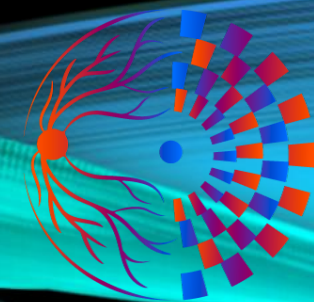


SURGICAL DRAINAGE FOR HEMORRHAGIC CHOROIDAL DETACHMENT

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48th BRAVS Meeting

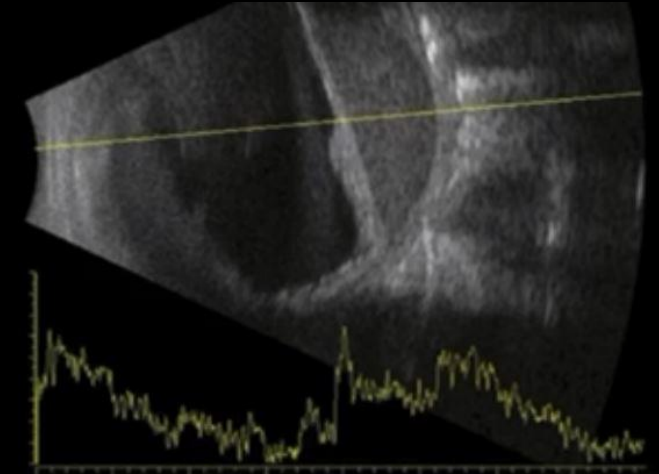
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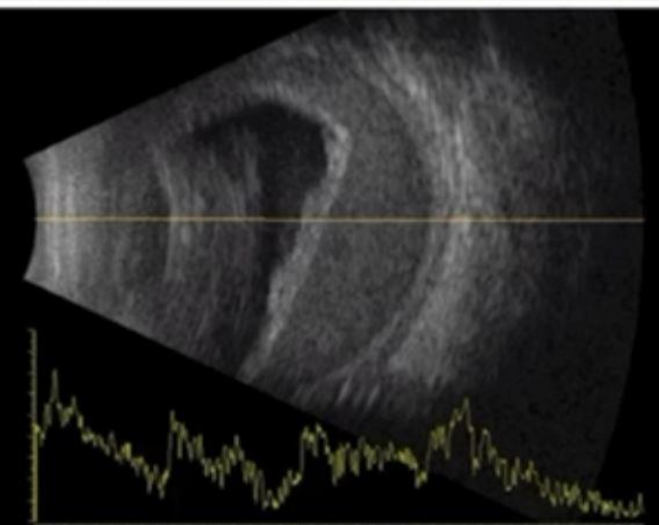
ABSTRACT

- Choroidal detachments encompass two main types: serous and hemorrhagic. Serous detachments, characterized by fluid accumulation, typically occur post-eye surgery or due to factors like inflammation or trauma. They are associated with low intraocular pressure and mild discomfort, sometimes manifesting spontaneously in far-sighted individuals. In contrast, hemorrhagic detachments involve sudden blood accumulation between the choroid and sclera, often during or after surgery. They are more common in older patients with atherosclerosis history or those using blood-thinning medications.
- A 48-year-old Caucasian male patient with a background of proliferative diabetic retinopathy underwent prior interventions including pars plana vitrectomy (PPV), phacoemulsification (phaco), endolaser treatment, and C3F8 gas tamponade due to tractional retinal detachment and vitreous hemorrhage. The patient had an uncomplicated 25-gauge pars plana vitrectomy procedure with C3F8 gas tamponade. A week following the procedure, he exhibited an appositional hemorrhagic choroidal detachment in the eye that had been operated on. Consequently, he underwent choroidal drainage on the 14th day.

