



## COMBINED PNEUMATIC AND SCLERAL BUCKLING IN THE RETINAL DETACHMENT MANAGEMENT



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**Purpose:** To describe the effect of combined pneumatic retinopexy (PR) using SF6 100% as an adjunctive procedure to scleral buckle (SB) on retinal reattachment.

### Methods

Seventeen patients with rhegmatogenous retinal detachment who underwent combined SB and PR between January 2014 and December 2014 was performed. Retinopexy were done with laser indirect ophthalmoscope intraoperatively or laser photocoagulation one day postsurgery. Inclusion criteria were primary RRD with a small peripheral break (less than 2 clock hours), had visual loss or symptoms (floaters and photopsia) of less than 30 days duration.

Patients with PVR more than grade B and vitreous opacities obscuring the view of operative fundus, other ocular abnormalities, and aphakia or pseudophakia were excluded from this study. All of the surgery were done by a single surgeon.

Break location, macula status, visual acuity before and after surgery, break apposition, attachment of retina, and recurrence of RD were recorded.

### Results

There were 8 male and 9 female patients, ranging in age from 19 – 51 years. In 14 (0.82%) eyes, the break were located in superior quadrant, and in 4 (0.23 %) eyes the macula was attached. The primary anatomical success rate in one month was 100%. We found that in two (0.12 %) eyes with malpositioned buckle, the break was closed after tamponade with SF6 and subsequent laser photocoagulation. Mean visual acuity in one month was 0.7 logMAR.

### Conclusion

Combination of SB with PR showed promising result in patients with rhegmatogenous retinal detachment. Both procedure may have synergistic effect: SB relieve vitreoretinal traction while SF6 occluding the break. It may improved the attachment rate and may be used routinely for beginner ophthalmologist regardless precise localization of the break.

### References

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