

# MACULAR MULTIMODAL IMAGING FINDINGS AFTER A RETINAL DETACHMENT SURGERY

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## PURPOSE

To report macular multimodal imaging findings after a retinal detachment surgery.

## METHODS

Case-report of the clinical course, multimodal imaging, diagnosis and treatment of one patient.

## RESULTS

A 65 year-old male patient, was submitted in August of 2020 to a PPV due to RRD on OD. Baseline BCVA was HM and on PO60 was 20/20.

After 2 months an outer retina fold (Fig 1) was seen on OCT which disappeared spontaneously after 3 months. In June of 2022, BCVA was 20/20 and OCT showed an ERM (Fig 2a), in October the ERM was associated with a hyperreflective and round lesion in the inner layers of the retina (Fig 2b). Follow-up was done and when BCVA dropped to 20/60 an ERM removal was performed. BCVA after surgery was 20/200, and the round lesion persisted on OCT (Fig 2c). Angiogram showed a hyperfluorescent spot at the edge of the FAZ (Fig 3) and ICG was normal. At this point, OCT-A suggested presence of a RAP lesion (Fig 4). Patient was treated with 4 IVI of anti-VEGF and dexamethasone implant with good response (20/25) (Fig 5). Fellow-eye never showed signs of Type 3 NVM (Fig 6), even after 3 years of follow up.

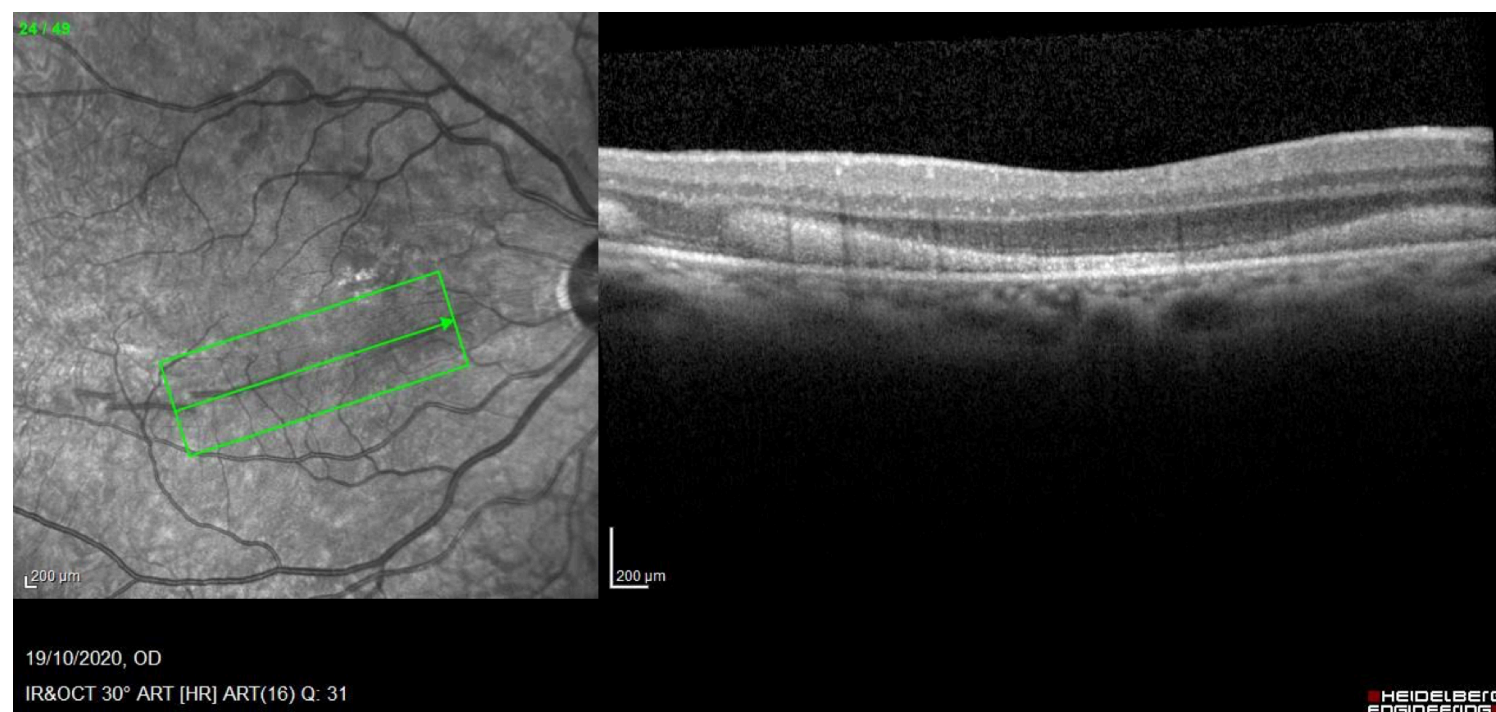


Fig 1: hyperreflective band at the level of outer retina.

