed countries.

Vitreous surgery is commonly used to treat various severe complications of PDR.<sup>1,2</sup> Accurate prediction of the long-term visual results of vitreous surgery for these complications is important in determining appropriate surgical strategies. Common PDR complications

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