

Latanoprost-Induced Cystoid Macular Edema: A case report

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Purpose

This case report aims to present the management and outcome of a case of cystoid macular edema induced by latanoprost in a 28-year-old male with congenital glaucoma.

Case report

The patient was an outpatient at our hospital since 2019, and had undergone multiple surgical interventions including phacoemulsification, trabeculectomy, and Ahmed's valve insertion in the right eye.

The right eye was aphakic and the left eye was blind due to trauma.

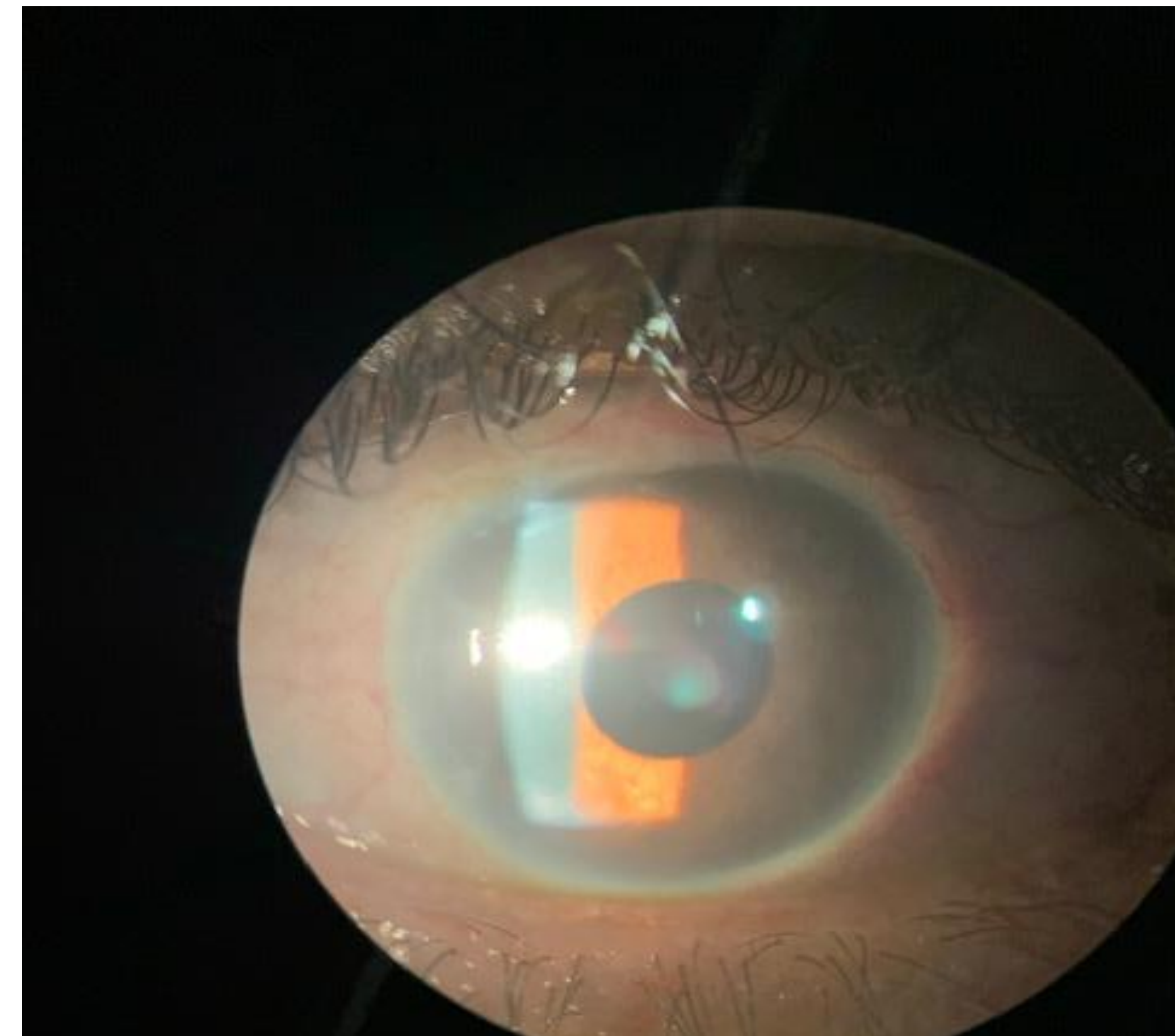


Figure 1: Patient's anterior segment examination

Methods:

