

Floater after Uncomplicated Phacoemulsification.

Maria Emfietzoglou¹, Anastasia Vogiatzi¹, Alexander Charonis¹

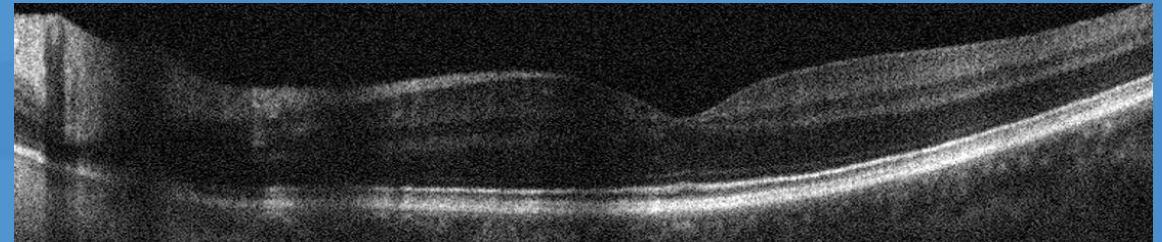
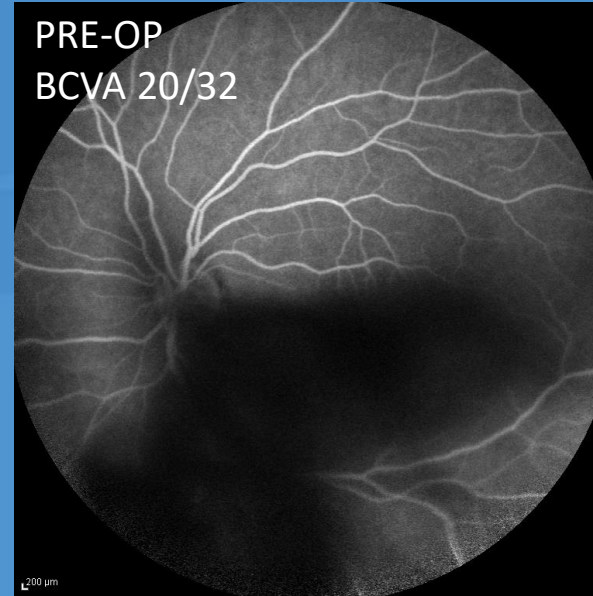
1. Retina Service, Athens Vision Eye Institute, Athens



**No relevant financial disclosures*

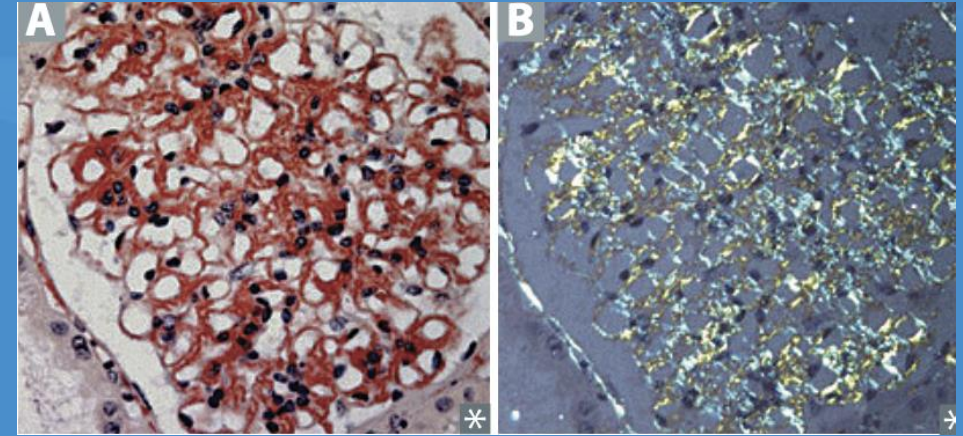


- **Aim:** Case report and review of pertinent literature.
- **Materials/Methods:** Case report.
- **Results (1):**
 - 51-year-old Caucasian female presents with floaters and vitreous opacities after an uncomplicated phacoemulsification.
 - Slit lamp examination reveals vitreous filaments without other signs of inflammation.
 - OCT and fluoroangiography do not reveal signs of inflammation or macular edema.

