

# The peripheral retina

## What the optometrist does not look for...

In the first in a series of case studies looking at the use of the Optomap scanning laser ophthalmoscope in optometric practice, Kevin Lewis describes a recent experience

IF I HAD TO GIVE only one piece of advice to a young inexperienced practitioner after 26 years in independent practice it would be to guard against complacency.

It is too easy to drift on a day where all your difficult patients seem to have gone elsewhere and the most taxing decision you have had to make at work, so far, has been whether to have a ham or cheese sandwich for lunch. Before you know it, you have missed a patient's main sign and have found yourself in front of a GOC fitness to practise panel.

I have had the dubious honour of sitting on the previous guise of this panel, namely the GOC disciplinary committee, for the past three years and judging by the expressions of those unfortunate enough to have found their way there, it is an experience you can do without in your practice life.

### CASE STUDY

Tuesday July 5, 2005, was one of those days. I had had an eventful time when, at 5pm, the last patient of the day walked into my consulting room.

He was a long-standing patient of the practice. Sixty-seven years young, non-insulin dependent diabetic since the year

2000 and had had regular yearly diabetic eye screening at the practice with dilated indirect ophthalmoscopy.

This had stopped in March 2004 due to the primary care trust having an epiphany and deciding to send 85 per cent of all diabetics to Basildon hospital to have the magic 'eye picture' taken (*patient's words not mine!*).

The remaining 15 per cent, unwilling to make the 12-mile trek, have to make do with a nine-month wait for a yearly appointment with a 'man in a van'. This second scenario was the one taken a few weeks earlier by my patient who was not happy with this 'burger bar' approach (*again the patient's words, not mine*) and had decided to come back to have it done 'properly'. This is why it had been 18 months since his last visit.

After a full symptoms and history discussion, nothing of any remark came to light except a 'throw-away comment' at the end saying he drove a car and was aware of an intermittent small black dot in the vision of his left eye when driving in sunlight, which seemed to move as he looked at it.

He had been aware of this for the past three months. His diabetes was just under control with blood sugars around  $9\text{mmol}^{-1}$  and he was taking oral hypoglycaemic

agents metformin and glipizide, as well as a 'statin' for high cholesterol.

His routine examination went on in this unremarkable vein with normal pupil reflexes, motility, external eye and ocular motor balance.

His visual acuity with his spectacles appeared normal at 6/6 R&L and N5 at near. His refraction showed no change from his January 2004 examination being the following:

R+0.25/-1.00 x 90 6/6 Near Add +2.25DS N5

L-0.25/-0.50 x 90 6/6 Near Add +2.25DS N5

Visual field examination on a Humphrey 720 analyser showed full fields on a SITA-fast 24-2 programme and IOP within normal limits at R 13mmHg, L 14mmHg on Pulsair.

### OPTOMAP RETINAL SCREENING

As the patient had specifically come for a full private diabetic screening, I undertook dilation and indirect fundus examination with a superfield binocular indirect ophthalmoscopy lens.

Both eyes showed no background diabetic retinopathy, macular reflex was clear and the only sign of note was a small, central posterior capsular lens opacity in the left eye.

I was ready to put the symptom of the 'black dot' in his left eye down to this lens opacity until I undertook an Optomap retinal screening examination.

