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Don't call it a comeback: a case of a Recurrent Central Retinal Vein Occlusion

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INTRODUCTION

Central retinal vein occlusions (CRVO) are a common type of vascular occlusion seen in elderly patients. This case highlights the rare re-occurrence and progression of a CRVO in an elderly female.

CASE PRESENTATION

- Chief Complaint: 76-year-old African American Female presents for ocular health examination.
- Ocular/Medical History: CRVO OS 2019 (resolved without treatment), cataract extraction OD/OS 2022, benign hypertension (HTN), rheumatoid arthritis, hypothyroidism, asthma
- Medications: Atenolol, Calcium, Enbrel, Fluticasone Propionate, Folic Acid, Furosemide, Levothyroxine Sodium, Lisinopril, Methotrexate, ProAir HFA, Vitamin D2

PERTINENT FINDINGS

- VAsc: 20/25+1 OD, 20/40 OS, PH 20/20
- Entrance Testing
 - o EOMs: Full range of motion OD/OS
 - o CVF: Full to finger counting OD/OS
 - o Pupils: equal, round, reactive to light, no APD OD/OS
- Slit lamp exam: Unremarkable OD/OS
- DFE:
 - o OD: Disc collaterals
 - o OS: Disc collaterals, scattered intraretinal hemorrhages in all 4 quadrants on posterior pole, tortuous vessels
- Additional Testing:
 - o Fundus Photos: Disc collaterals OD/OS, scattered intraretinal hemorrhages with tortuous vessels OS
 - Fundus photos 3 months prior showed no signs of intra-retinal hemorrhaging
 - o Macular OCT: No evidence of macular edema OS
 - o Fluorescein angiography: no retinal neovascularization, edema or ischemia noted OS
 - o BP: 143/81