# DISCUSSION

According to Kim et al., 3 or more than 5 criteria are needed to define type 3 NVM (1. thin choroid - <200 micra; 2. intraretinal cyst-like fluid; 3. absence of subretinal fluid; 4. PED; 5. intra or intra-subretinal hyperreflective mass +/- break of RPE). The patient fills at least 3 of proposal criteria for type 3 NVM, previously called RAP lesion.

Our main hypothesis for the formation of type 3 NVM would be ischemia generated by the retinal fold present after PPV for RRD. We also believe that the initial multimodal imaging findings could already be changes related to the final outcome. Follow up of the patient are still made and new similar cases should be observed.

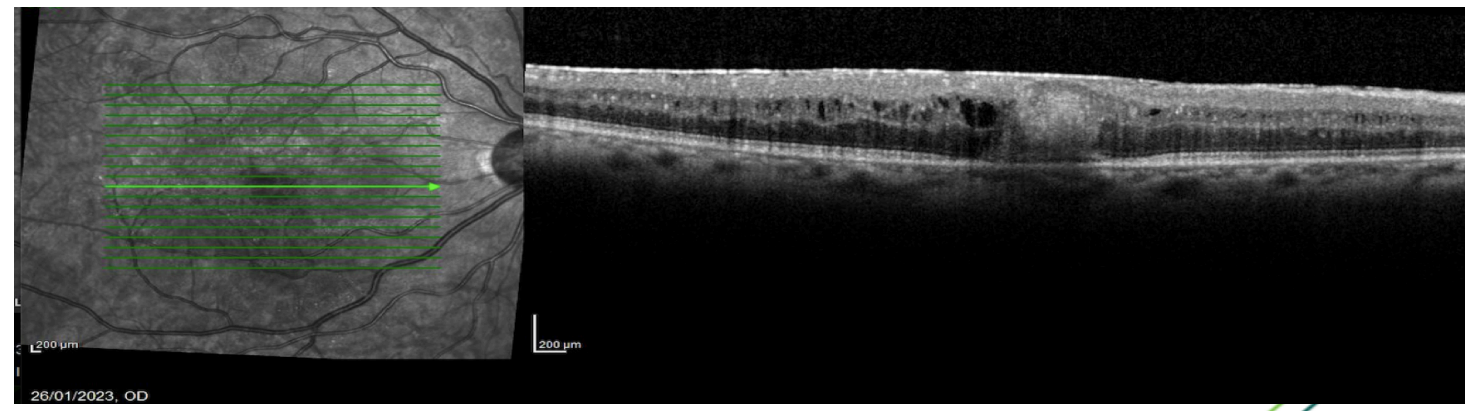
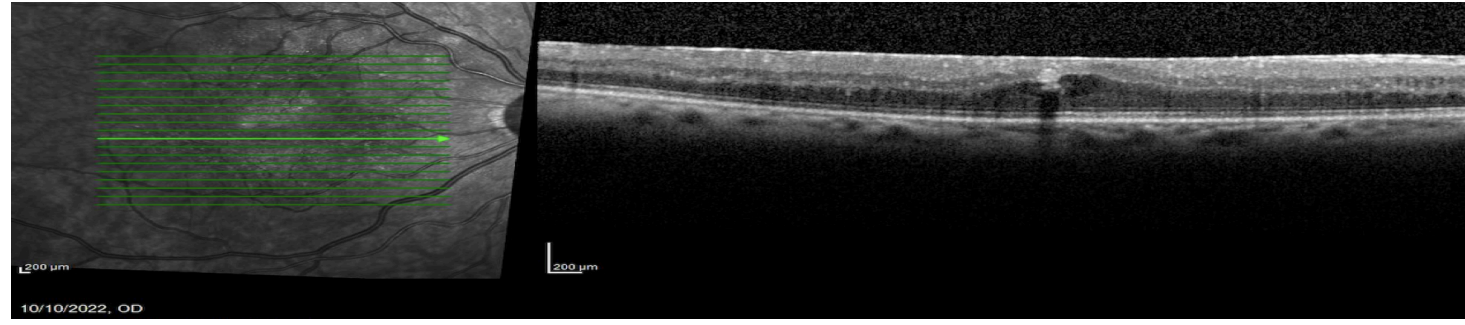
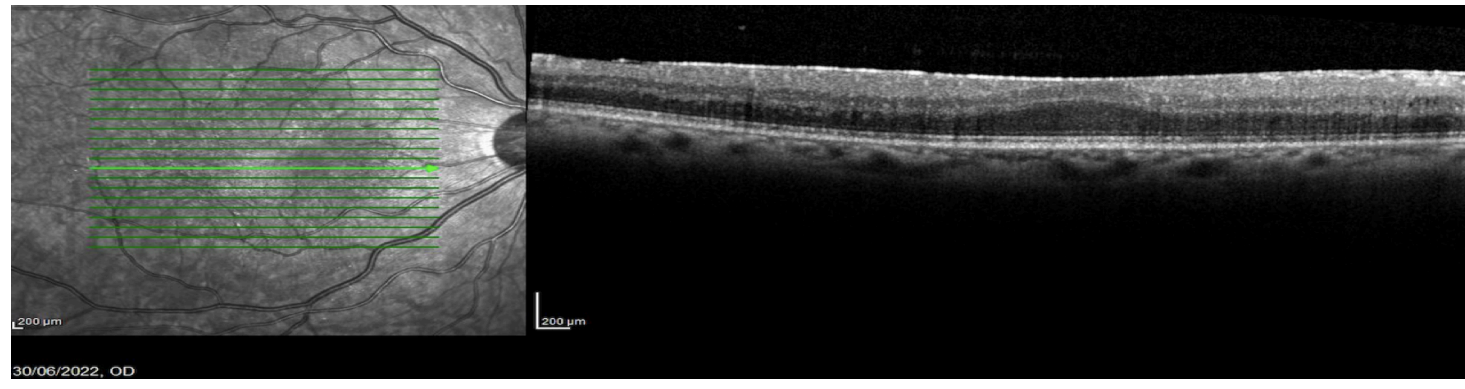


