RAISED INTRAOCULAR PRESSURE AFTER PARS PLANA VITRECTOMY WITH SILICONE OIL TAMPONADE

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Purpose: To study the incidence and mechanism of raised intraocular pressure (IOP) after pars plana vitrectomy with silicone oil tamponade and their response to treatment in Asians. Methods: This is a retrospective case series of consecutive patients who have undergone pars plana vitrectomy with silicone oil injection in Tan Tock Seng Hospital, Singapore over a 3 year period. Patient demographics and clinical details pre and post operatively such as medical history, intraocular pressure, visual acuity, complications, types of treatment and outcomes were captured. Presence of raised IOP and the result of medical and surgical management were the main outcome measures. This study also explores the various types of mechanisms that cause raised IOP postoperatively. Results: Fourteen of 39 eyes (35.9%) developed raised IOP after pars plana vitrectomy and silicone oil injection. Three were treated only with antiglaucoma medications, 11 had a combination of medication and removal of silicone oil. Of them, 12 eyes had their pressure under control. The risk of post-operative raised IOP was related to the presence of post-operative risk factors (p=0.023), in particular post-operative aphakia (p=0.002). Conclusions: Raised intraocular pressure occurs in a fair proportion of patients treated with silicone oil. Most of them are treated effectively with antiglaucoma medications alone. Silicone oil removal alone reverses the raised IOP in majority of patients. Financial Disclosure: No.