FIGURE 1

Posterior pole photo from 2019 showing disc collaterals OS

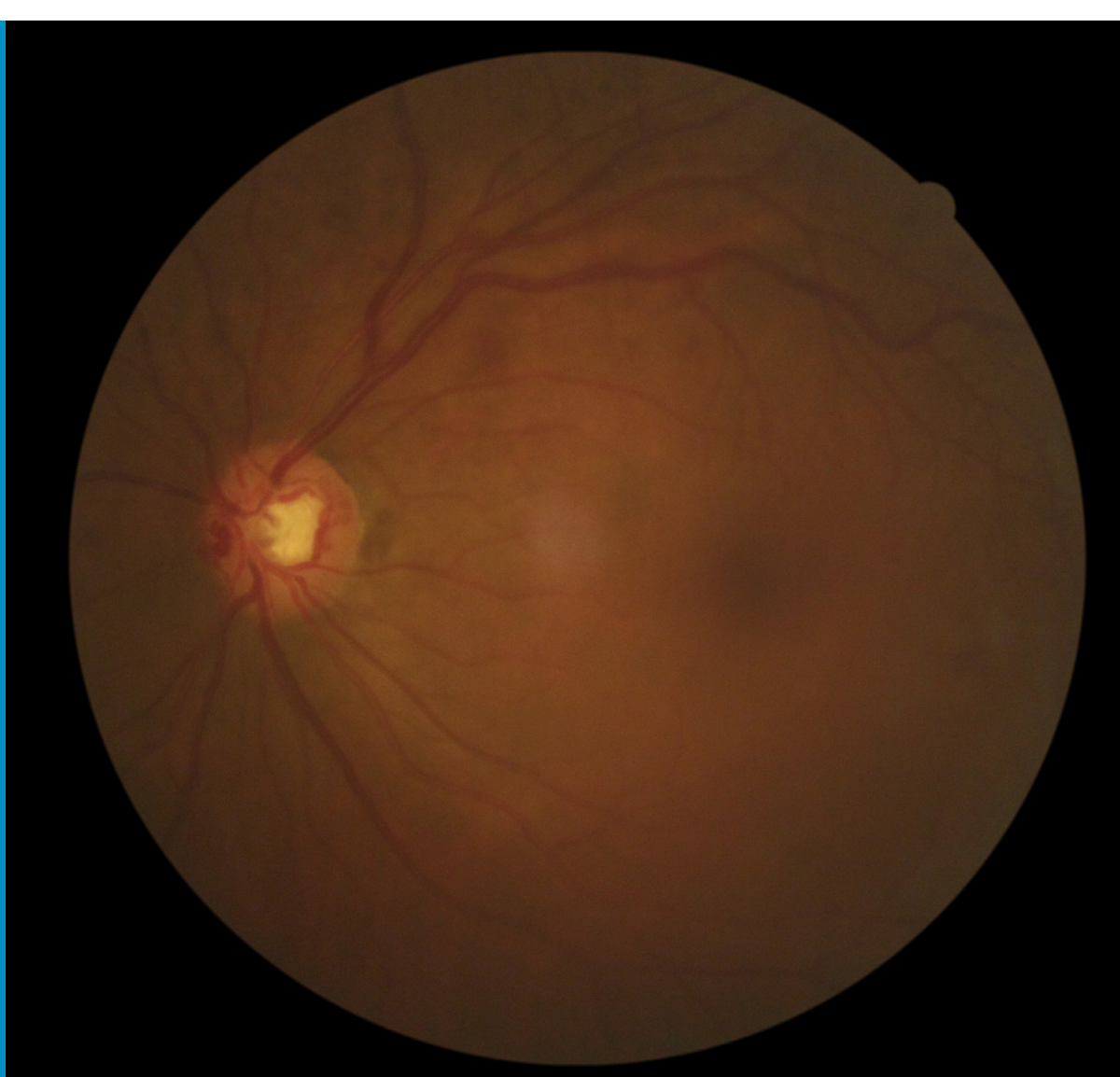


FIGURE 2

Optos photo taken May 2022 showing disc collaterals with no signs of intraretinal hemorrhaging OS



FIGURE 3

Optos photo taken July 2022 (date of examination) showing disc collaterals with early stage of CRVO OS (trace scattered intraretinal hemorrhages with tortuous vessels)

