RETINAL DETACHMENT & PVR

PROLIFERATIVE VITREORETINOPATHY IN RETINAL DETACHMENT

Courses

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Proliferative vitreoretinopathy remains the leading cause of failure following retinal detachment surgery, occurring in 5–10% of cases and representing one of the most challenging conditions encountered in vitreoretinal practice. Despite advances in surgical instrumentation and tamponade agents, outcomes in established PVR continue to be limited by the complexity of membrane formation, the risk of reproliferation, and the technical demands of operative intervention. A structured, comprehensive educational course addressing all stages — from pathobiology and risk stratification through to surgical decision-making and advanced operative technique — is essential for surgeons at every career stage.

Course Description This two-hour multi-faculty instructional course offers a structured, case-enriched exploration of PVR across its full clinical spectrum. The course is designed for vitreoretinal surgeons of all levels, from trainees and fellows to experienced consultants seeking to refine their approach to complex cases. Teaching will combine didactic presentations, annotated surgical video, and interactive case-based discussion, with dedicated time for audience Q&A.

The course will be delivered across five thematic modules: Pathophysiology & Classification — cellular mechanisms of PVR, the role of RPE and glial cells, cytokine-driven proliferation, and the updated Retina Society Classification Risk Factors, Prevention & Prophylaxis — identifying the at-risk eye, surgical strategies to minimise PVR, and the evidence base for adjunctive pharmacotherapy Surgical Planning & Decision-Making — when to operate, choice of approach (scleral buckle vs. PPV vs. combined), tamponade selection, and informed consent considerations Operative Technique — membrane dissection, segmentation and delamination, relaxing retinotomies and retinectomies, management of anterior PVR, and achieving retinal re-apposition Postoperative Management & Outcomes — anatomical and functional outcomes, reoperation strategies, and the evidence for silicone oil removal timing

Learning Objectives By the end of this course, participants will be able to: Describe the pathophysiological basis of PVR and apply the Retina Society Classification in clinical practice Identify modifiable risk factors and implement preventive surgical strategies Construct a logical, evidence-based surgical plan tailored to PVR grade and distribution Execute key operative steps including membrane peeling, retinotomy, and tamponade selection with confidence Counsel patients appropriately and manage expectations regarding visual and anatomical prognosis