

## Abstract 171

### SUPRACHOROIDAL VISCO-BUCKLING

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To present a modern adaptation of the classic suprachoroidal buckling technique for the management of retinal detachment in a young patient.

We report the case of a 23-year-old male referred for evaluation of blurred vision in the left eye persisting for one month. He had a history of bilateral myopia of approximately -5.00 D and no other systemic or ocular conditions.

Ophthalmologic examination revealed a best corrected visual acuity (BCVA) of 0.0 logMAR in the right eye and 0.3 logMAR in the left. Fundoscopy showed a chronic superior-temporal retinal detachment involving the macula, with a horseshoe tear at the 1 o'clock position and a subretinal vitreous band extending temporally to the vascular arcades. These findings were confirmed by optical coherence tomography (OCT).

In the absence of posterior vitreous detachment and with the presence of a single superior break, we opted for a suprachoroidal buckling procedure. Viscoelastic (Healon 5) was used as the buckling agent, combined with cryopexy to seal the retinal break and 0.5 ml of 100% SF<sub>6</sub> gas for tamponade.

Postoperatively, the chorioretinal indentation remained for 3 months. The intraocular gas bubble was absorbed after 13 days, at which point a cryopexy-induced chorioretinal scar had already formed. The chronic subretinal fluid was gradually absorbed by the retinal pigment epithelium (RPE) pump. No postoperative complications or new retinal tears were noted.

At the 5-month follow-up, a small amount of residual subretinal fluid remained under the macula. However, the patient had a BCVA of 0.0 logMAR in the left eye and reported full functional recovery and satisfaction with his visual performance.

Scleral buckling reduces vitreous traction and limits vitreous fluid passage through retinal breaks, promoting retinal reattachment. Achieving this via the suprachoroidal space avoids several challenges associated with traditional episcleral buckling. This minimally invasive approach is particularly suitable for young patients with one or more retinal tears spanning more than one clock hour.