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### PNEUMATIC RETINOPEXY FOR SELECTED CASES OF RETINAL DETACHMENT: A THIRTEEN YEARS RETROSPECTIVE SINGLE-CENTER STUDY

Poster

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#### **Purpose:**

The aim of this study is to retrospectively analyze the results of more than 100 cases of pneumatic retinopexy (PnR), a surgical option for the repair of rhegmatogenous retinal detachment (RD), performed at a single Hospital in Northern Italy during a period of thirteen years (2008-2020)

#### **Methods:**

102 patients with rhegmatogenous retinal detachment (among 1505 total cases of RD) were treated in a thirteen years period (2008-2020) with PnR by four different vitreoretinal surgeons. All the procedures consisted of intraoperative cryopexy or postoperative laser of the retinal break(s), paracentesis of the anterior chamber followed by transconjunctival pars plana injection of 0.5 ml undiluted SF6 and postoperative positioning. Follow up visits were scheduled at 1, 2, 3 days, and then as needed up to 12 months postoperatively

#### **Results:**

In a thirteen years period analysis we used PnR as the primary choice for the repair of RDs in 6.8 % of cases. The single operation success was 85.3%. The retina was reattached on average at 1.42 day postoperatively, and when it re-detached, it did so 1.69 month after surgery. Best corrected visual acuity improved from 0.49 (20/40) preoperatively to 0.91 (20/25) postoperatively. Complications were represented mainly by failure (14.7%) and new tears (6.9%), but excluding failure after surgery, the complication rate dropped from 28% to 13.7%. Failure rate positively correlated with the pseudophakic status of the eye

#### **Conclusions:**

Given the many advantages of this procedure, pneumatic retinopexy should be considered as a valuable alternative to vitrectomy and scleral buckle for the treatment of selected cases of retinal detachment