

## Visual Outcome After 360-Degree Retinectomy in Total Rhegmatogenous Retinal Detachment with Advanced Proliferative Vitreoretinopathy: A Case Series

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**Abstract :** Introduction: Rhegmatogenous retinal detachment is a condition where there's a break in the retina, which allows the vitreous to directly enter the subretinal space. Proliferative vitreoretinopathy (PVR) may develop due to this condition and can result in a new break, which could cause traction on the previously detached retina. Various methods of therapy can be done to treat this complication. Case: This case series involved 2 eyes of 2 patients who had total retinal detachment with advanced PVR. Pars plana vitrectomy was performed, and a 360-degree retinectomy procedure with perfluorocarbon liquid usage was done. This was followed by endo laser retinopexy to surround the border of retinectomy. 5000 cs silicone oil was used in 1 eye, whereas 12% of perfluoropropane gas was used in the other eye as a tamponade. These procedures were performed with meticulous attention to prevent any fluid from entering the subretinal space. Postoperative examination showed attachment of the retina and improvement of the patient's visual acuity. Both eyes' intraocular pressure was in the normal range. One eye developed retinal displacement, but no other complications occurred. Discussion: Rhegmatogenous retinal detachment with advanced PVR is a complex situation for vitreoretinal surgeons. PVR is characterized by the growth and migration of preretinal or subretinal membranes. PVR is the most common cause of retinal reattachment failure. A 360-degree retinectomy is an alternative surgical method to overcome this condition. Objectives of this procedure are releasing retinal traction caused by PVR, reducing the recurrence rate of PVR, and reattaching the retina to the pigment epithelial surface. Conclusion: 360-degree retinectomy provides satisfactory retinal reattachment and visual outcome improvement in rhegmatogenous retinal detachment with advanced PVR.

**Keywords :** RRD, retinectomy, pars plana, advanced PVR

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