Oral | Abstract 325

RETINAL DETACHMENT & PVR

HOW TO SIMPLYFY PNEUMATIC RETINOPEXY

Oral Presentation

Chwiejczak K.*, Elamrani A.

Nottingham University Hospitals NHS Trust ~ Nottingham ~ United Kingdom

Pneumatic Retinopexy (PnR) has long hostory as a sucessful technique of retinal detachment repair. We ustilised single procedure approach with cryotherapy applied immediately prior to intravitreal gas.

A consecutive case series of 25 patients,(14 male, 11 female, age: 36-83) who underwent PnR for rhegmatogenous retinal detachment. Patients who were considered for pneumatic retinopexy had retinal tears above the 4and 8 o'clock meridian and within 2 clock hours . All of them underwent cryotherapy to the retinal tear, followed by anterior chamber paracentesis and insertion of gas tamponade. All procedures were performed by a single surgeon (KMC). The patients were followed up for 6 months. Primary sucess was sucessful re-attachment. Visual acuity results, type of tamponading agent, lens status, presence of lattice degeneration, type of break, outcome of secondary surgery in failed cases, ocurrence of proliferative vitreoretinopathy and need for cataract surgery in phackic patients, were recorded.

Successful retinal reattachment was in 21/25 patients (84%). Majority of patients had breaks in 2 superior clock hours, 11-1, where success rate was 15/17 (88.2%) Patients who had breaks in the 4 superior quadrants 11-2 o’clock, the success rate was 19/21 (90.5%). Worse success rate was in patients with breaks around horizontal meridian (50%). PR on 1 patient with a break at 8 o’clock, failed. Location of the retinal tear was statistically significant as predictor of sucessful surgery. The case series included 2 pseudophakic patients, both of whom had failed procedures. There was no case of proliferative vitreoretinopathy or significant epiretinal membrane. All patents who underwent secondary surgeries, had successful reattachment. Mean vision improved form 0,27 LogMAR to 0,09 LogMAR. 1 patient with a large tear developed vitreous haemorrhage, 1 patient with preexisting cataract, required cataract surgery. Age, sex, visual acuity, presence of lattice degeneration, type of tampnading gas, type of retinal tear, were not statistically significant for the outcome.

PR with cryotherapy is a safe and efficient technique of retinal detachment repair. Cryotherapy prior to gas tamponade in single procedure proved to be a good alternative to subsequent laser. It seems to work best if the breaks are located in 4 superior clock hours and in phackic patients.

Muni, R. H., Francisconi, C. L. M., Felfeli, T., et.al (2020). Vision-Related Functioning in Patients Undergoing Pneumatic Retinopexy vs Vitrectomy for Primary Rhegmatogenous Retinal Detachment. JAMA Ophthalmology, 138(8), 826. https://doi.org/10.1001/jamaophthalmol.2020.2007