- The patient had regular appointments with the glaucoma staff maintaining his Visual Field, Visual Acuity and Nerve OCT. At his February 2022 appointment, no significant changes were noted in his anterior segment examination or in his fundus biomicroscopy, except for changes in macular brightness and color located perifoveally.
- A macular OCT was performed and showed the presence of cystoid macular edema (CME), leading to the diagnostic hypothesis of latanoprost-induced CME.
- The case was discussed with the HCRP retinal team, and immediate withdrawal of latanoprost and serial macular OCT were suggested to assess the response.
- Additionally, Acetazolamide was prescribed to control intraocular pressure and help in the resolution of the CME.

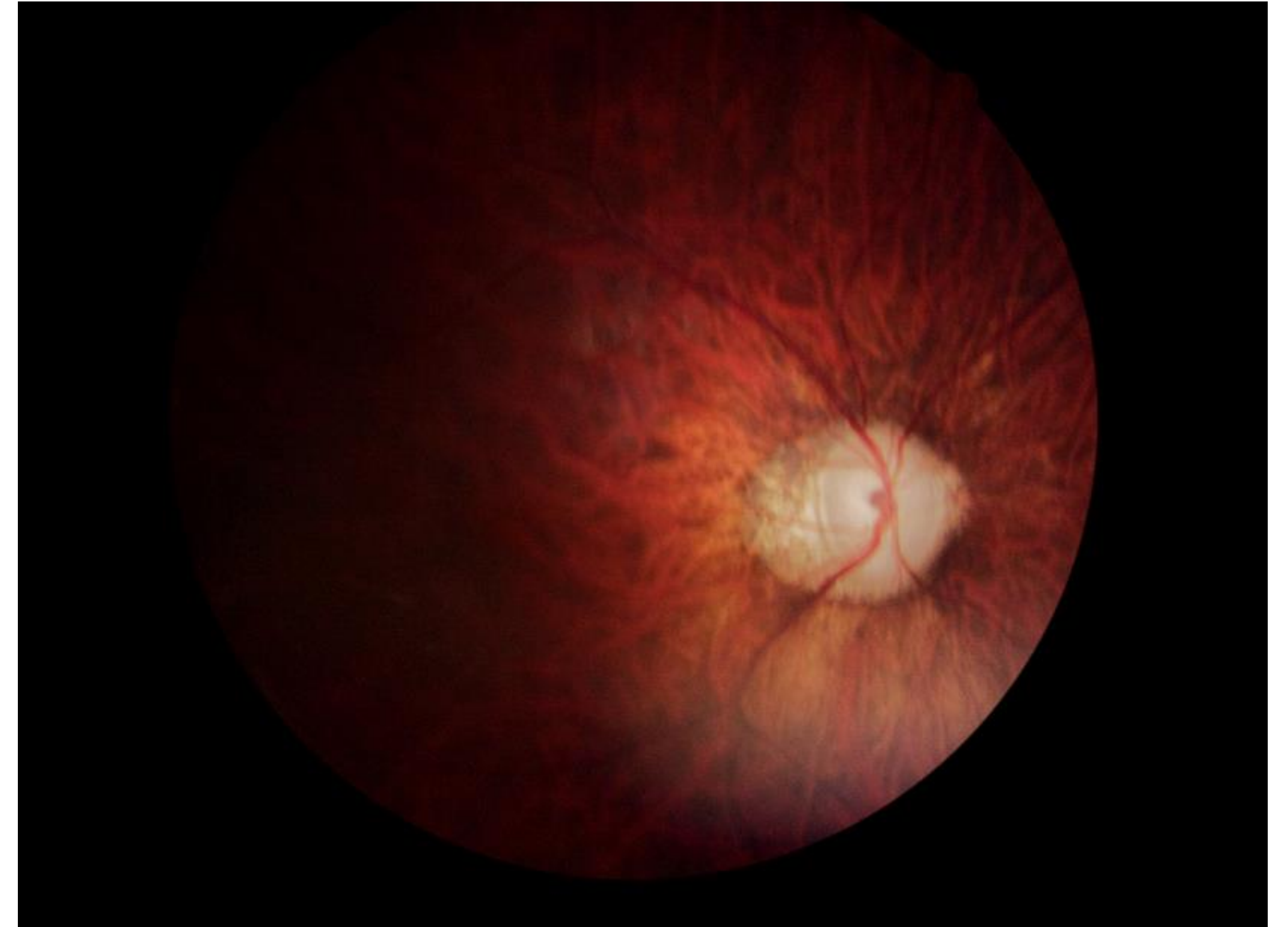


Figure 2: Patients Retinography

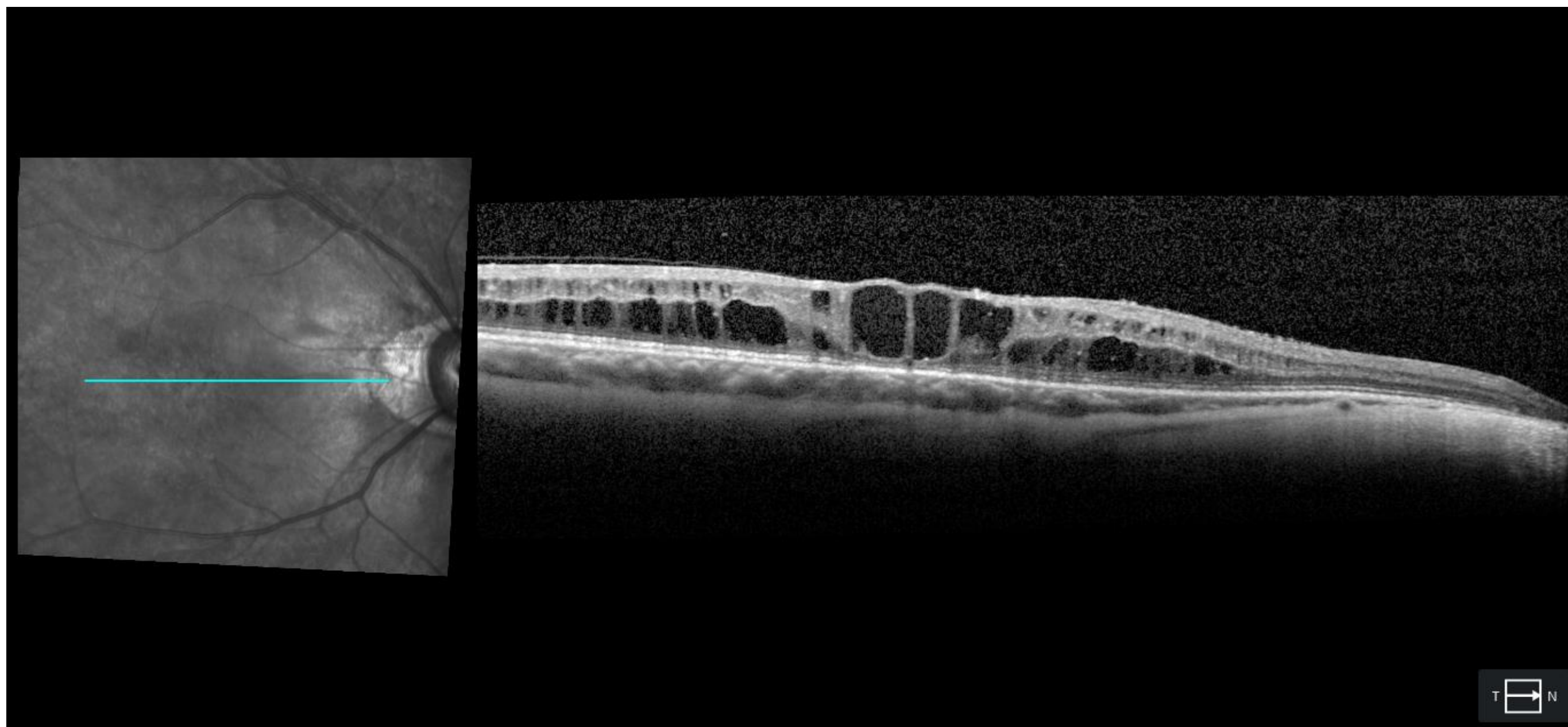


Figure 3: Fev, 2022 Macular OCT

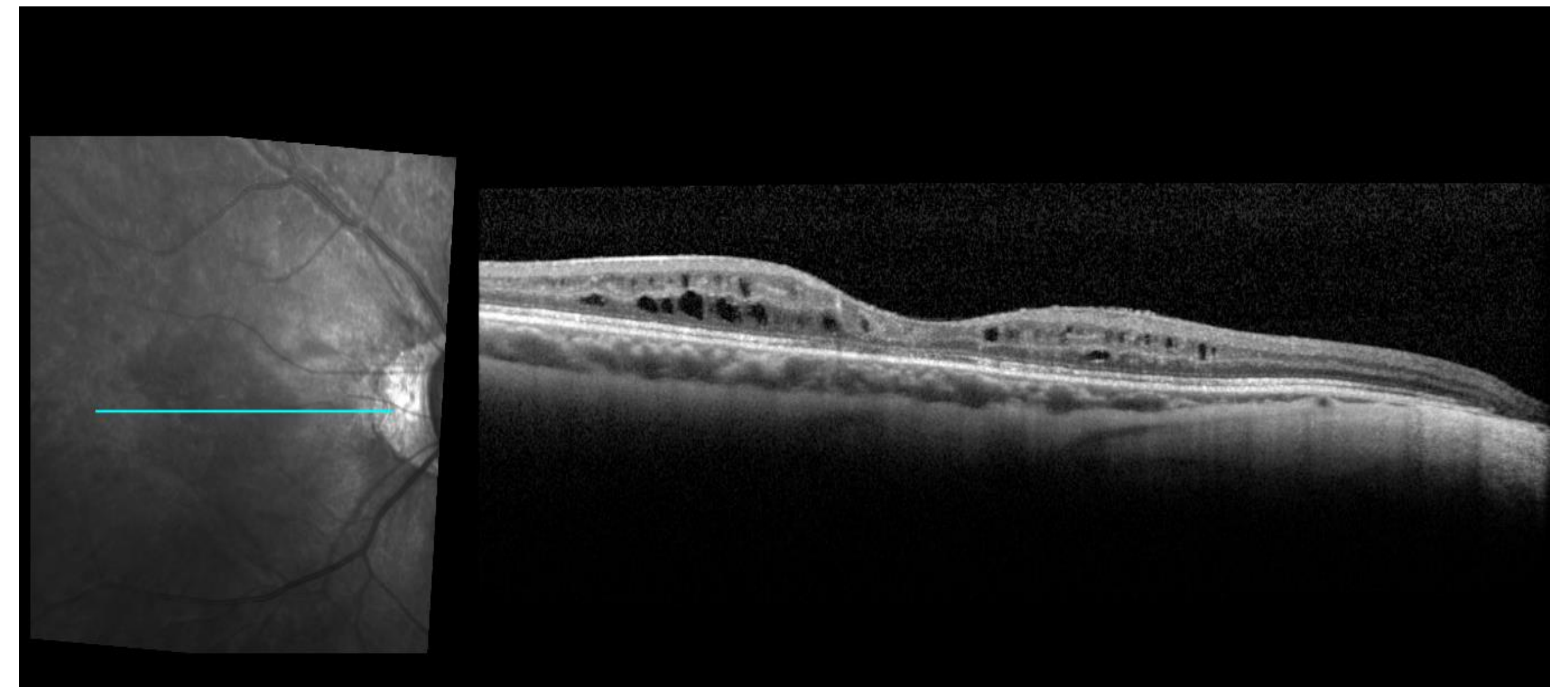


Figure 5: April, 2022 Macular OCT

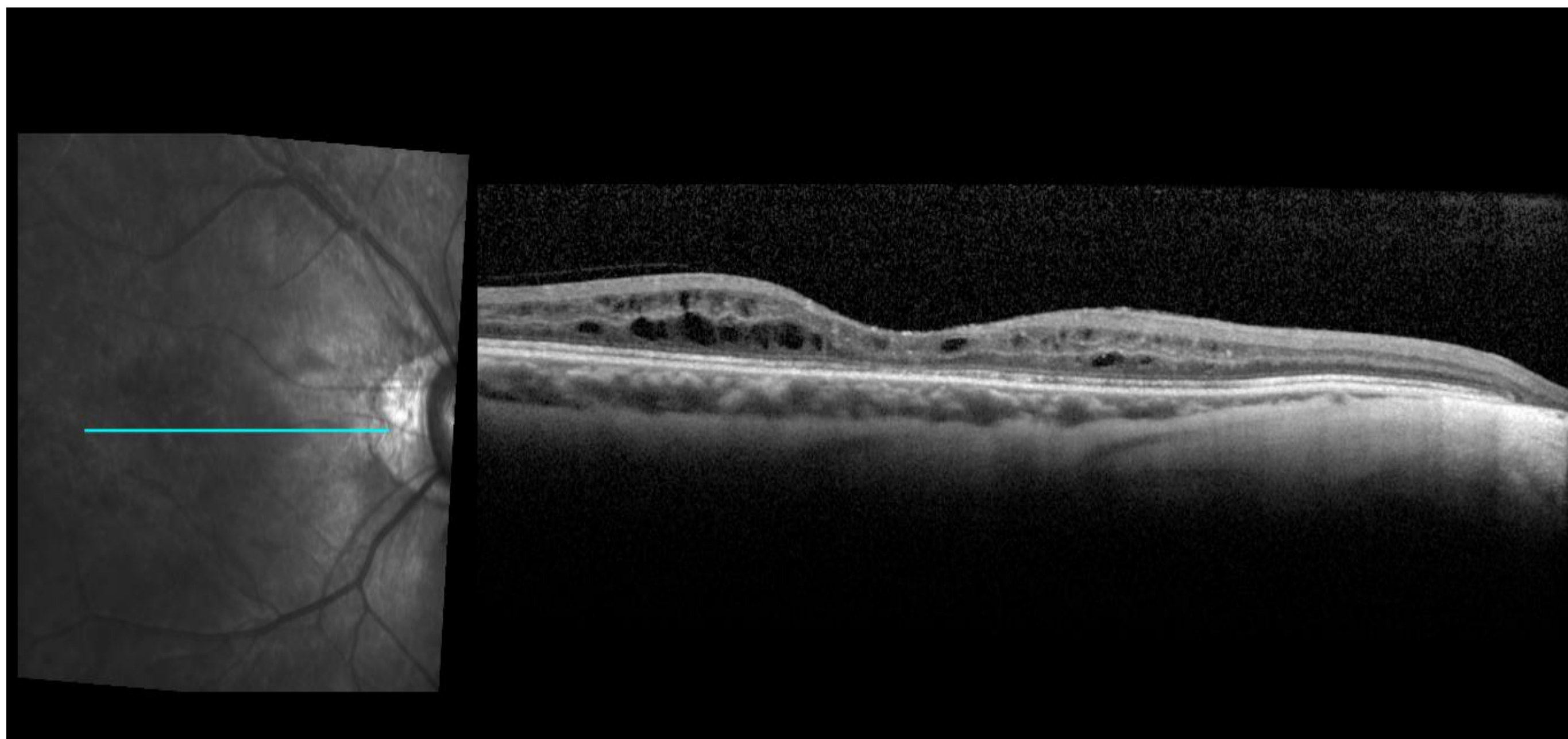


Figure 4: March, 2022 Macular OCT