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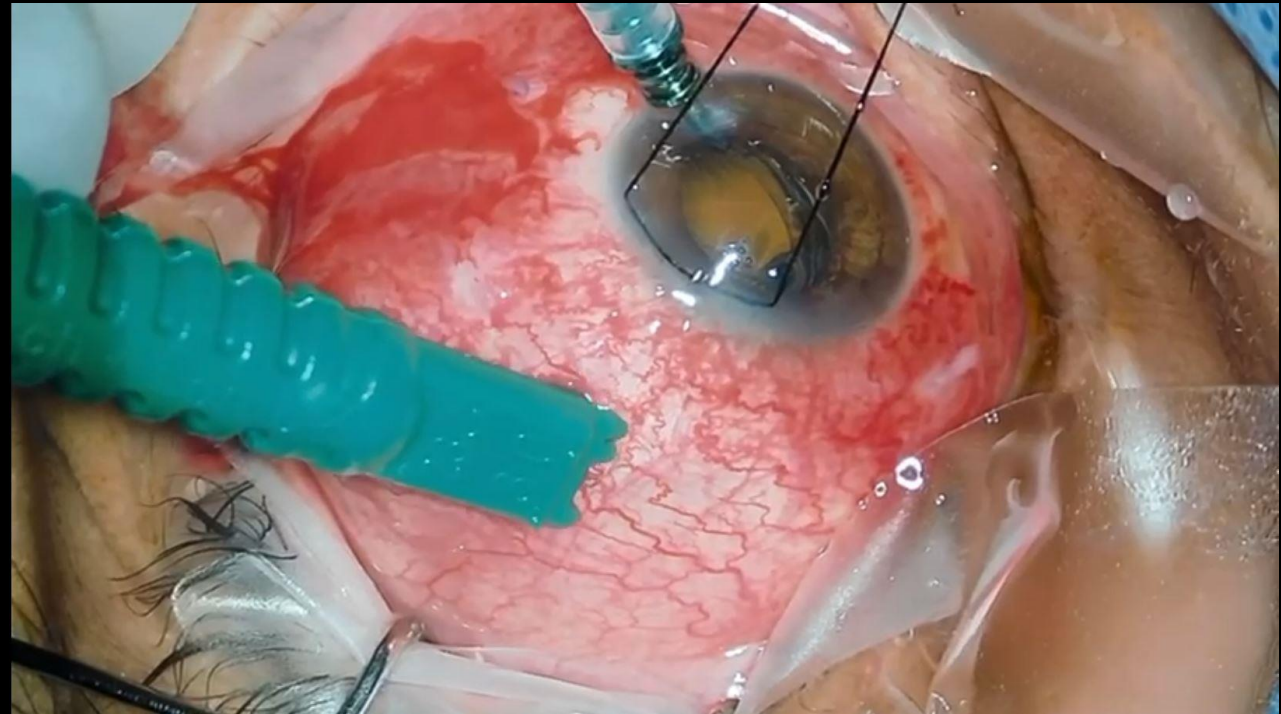


