

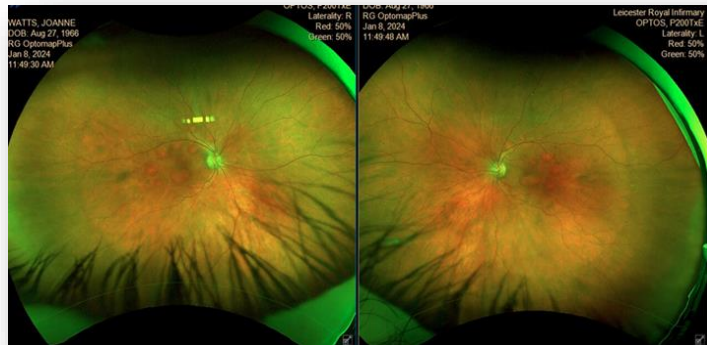
Acute Exudative Paraneoplastic Polymorphous Vitelliform Maculopathy during Abemaciclib treatment for ductal breast carcinoma

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Purpose

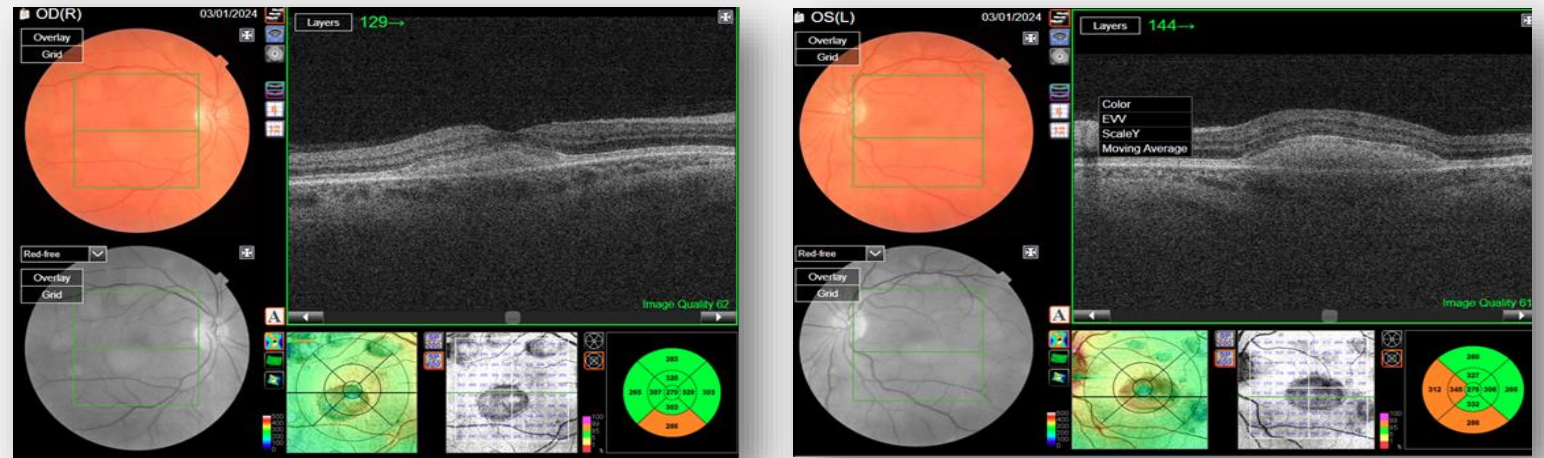
To present the rare case of a patient who developed acute exudative polymorphous paraneoplastic maculopathy (AEPPVM) after the onset of Abemaciclib treatment for breast cancer.