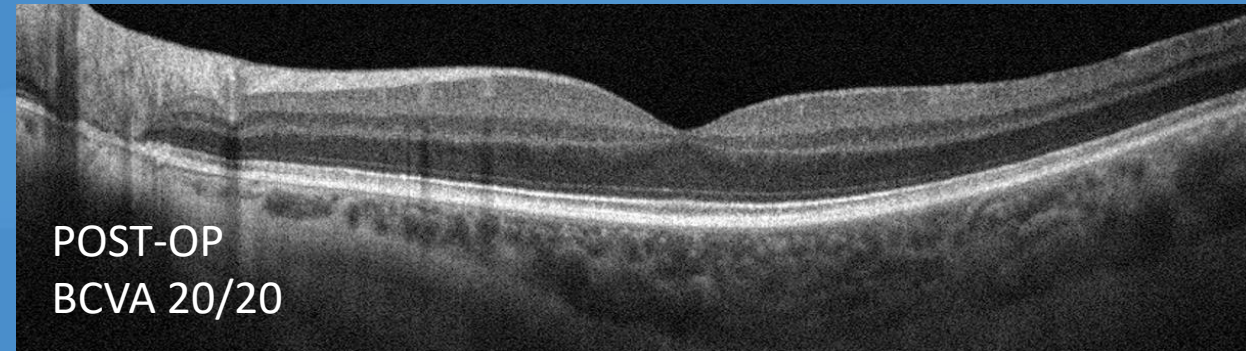


- Results (2):

- A thorough clinical and paraclinical examination was performed which ruled out active inflammation and a diagnostic and "therapeutic" vitrectomy was performed.
- Histopathology examination of the vitreous revealed the presence of amyloid deposits visualized by Congo red stain (red/orange on nonpolarized light, apple-green birefringence on polarized light), and H&E stain (amorphous pink).
- Systematic investigation revealed signs of liver inflammation and targeted genetic testing confirmed the clinical suspicion of hereditary amyloidosis (transthyretin mutation, TTR).

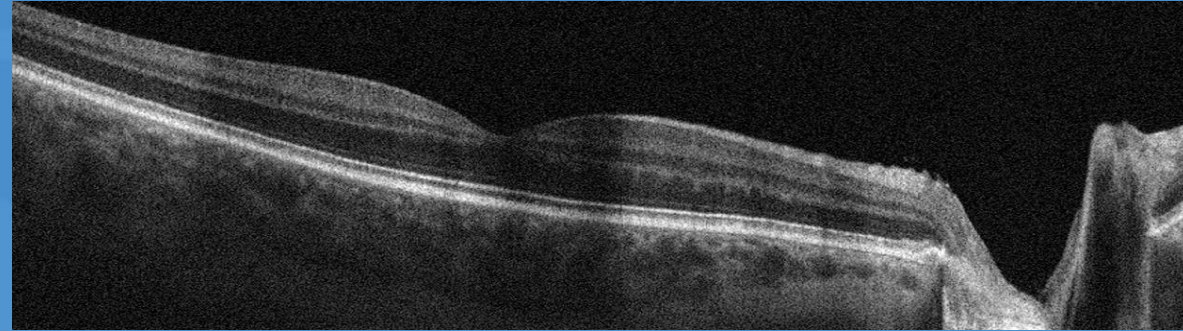


A: nonpolarized light, B: polarized light.



- **Results (3):**

- During the two-year follow-up, the patient developed ipsilateral ocular hypertension while the disease appeared in the fellow eye requiring a pars-plana vitrectomy.



- **Conclusions:**

- Ocular involvement of hereditary amyloidosis should be included in the differential diagnosis of floaters after cataract surgery in the absence of signs of inflammation.
- A more systematic approach of other organ/systems is necessary for the correct diagnosis and management.
- Long-term follow-up is required as ocular hypertension and glaucoma can arise.

References

- *Kakihara, S., Hirano, T., Imai, A. et al. Small gauge vitrectomy for vitreous amyloidosis and subsequent management of secondary glaucoma in patients with hereditary transthyretin amyloidosis. Sci Rep 10, 5574 (2020).*
- *Nan Zhou, wenbin wei; Vitreoretinal Amyloidosis: Clinical Features, OCTA Appearances, Gene Mutations, and Treatment Outcomes of Vitrectomy Surgery. Invest. Ophthalmol. Vis. Sci. 2022;63(7):4296.*
- *Beirão NM, Matos E, Beirão I, Costa PP, Torres P. Recurrence of vitreous amyloidosis and need of surgical reintervention in Portuguese patients with familial amyloidosis ATTR V30M. Retina. 2011 Jul-Aug;31(7):1373-7. doi: 10.1097/IAE.0b013e318203c0c2. PMID: 21358362.*