Fig 2: a) OCT - June 2022. b) OCT - October 2022. c) OCT - January 2023.

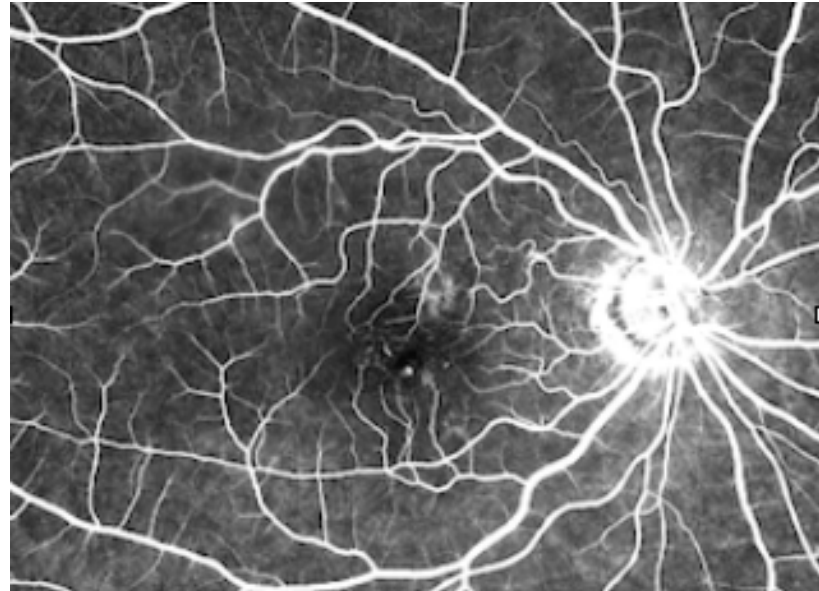


Fig 3: FA with hyperfluorescent spot at the edge of the FAZ.