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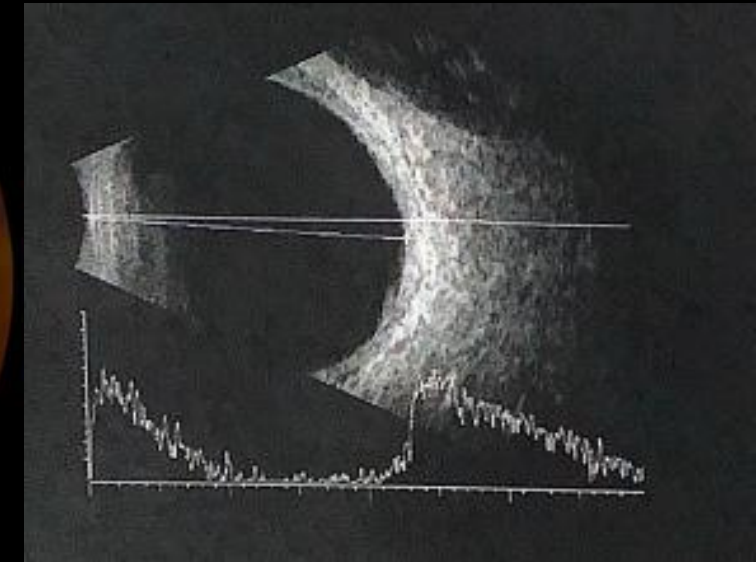
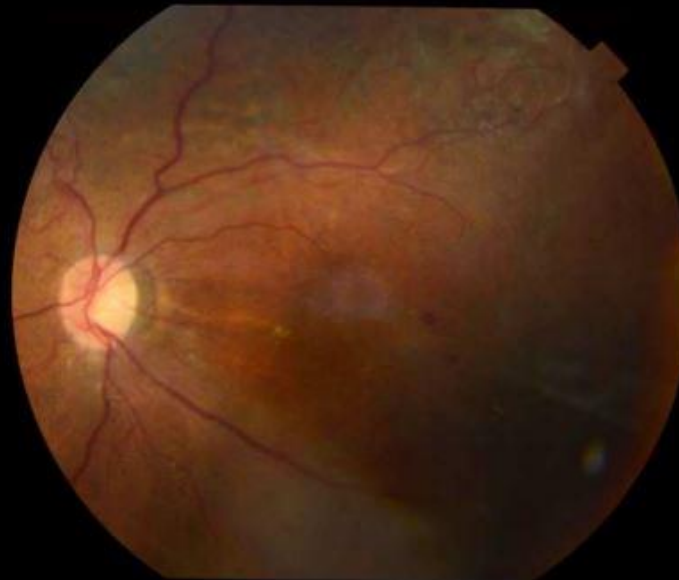
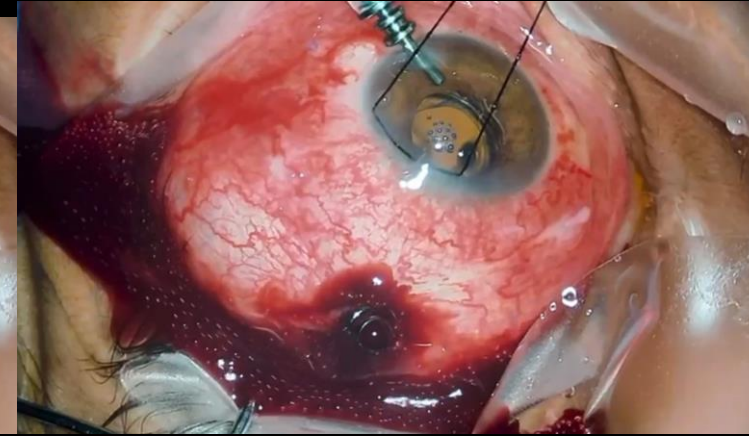
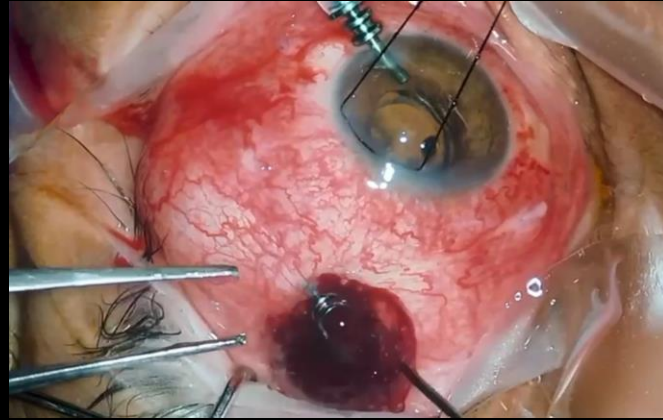
MATERIALS AND METHODS

- This method involves inserting a maintainer into the anterior chamber through a small incision in the cornea, known as a paracentesis incision. The infusion line is then opened at a pressure of 60 mmHg. A significantly elevated intraocular pressure (IOP) is necessary to actively push fluid from the anterior to the posterior segment, aiding in choroidal drainage. The next step does not require exposure of the conjunctiva, diathermy, or cutting of the sclera. Trocars are placed approximately 8 mm away from the limbus in the quadrant with the most detachment, a determination best made using preoperative or intraoperative ultrasound. A 23G non-valved trocar is then inserted at a 15° angle into the suprachoroidal space via the pars plana.
- Successful drainage can be monitored intraoperatively by observing signs such as fluid emerging from the trocar port, deepening of the anterior chamber, and an increase in the red reflex.



RESULTS

- At the outset of the surgery, the red reflex appeared faint. Following the described drainage procedure, choroidal fluid was successfully drained. Upon insertion of the trocar, hemorrhagic fluid freely drained, resulting in a deepening of the anterior chamber. The duration of the surgery was approximately 15 minutes. By the conclusion of the procedure, a bright reflex was noted. A week post-surgery, b-mode ultrasound confirmed the resolution of choroidal fluid without any complications observed. Visual acuity improved from 20/400 upon presentation to 20/300 after surgery, with further improvement anticipated over time.



CONCLUSION

- Managing hemorrhagic choroidal detachment can present challenges. Various strategies are available for addressing postoperative suprachoroidal hemorrhage. While medical management is often preferred, a surgical method that minimizes manipulation while maximizing drainage is optimal for restoring ocular structure and promoting visual rehabilitation
- Surgical intervention aims to achieve two primary goals: draining the hemorrhage from the suprachoroidal space and restoring normal ocular anatomy post-surgery. Traditionally, the standard recommendation has been to wait for approximately 14 days, allowing for the clot to liquefy before proceeding with drainage. This approach aims to optimize the evacuation of hemorrhage with minimal manipulation.