A 60 year old Caucasian male presented for a glaucoma assessment. An incidental finding in this patient’s left eye is shown below. What are the changes seen on OCT and what is the significance of these changes?
Answer

The OCT images show 2 areas of focal choroidal excavation (identified by the arrows below):

Focal choroidal excavation (FCE) refers to a localised region of excavation within the choroid. While the aetiology of this finding is not completely understood, it has been associated with pathologies where the choriocapillaris is dysfunctional, including central serous chorioretinopathy (CSCR) and polypoidal choroidal vasculopathy (PCV). This has recently led some authors to consider FCE as part of the pachychoroid spectrum of diseases (Chung et al. 2017 Retina).

Similar to many conditions in the pachychoroid spectrum of disease, a potential sequela of FCE is choroidal neovascularisation (CNV). While the pathophysiology of this process is not yet completely understood, FCE should be considered a risk factor for CNV and patients should be followed up regularly to monitor for this development.