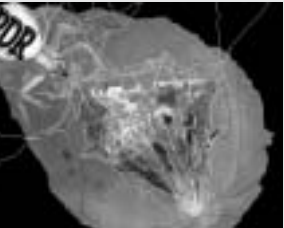


# SYMPOSIUM: PROLIFERATIVE DIABETIC RETINOPATHY

Moderators: Mahmoud Soliman, Khaled El-Rakhawy

Wednesday, September 15, 2004 ; 8:00 - 5:15



## Intraoperative and postoperative complications after vitrectomy in diabetic cases

*Author: Nur Acar, MD, Yaprak Banu Unver, MD, Ziya Kapran, MD, Mehmet Cakır, MD, Zerrin Bayraktar, MD, Tugrul Altan, MD, Basak Yilmaz, MD, Irfan Perente, MD*

### **Purpose:**

To evaluate the incidence of intraoperative and postoperative complications encountered after pars plana vitrectomy (PPV) in diabetic cases.

### **Methods:**

The medical records of 201 consecutive eyes with diabetic retinopathy that underwent PPV were reviewed retrospectively for the incidence of intraoperative and postoperative complications.

### **Results:**

The mean age of the patients was  $56.98 \pm 13.45$  years. The indications for PPV was tractional retinal detachment (RD) in 96 eyes, rhegmatogenous RD in 20 eyes and vitreous and/or subhyaloidal hemorrhage in 139 eyes. The patients were followed-up for a mean period of 7.51 months postoperatively. Preoperative mean best corrected visual acuity (BCVA) of 0.01 increased to 0.03, 0.08, 0.09, 0.10 and 0.13 at first week, first, third, sixth months and first year ( $p \leq 0.0001$ ). Intraoperative complications were iatrogenic retinal tear (13.5%), iatrogenic retinal hemorrhage (4%), fibrinoid reaction (3,3%). The most frequent postoperative complication was cataract: 32.8% at first and 46.1% at sixth months. Intravitreal hemorrhage was present in 23.1% in 1st week, decreasing to 10.9 % at sixth months. Postoperative high intraocular pressure detected in 16.1% of cases decreased to 9.9% and 6% at sixth months. Preoperative rubeosis iridis of 10.9 % was found to be stable statistically ( $p > 0.05$ ) at all follow-up times. Anterior hyaloidal proliferation was detected in 8% of eyes by the first month. Retinal detachment, epiretinal membrane, macular edema were other complications encountered in 15.6%, 22.4%, 22% of eyes at the sixth month follow-up respectively.

### **Conclusion:**

In diabetic eyes complicated with RD or intraocular hemorrhage, improvement of visual acuity is achieved by PPV. The most frequent complication is iatrogenic retinal tear intraoperatively and cataract postoperatively. Persistent intraocular hemorrhage, anterior hyaloidal proliferation, RD are other important complications necessitating repeat vitrectomy.

### **Take-home message:**

During follow-up careful evaluation for the development of complications is very important in diabetic eyes after PPV since timely management of potential devastating complications is necessary.