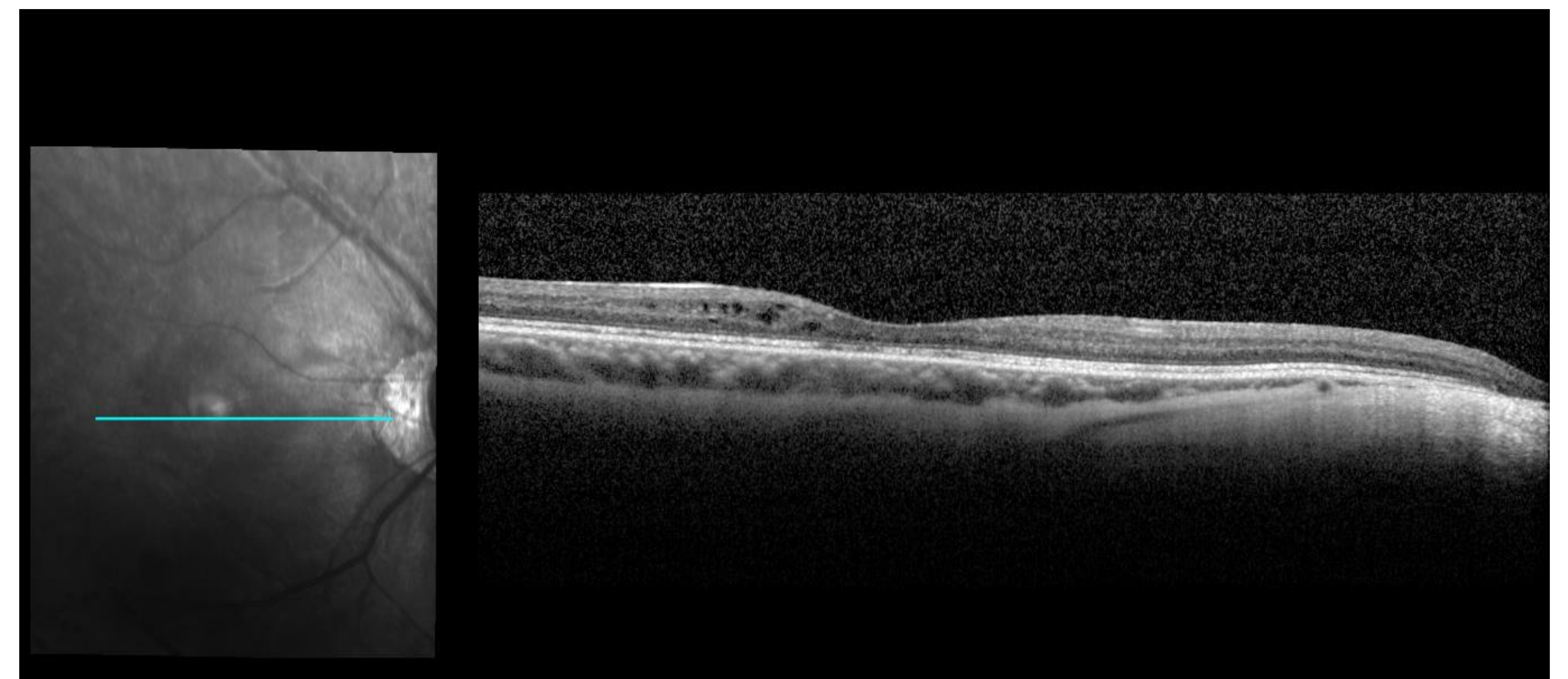


Figure 6: August, 2022 Macular OCT

Results

- The patient returned one month later with improved macular edema and controlled intraocular pressure (12 mmHg).
- Over the next few months, he returned regularly with macular OCT exams, always demonstrating improvement of the edema and controlled intraocular pressure with the use of Dorzolamide and Timolol eye drops. Acetazolamide was suspended due to patient non-compliance.
- Finally, in October 2022, the patient had complete resolution of the cystoid macular edema.
- He then returned to regular follow-up every 6 months, maintaining only two classes of eye drops (Timolol and Dorzolamide).

