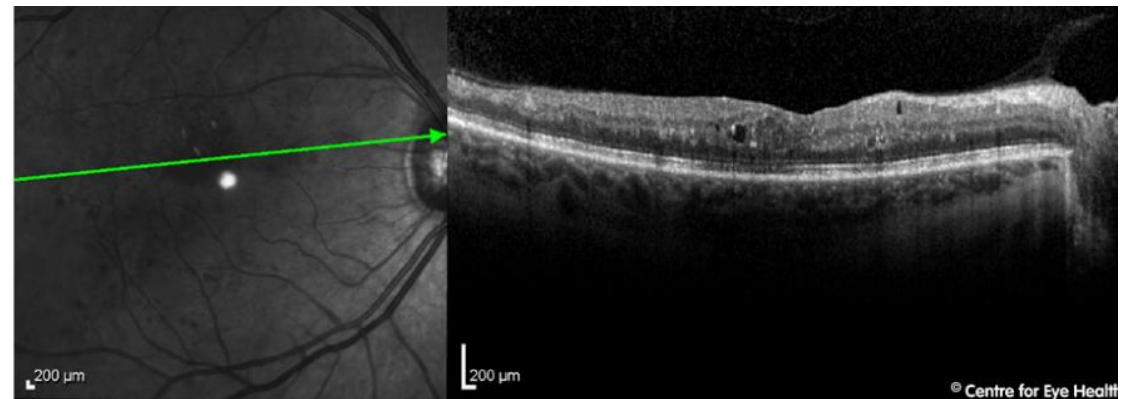




CFEH Facebook Case #50

A 29 year old male was referred for a diabetic retinal examination. He was diagnosed 12 years ago with type 1 diabetes and his most recent HbA1c was 8.1%. This case will focus on the right eye only which has a pinhole acuity of 6/9. Below are the posterior pole photo and a macular OCT. By looking at the posterior pole only, what piece of the puzzle are we missing?



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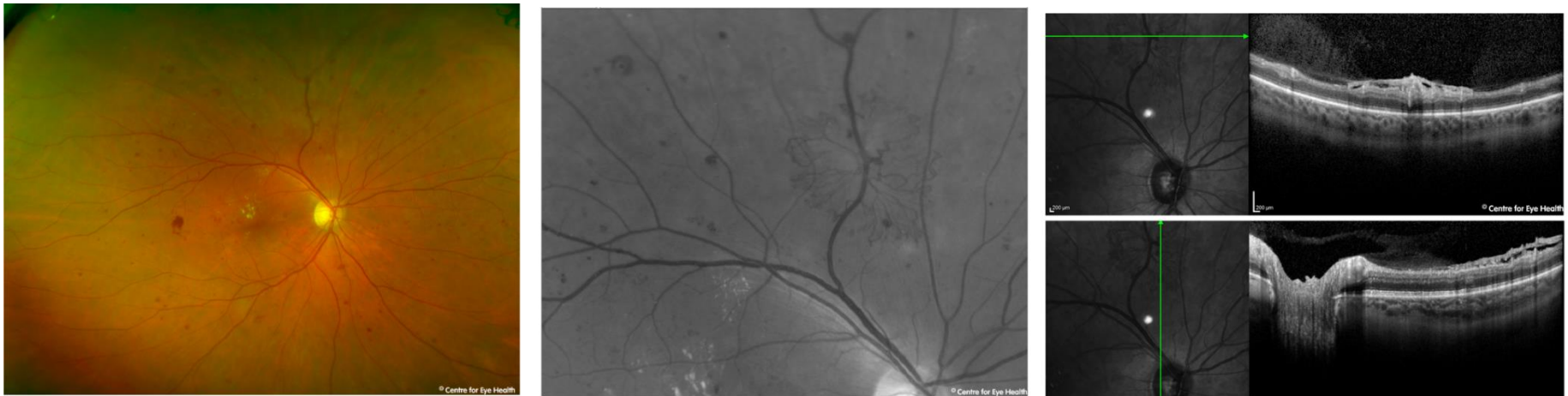
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ANSWER

Peripheral retinal examination revealed proliferative diabetic retinopathy (PDR) with a large neovascular sea-fan in the superotemporal arcades not apparent in the posterior pole images. Extensive peripheral haemorrhages, venous calibre abnormalities and retinal ischaemia were also present. The posterior pole image and OCT line scans showed moderate diabetic macular oedema (International Clinical Disease Severity Scale for Diabetic Retinopathy and Diabetic Macular Edema).

By examining the posterior pole in isolation, the level of retinopathy would likely have been significantly underdiagnosed as moderate NPDR with macular oedema. This case highlights the need to examine the peripheral retina in all patients with diabetes.



A recent study in the UK (Talks et al. 2015) has shown that 24% of neovascularisation in diabetic patients occurs outside the area of the posterior pole imaged by two 45 degree images centred around the optic nerve and macula. This indicates that a quarter of all neovascularisation in diabetic patients may be missed by relying on photography of the posterior pole alone. Further studies have indicated that individuals with peripheral diabetic lesions have a greater risk of DR progression. For a summary of the latest literature on this topic, you can download the CFEH condition spotlight "Peripheral Diabetic Retinopathy" [here](#).

This week CFEH is opening their new collaborative care clinic at Sutherland hospital with the goal of maximising the timely availability of public health care while maintaining a high quality and quality controlled service. The clinic will offer a diabetic retinopathy assessment and management service for outpatients referred from the endocrinology department as well as external referrals from GPs and Optometrists. Imaging and diagnostic services similar to those offered at Kensington will also be available at Sutherland.