

Perfluorodissection in Vitreoretinal Surgery: A Novel Technique

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SYNOPSIS

Improvement in surgical techniques has led to improved anatomic and functional success rates following surgery for severe complications of proliferative diabetic retinopathy (PDR) and uveitic vitreo-retinal complications. We found that perfluorodissection using perfluorocarbon liquid in limited amounts (mean: 4 ml) provides outcomes better or comparable to conventional pick and scissors dissection in PDR and complex uveitic cases. With proper selection of patients and techniques, the anatomic success rate can exceed 90% with a considerable shorter operating time even in the most severe cases. Other advantages include retinal stability at the time of vitreous removal, better visualization of vitreous and intraocular structures, rapid retinal reattachment, less blood in the vitreous cavity, subretinal fluid resolution, blood confinement, and easier dissection of epiretinal membranes. This video demonstrates the applicability of using perfluoro dissection during vitrectomy in eyes with PDR and and uveitic vitreo-retinal complications.