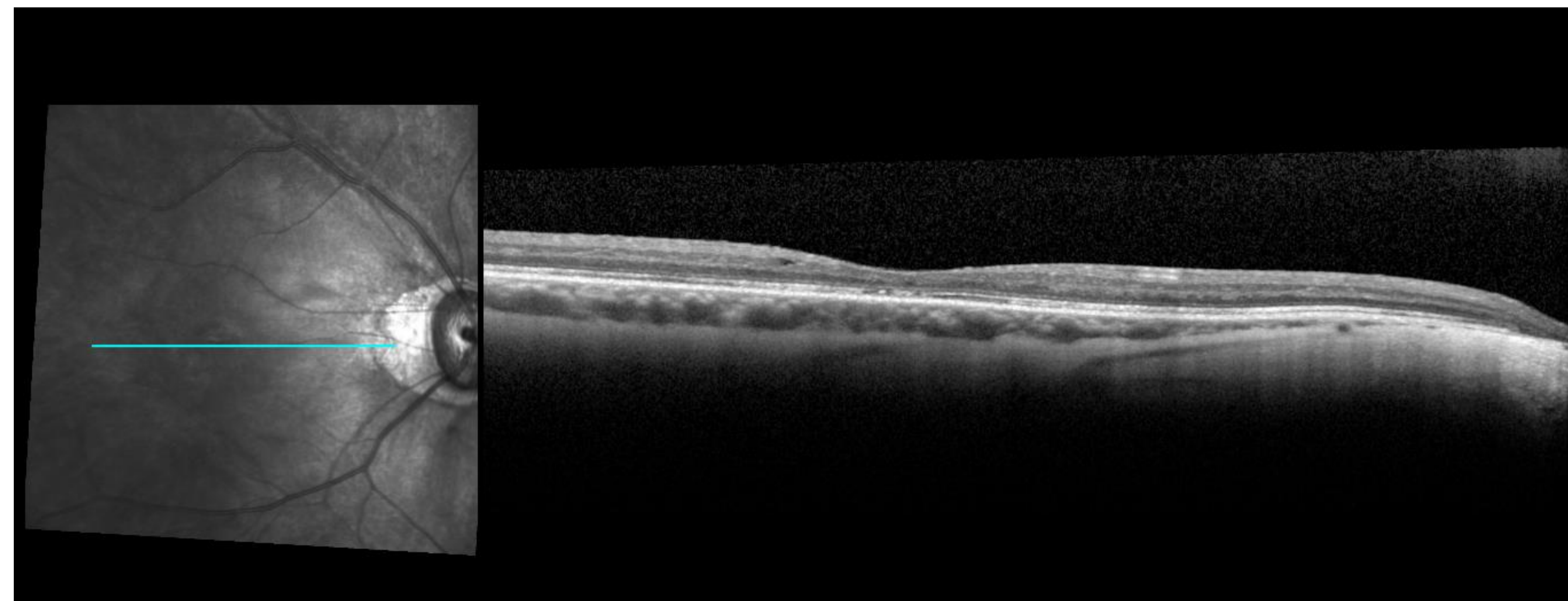


Figure 7: October, 2022 Macular OCT

Discussion

- After the withdrawal of Latanoprost we could see steady improvement in the patient's Macular OCT as of complete resolution of the CME after 8 months.
 - There have been other published cases of Latanoprost-Induced Cystoid Macular Edema that were resolved after the withdrawal of the drug
 - Even though Acetazolamide has been extensively use in other cases of secondary CME we cannot conclude wether it helped or not the patient in this case as more extensives studies are needed
 - This case highlights the importance of monitoring for and managing latanoprost-induced CME,To prevent long-term vision impairment.
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