

Pneumatic retinopexy as a primary repair for complicated retinal detachments

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Advantages:

To assess the efficacy of pneumatic retinopexy (PR) in complicated retinal detachments without the possibility of a vitrectomy in the next two weeks or with patients in very bad health condition. Complicated retinal detachment was defined as a detachment in pseudophakic/ aphakic eyes; eyes after previous buckling surgery; or with vitreous hemorrhage.

Methods:

40 detachments operated between 2006-2009 with cryopexy, paracentesis and gas injection (SF6, C3F8 and air). PR was performed on 21 aphakic/pseudophakic eyes (group I), 9 eyes with previous buckling surgery in the upper half of the eye (group II), and 10 eyes with light vitreous hemorrhage (group III). All patients were treated with injection of 100% gas (SF6, C3F8, air), under local anesthesia (topical, subconjunctival or peribulbar injection) after a temporal paracentesis. Cryopexy was performed under breaks or vitreous adhesions.

Effectiveness / Safety:

Mean follow-up ranges from 3-36 month. Single operation success rate was 62,5% (25/40 eyes). Retina was attached in 66,6% (14/21 eyes) in group I, 66, 6% (6/9 eyes) in group II and 50% (5/10 eyes) in group III. Second gas injection was performed only in pseudophakic/aphakic group with complete reattachment of the retina. Vitrectomy was performed in 10 patients with anatomical success. Three patients were not operated due to cardiovascular problems: one of them had an inferior detachment with useful visual acuity 5/6.

Take home message:

You can apply this cost-effective, outpatient procedure even in cases where anesthesia is not possible or risky. It gives you time, spares macula and in unsuccessful cases, a vitrectomy is still possible.