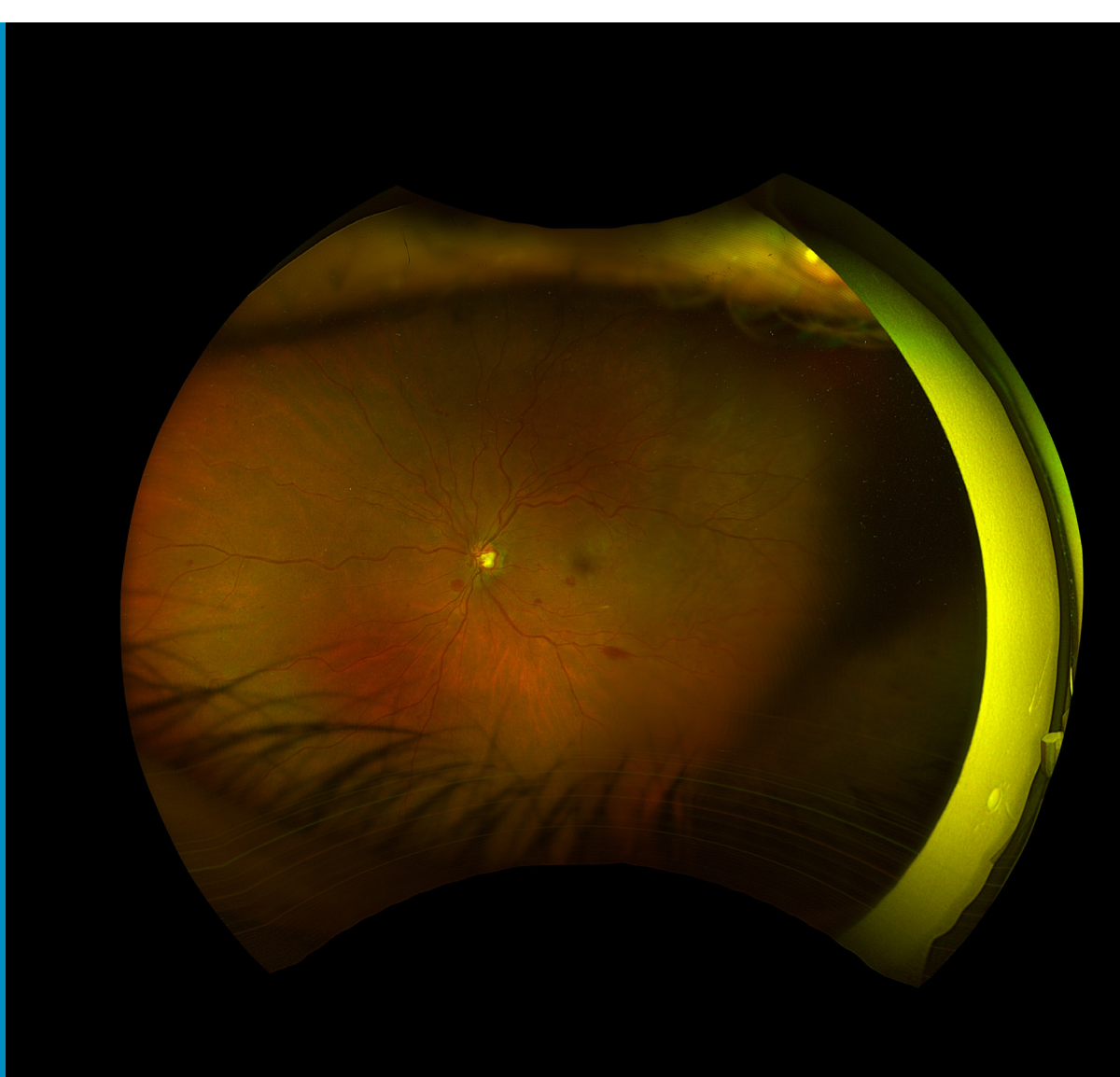
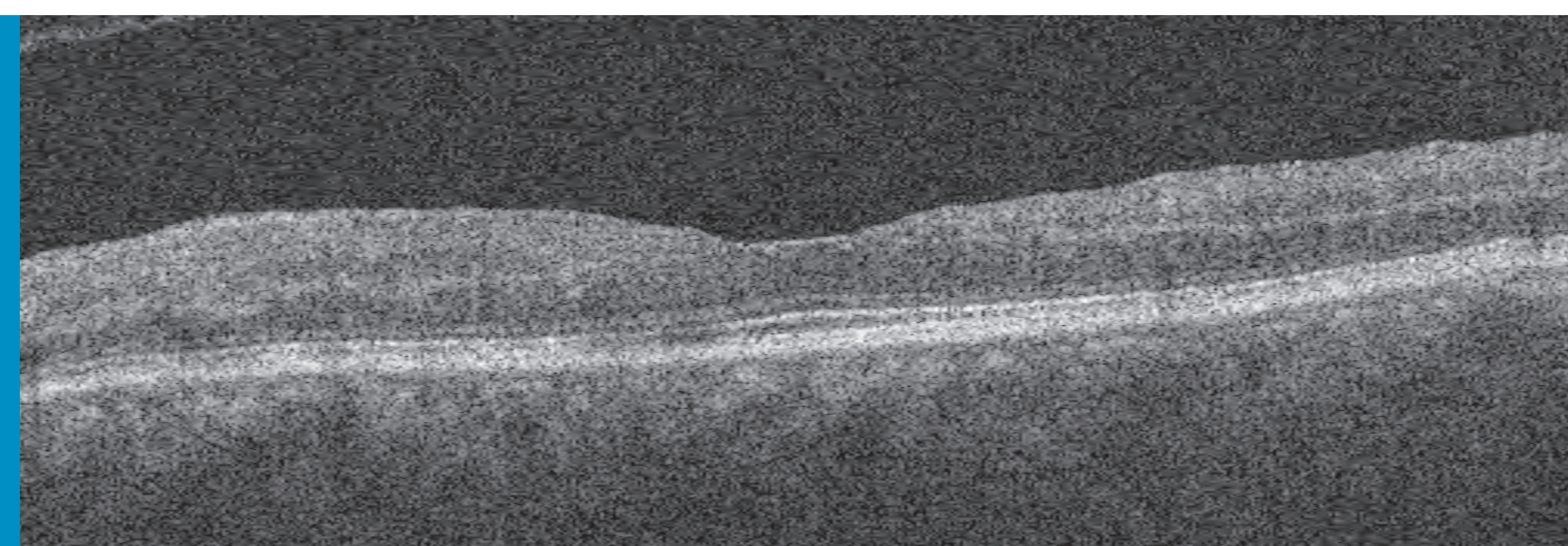


FIGURE 6

MAC OCT showing no evidence of macular edema OS



DIFFERENTIAL DIAGNOSIS

- Primary: Recurrent CRVO
- Others: Diabetic Retinopathy, hypertensive retinopathy

FIGURE 4

Optos photo taken August 2022 showing disc collaterals with CRVO OS (scattered intraretinal hemorrhages in all 4 quadrants of posterior pole with tortuous vessels)