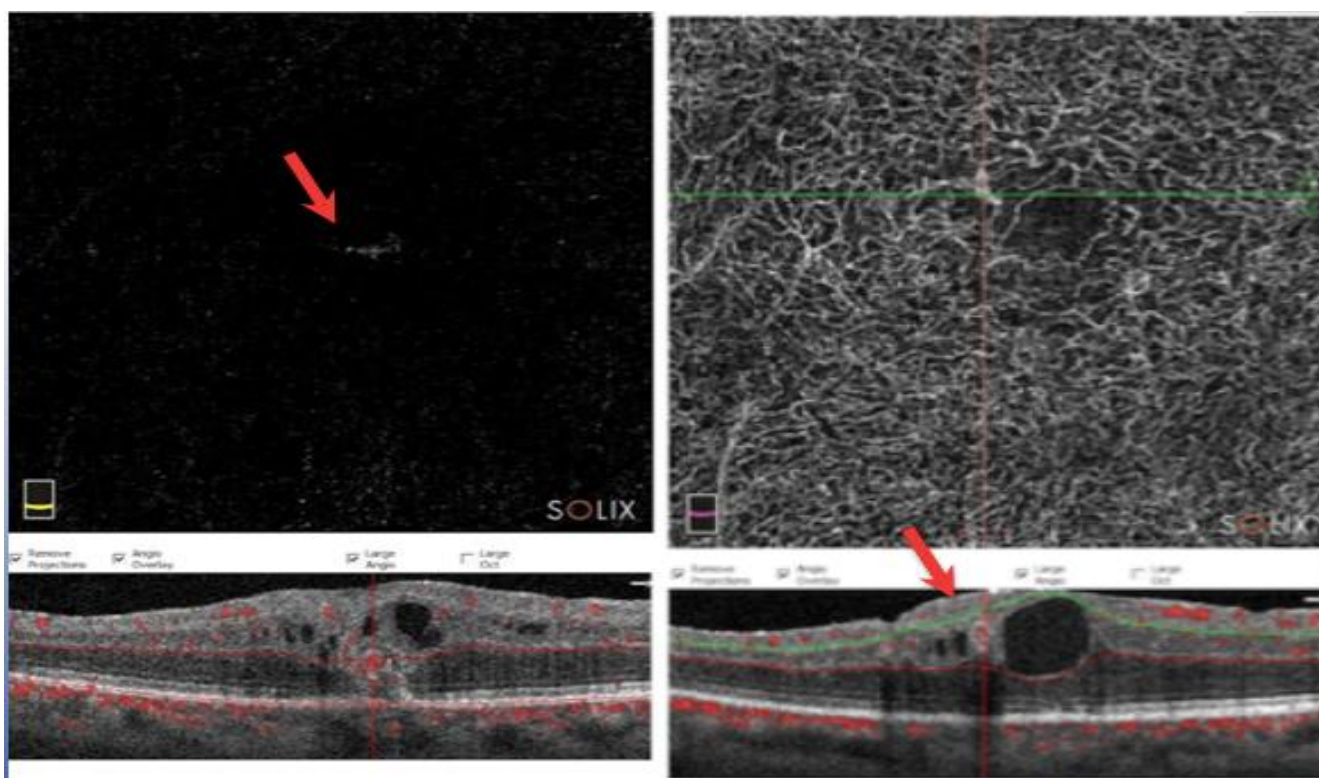


Fig 4: A-OCT - July 2023.

