A 29 year old female presented complaining of a persistent spot in her left eye vision that resembles an after-image. She was recovering from acute influenza A infection at the time the visual disturbance appeared. Visual acuity was 6/6 in each eye and testing with an Amsler grid allowed a small defect approximately 5 degrees temporal to fixation to be mapped out. Imaging results are shown below. What is the most likely cause of the visual change in this patient?
The Spectralis near infrared reflectance image outlines a sharply demarcated, hypo-reflective, wedge–shaped lesion with its apex pointing towards the fovea. The lesion corresponds to the shape and location of the scotoma mapped out on Amsler. OCT B -scan shows focal outer retinal disturbance with increased hyper-reflectivity in the outer nuclear layer and external limiting membrane as well as disturbance of the ellipsoid zone.

This presentation is consistent with a diagnosis of acute macular neuroretinopathy in the left eye.

Acute macular neuroretinopathy is a rare condition of unknown cause that is most commonly found in young white females. It is commonly associated with non-specific flu-like illness, fever, or the use of oral contraceptives.

This condition is characterised by small paracentral lesions with associated scotomas and may affect one or both eyes. The lesions are initially best seen on infra-red but become more visible over days to weeks on examination and retinal photography. OCT imaging through the lesions usually show disruption of the ellipsoid zone.