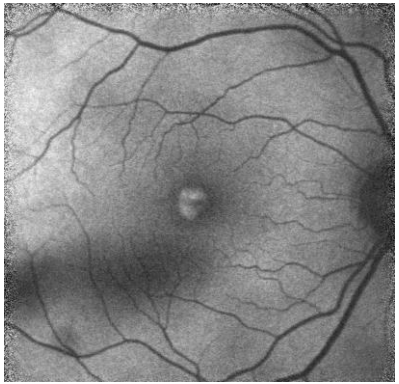
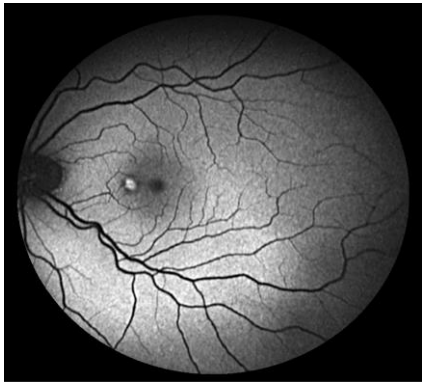
A Case Series of Unilateral Adult-onset Vitelliform-like Lesions in Greek Population





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Purpose: To report 4 case reports of unilateral adult-onset vitelliform lesions (AVLs) and their findings after complete ophthalmologic examination.

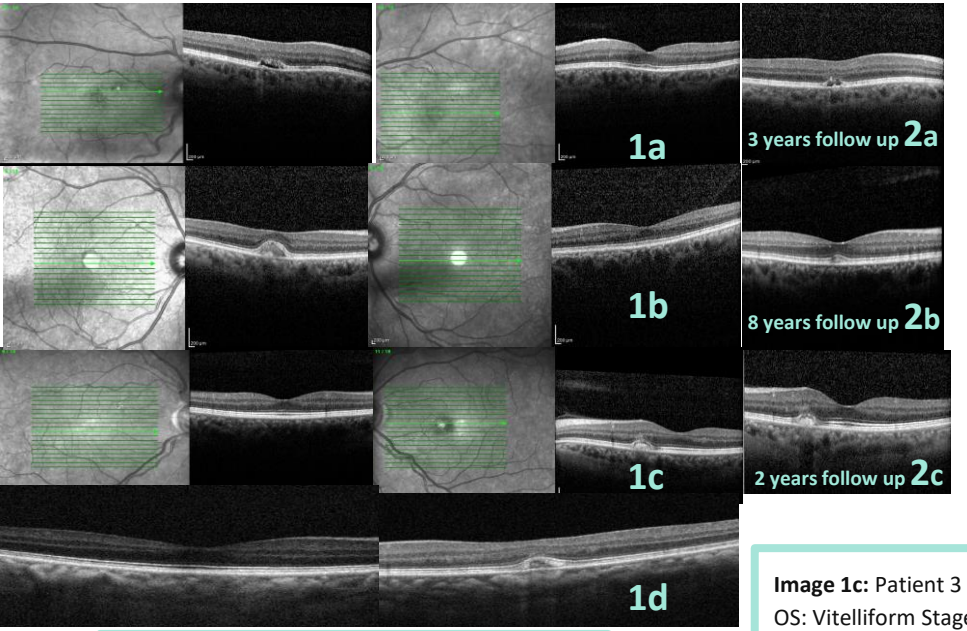

Image 1a: Patient 1 (P1) VA OD/OS: 0.8/0.8
OD: Vitelliform Stage III (2023)
Image 1b: Patient 2(P2) VA OD/OS: 0.6/0.8
OD: Vitelliform Stage IV (2023)

Image 1c: Patient 3 (P3) VA OD/OS: 0,7/0.5
OS: Vitelliform Stage II (2023)
Image 1d: Patient 4 (P4) VA OD/OS: 1.0/0.9
OS: Vitelliform Stage II (2023)

