
SUBMACULAR HEMORRHAGE AFTER BLUNT TRAUMA SUBJECTED TO 2 PNEUMATIC MOBILIZATIONS: A CASE REPORT

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PURPOSE

To report a case of subretinal hemorrhage affecting the foveal region after blunt trauma, requiring two surgical approaches with pneumatic mobilization with octafluoropropane (C₃F₈) treated at Fundação Altino Ventura, PE.



CASE REPORT



- Female patient, **15 years old**, complaining of poor vision in the left eye after blunt trauma with a rubber band 3 days prior.
- **Visual Acuity (VA):** 20/200.
- **Fundoscopy:** submacular hemorrhage (SMH) and temporal and superior temporal commotio retinae (Figure 1).

After 2 days, patient underwent intravitreal injection of 100% C3F8 0.3 ml associated with the ventral head position. However, just 10 days after the procedure, there was still a significant amount of SMH (Figure 2) and a small amount of residual gas. VA with correction of 20/200. Therefore, 2 days after the last evaluation, the patient underwent a new injection of C3F8 in the same quantity and concentration. During postoperative follow-up, the patient developed increased intraocular pressure (IOP), which was controlled with anti-glaucoma eye drops. Patient was discharged after 47 days (Figure 3), with IOP controlled without medication and VA with 20/20 correction.



CASE REPORT (FIGURES)

Figure 01 - Patient admission exam

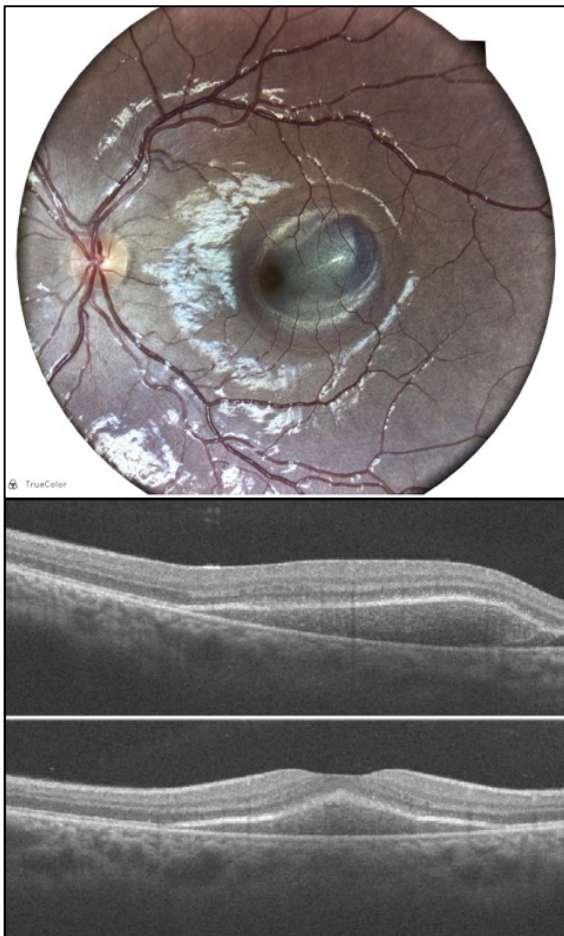


Figure 02 - 10th day after 1st injection of C3F8

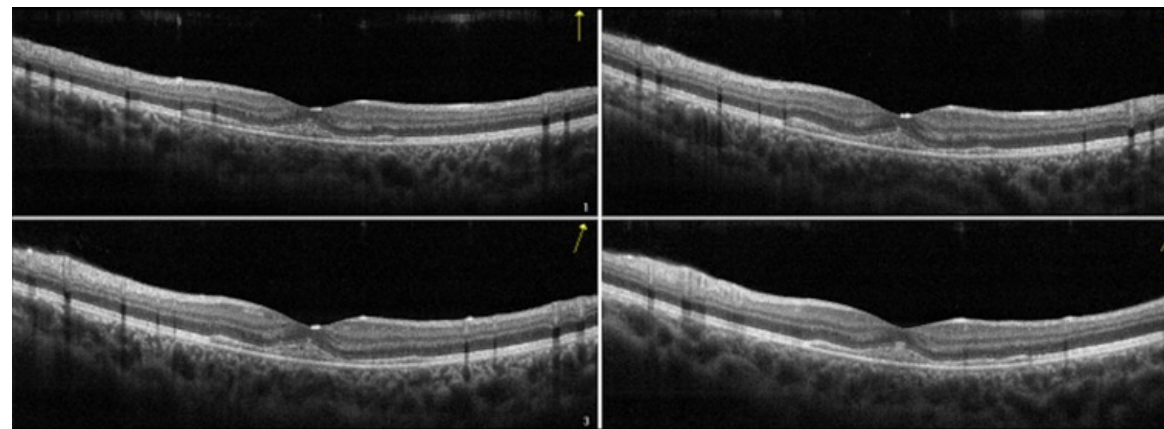
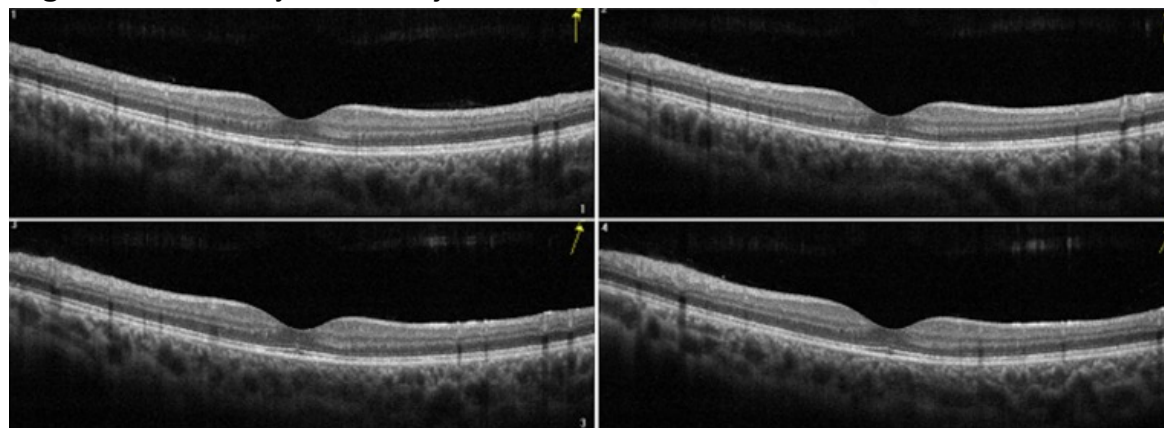


Figure 03 - 47^o day after 2^a injection of C3F8



CONCLUSION

- The management of submacular hemorrhage (SMH) remains a significant challenge due to its potential for poor visual outcomes. While current treatment modalities, including intravitreal or subretinal tissue plasminogen activator (tPA) injection and pneumatic displacement, offer promising results, there is a need for further investigation into less invasive approaches such as gas shift alone, as demonstrated in this report.
- This highlights the importance of continued research to optimize treatment strategies and improve outcomes for patients with SMH.



REFERENCE

1. Motta, L., Ripa, M., Theodoraki, K., Jackson, T. L., & McHugh, D. (2023). A Case of Traumatic Submacular Hemorrhage Treated with tPA and Pneumatic Displacement. *Case Reports in Ophthalmology*, 14(1), 596-601.
2. Casini, G., Loiudice, P., Menchini, M., Sartini, F., De Cillà, S., Figus, M., & Nardi, M. (2019). Traumatic submacular hemorrhage: available treatment options and synthesis of the literature. *International journal of retina and vitreous*, 5, 1-9.

