

Project No. : 3492/2006

**Five-fluoro-uracil and low molecular weight heparin in the
management of proliferative vitreo-retinopathy**

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OBJECTIVES

Proliferative vitreoretinopathy (PVR) is the most common cause of failed repair of a primary rhegmatogenous retinal detachment (RRD) and occurs when cellular proliferation creates traction on the retina usually leading to a recurrent rhegmatogenous retinal detachment. The success rates for the surgery of complicated RRD has doubled with improved vitreous techniques from 35% to 40% to approximately 65% to 75% at 06 months. However, despite these advances, recurrent vitreo-retinal traction leads to re-detachment in more than one-fourths of the initially successful cases. As a result there is an effort to tackle the problem of PVR through some other means. The use of adjunctive treatment to prevent cellular proliferation holds promise for the prevention of PVR or recurrences after surgery. One focus has been on the use of intra-vitreous antimetabolites to prevent the occurrence of PVR.

METHODOLOGY

30 patients of complicated retinal detachment associated with proliferative vitreo-retinopathy (PVR), CI or more were managed by vitreo-retinal (VR) surgery with the addition of 250 ug/ml of 5-fluorouracil (FFU) and 1 IU/ml of low molecular weight heparin (LMWH) to the vitreous infusion. The patients were examined for any evidence of PVR till 180 days as also for any systemic or any other ophthalmic complication.

RESULTS

Out of the 30 cases in the study group, 25 (83.34%) of the cases had retinal settlement at the end of six weeks which is similar to the outcomes of conventional VR surgery. There was no case of any serious complication.

RECOMMENDATIONS

The addition of LMWH and FFU did not enhance the outcome of VR surgery.