Cases Presentation: 4 female patients presented with unilateral adult-onset vitelliform lesions. Age: 59-75 years old.
All patients underwent complete ophthalmologic examination including medical history, fundoscopy, optical coherence tomography, autofluorescence and electrooculogram(EOG).
Initial visual acuity of the affected eye varies between 0.7-0.9/1.0
All lesions had typical clinical findings, with various vitelliform stages: from stage II to stage IV . The vitelliform lesion was located in the macula, in sub- or juxtafoveolar localization.
EOG findings were within normal limits for all patients (SO-Arden >1,8)
The decrease of the visual acuity is correlated to the seriousness and the duration of the retinal findings.
Current visual acuity varies between 0.6-0.8/1.0
No lesions have been detected on the fellow eye in any of the 4 patients after follow-up of 1-8 years

Image 2a: Patient 1 (P1) Oct (OD) from 2020 depicting minor unilateral progression.
Image 2b: Patient 2(P2) Oct (OD) from 2015 depicting gradual unilateral progression from stage II to stage IV.
Image 2C: Patient 3 (P3) Oct (Os) from 2021 depicting almost non progression.
*Patient 4 (P4) have also stable lesions in 1 year follow up.

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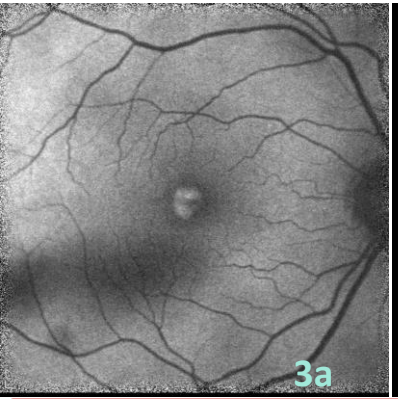

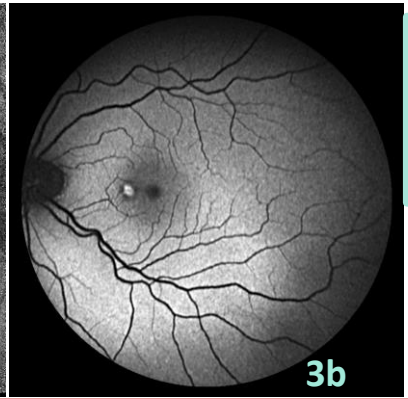

Image 3a. P2 OD Autofluorescence: Foveal hyperfluorescent lesion
Image 3b: P3 OS Autofluorescence: Parafoveal hyperfluorescent lesion

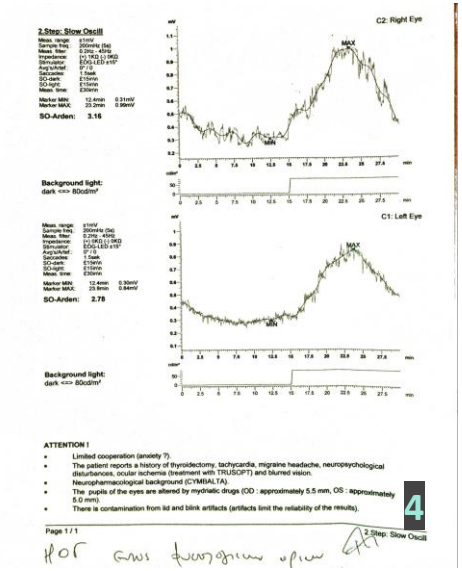

Image 4. P3 Normal EOG for both Eyes
OD SO-Arden: 3.16
OS SO-Arden: 2.78

Conclusion: Adult-onset vitelliform is often bilateral. Few sporadic unilateral cases are reported in the literature. While involvement of the fellow eye eventually is common, no such finding has been found yet in our group of patients despite even long-term follow-up.
In contrast to Best Disease, in adult onset vitelliform, EOG is not necessarily abnormal.
In our observations, we have identified a gradual advancement of the disease over an extended follow-up period. Consequently, it is essential to apprise patients of the incremental nature of their condition. Simultaneously, healthcare professionals should exercise caution to prevent misdiagnosing unilateral diseases as other macular disorders and refrain from administering treatment through injections. Additional research involving a larger sample of patients may, in the future, reveal a potential genetic link between our discoveries and adult-onset vitelliform.

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