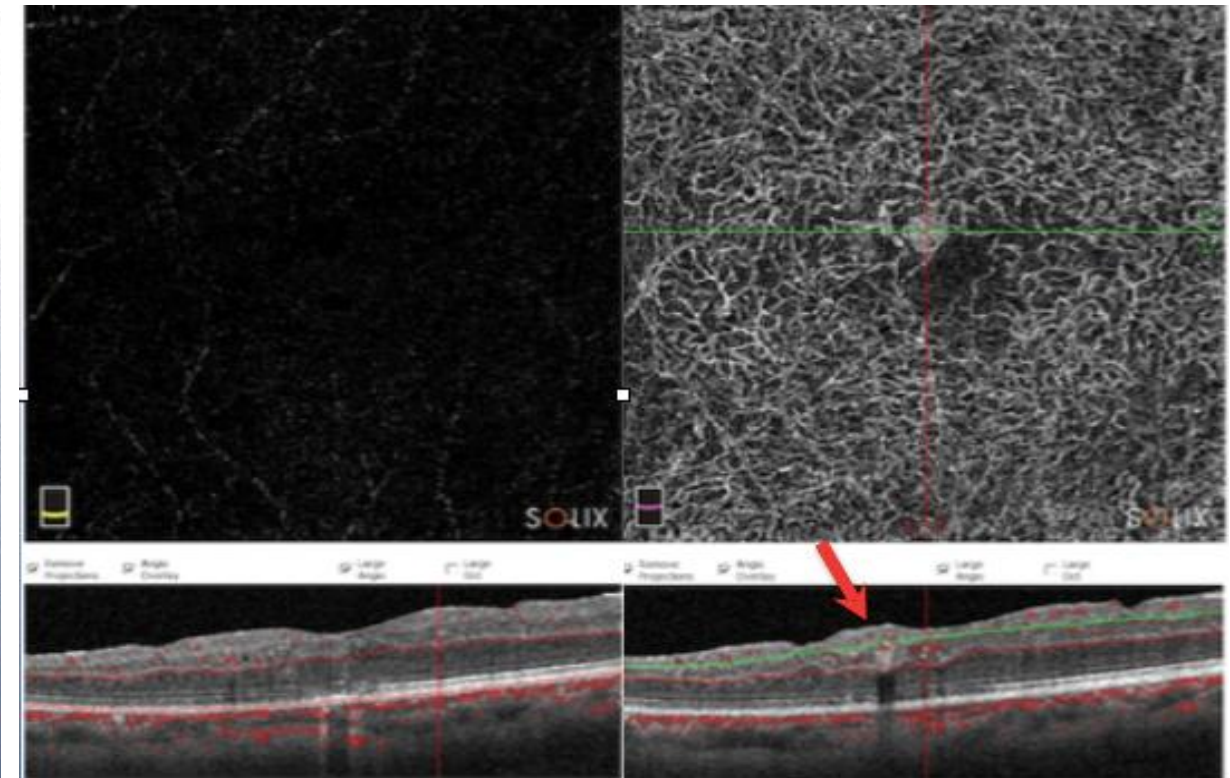


Fig 5: A-OCT - November 2023 - after treatment.

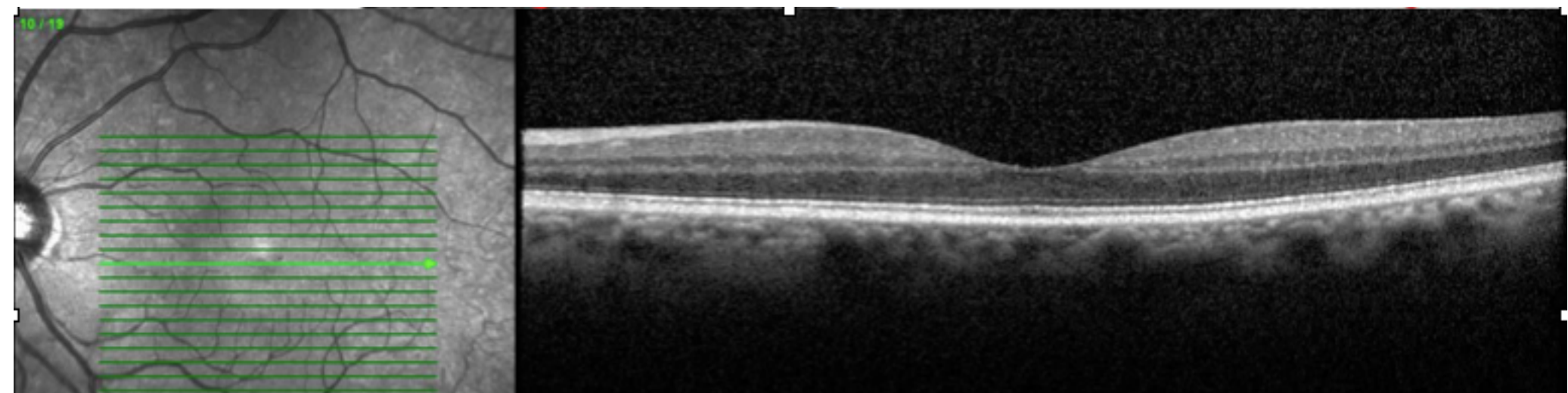


Fig 6: Fellow-eye OCT.

## REFERENCES

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