Material and methods

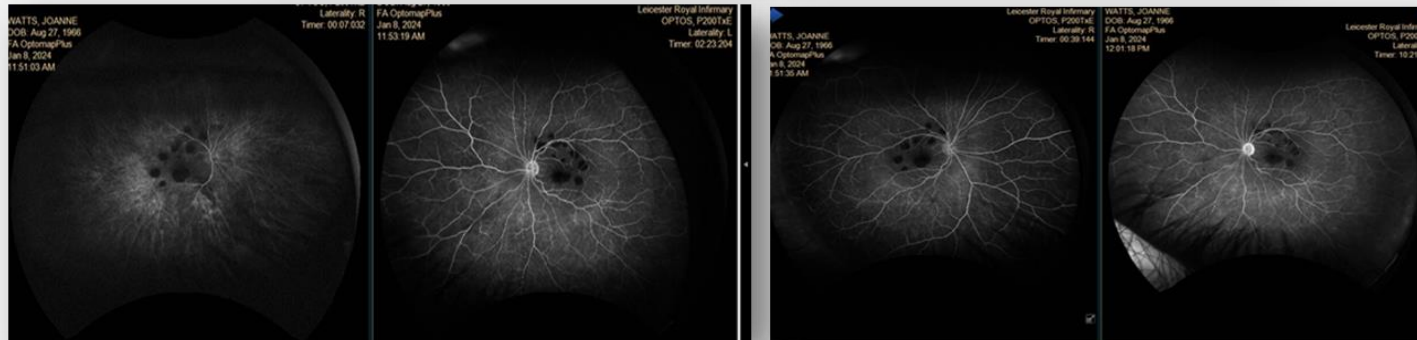
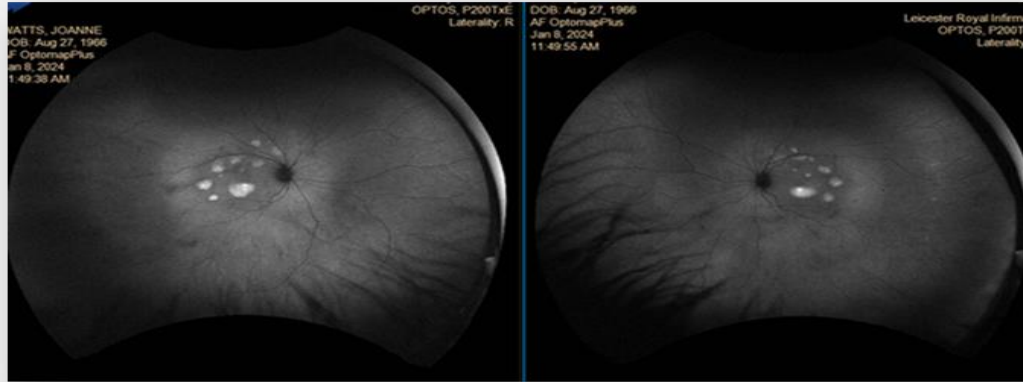
Retrospective case report documented with Ultrawide-field fundus imaging, spectral domain optical coherence tomography (SD-OCT), fundus autofluorescence imaging and fluorescein angiography.

Results



A 70-year-old woman with left ductal breast carcinoma complained of bilateral blurred vision within four months of starting treatment with Abemaciclib (CDK4/6 inhibitor). She had had left mastectomy and axillary node clearance, radiotherapy, adjuvant chemotherapy, and was on combined Letrozole with Abemaciclib treatment. On presentation, her visual acuity had declined to logMAR 0.32 in both eyes. Fundoscopy showed bilateral diffuse and symmetrical elevations of the fovea and the posterior pole with multifocal yellow-white, crescent-shaped subretinal deposits, giving the impression of vitelliform like lesions. On autofluorescence imaging, these lesions appeared hyper-autofluorescent. On fluorescein angiography there was blocking of the fluorescence in the affected areas of both eyes and absence of any other signs of inflammation. A modification of the chemotherapy dose was suggested but the patient refused to proceed. We decided to treat the patient with systemic steroids and refer her for skin review, to exclude skin melanoma, which is the most common recognized cause for AEPPVM.

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Conclusion

This case report suggests AEPPVM may be directly associated with the use of CDK4/6 inhibitors for the treatment for ductal breast carcinoma, or indirectly, by triggering autoimmune-paraneoplastic processes. Future identification of similar associations is required to unequivocally link Abemaciclib to AEPPVM in ductal breast carcinoma.

Bibliography

1. M. Asencio-Durán et al.
Ocular side effects of oncological therapies: Review
Archivos de la Sociedad Española de Oftalmología (2024)
2. H. S. Sandhu et al.
Acute Exudative Paraneoplastic Polymorphous Vitelliform Maculopathy During Vemurafenib and Pembrolizumab Treatment for Metastatic Melanoma
Retinal Cases & Brief Reports (2019)
3. F. Canino et al.
Ocular Toxicity in Breast Cancer Management: Manual for The Oncologist
Clinical Breast Cancer (2022)