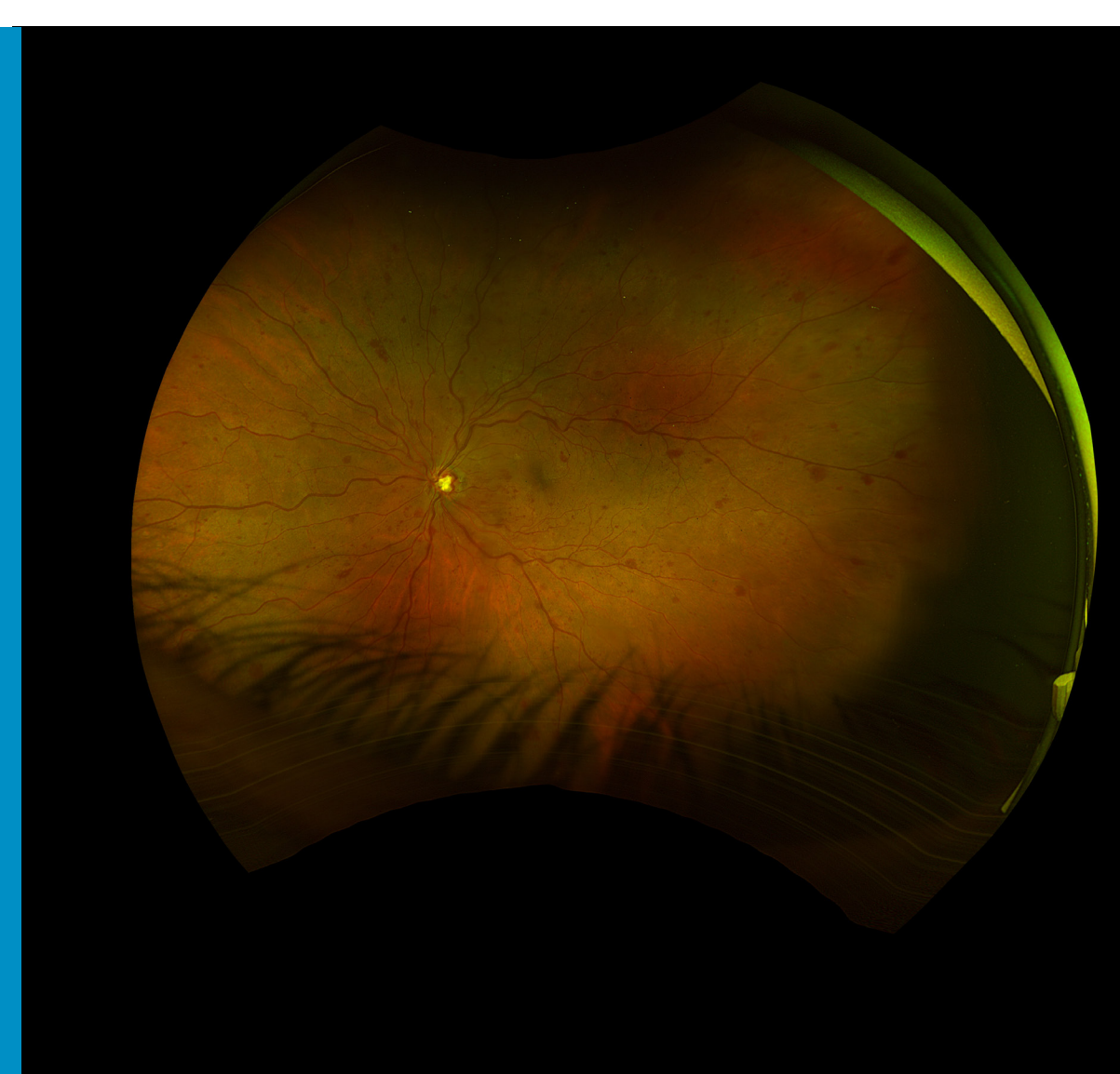
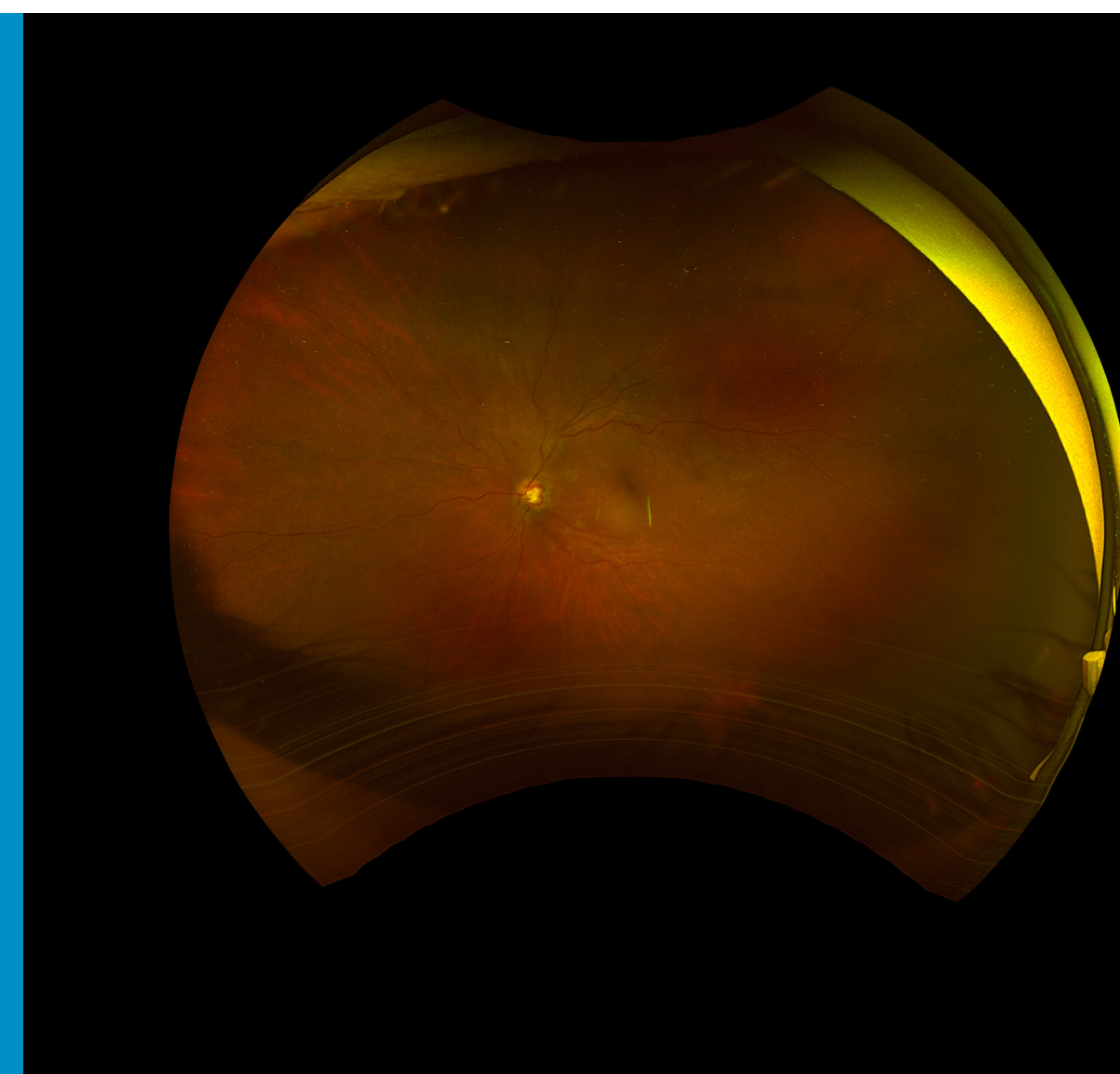


FIGURE 5

Optos photo taken September 2022 showing disc collaterals with resolution of CRVO OS



DIAGNOSIS AND DISCUSSION

- Diagnosis: Recurrent non ischemic CRVO OS without macular edema
- Discussion: The incidence of acute recurrent CRVOs in eyes originally diagnosed with non-ischemic CRVOs is rare: 0.9% within 2.5 years and 2.2% within 5 years. Almost all recurrent CRVOs present with poor acuity owing to macular edema. The edema tends to be resistant to traditional anti-VEGF therapy. This case is unique owing not only to the recurrent CRVO but its presentation without macular edema. In addition to hyperlipidemia, systemic hypertension is commonly associated with recurrent CRVO's, (as seen in our patient).

TREATMENT AND MANAGEMENT

Continue to monitor for resolution of hemorrhaging, development of macular edema and/or conversion to an ischemic CRVO. The patient is to follow up with her primary care physician for continued control of systemic conditions.

CONCLUSION

Although rare, clinicians should be aware of the possible reoccurrence of CRVOs with or without macular edema. Baseline/serial fundus photos and OCT's allow clinicians to make comparisons overtime. Further studies are necessary to showcase more instances of recurrent CRVO's without poor acuity or macular edema.

References: Available on request

CONTACT

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