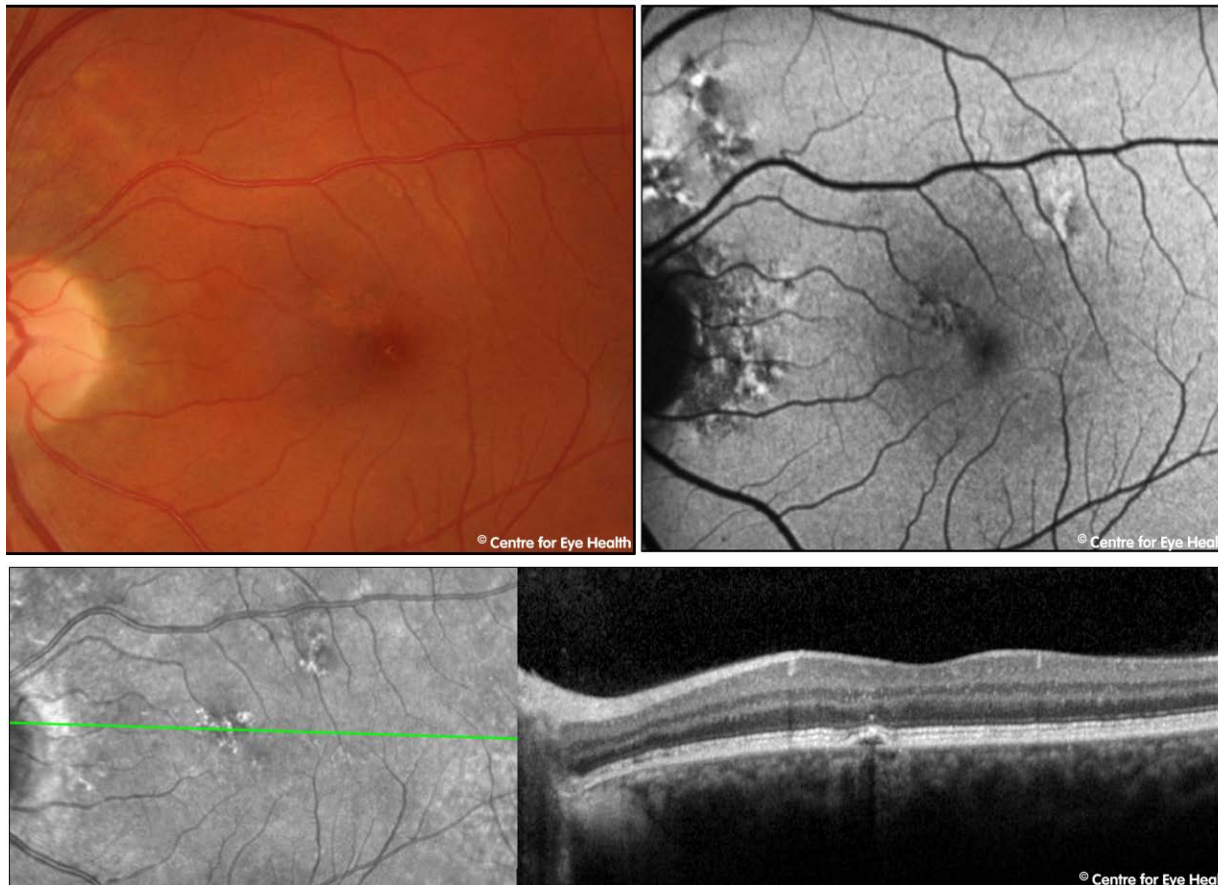




CFEH Facebook Case #55

A 47 year old Caucasian male was referred for investigation of macular changes. His medical history includes sleep apnoea and hypertension and current medications include Seretide, Accupril and Lopressor. This case will focus on the left eye only which has acuity of 6/7.5 and no distortions on an Amsler grid. What are the notable clinical findings in these images and what recently identified retinal condition do these findings suggest?



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ANSWER

The notable findings on funduscopy (and seen in the retinal image) include areas of mottled RPE change within and around the macula and near the optic nerve. Fundus Autofluorescence (FAF) shows mixed stippled hyper- and hypo-autofluorescence corresponding to these areas of RPE change. Note that these changes are more evident using fundus autofluorescence than with funduscopy/photography. OCT imaging showed an isolated shallow PED and disruption of the ISe zone with some overlying pigment migration at this point (seen as a hyper-reflective foci on the OCT scan).

These findings are consistent with pachychoroid pigment epitheliopathy (PPE), which is part of the Pachychoroid spectrum of disease. This spectrum is characterised by the common features of increased choroidal thickness, reduced fundus tessellation, drusenoid RPE changes, areas of hyper and hypo autofluorescence that are in excess of RPE changes noted clinically, and the presence of small PEDs overlying areas of thickened choroid.

In addition to PPE, other conditions included in the spectrum include central serous chorioretinopathy (CSCR), polypoidal choroidal vasculopathy (PCV) and pachychoroid neovascularopathy. PPE is likely to be a “forme fruste” manifestation of CSCR as it involves no history of serous macular detachment or sub-retinal fluid but other clinical characteristics are similar.

A recent study showed that in eyes with pachychoroid spectrum disease, the finding of shallow irregular PEDs on OCT (such as in this case), may be a significant indicator of the development of type 1 neovascularisation.