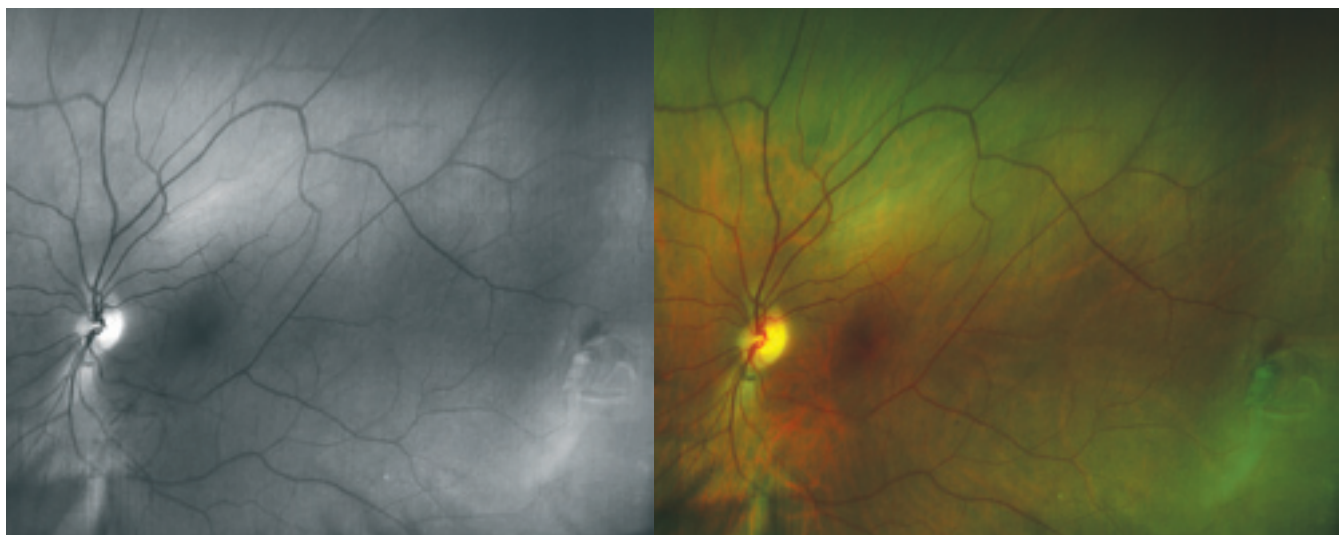


FIGURE 1. Green scan

Composite scan

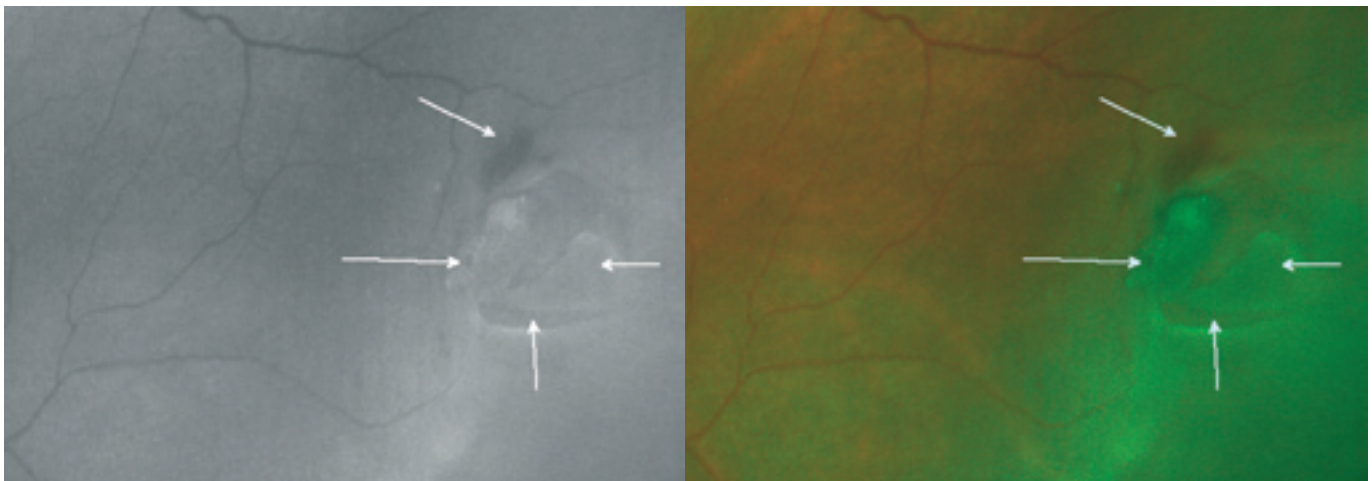


FIGURE 2. Green scan

Composite scan

I have had an Optomap scanning laser ophthalmoscope for the past two years and use it routinely for all my private diabetic screening, as well as offering it to all other patients.

It allows me a digital image of up to 80 per cent of the retina (undilated) in good detail, with a scan of the sensory retina by a green laser and of the choroid and deeper retinal layers by a red laser. Slightly more of the retina can be viewed with eye steering in the dilated patient.

To my abject horror and utter surprise I noted a large ‘horseshoe’ retinal tear (Figure 1) in the left eye at about 3 o’clock in the far periphery. You can see the edges

of the tear flaps raised into vitreous (Figure 2 middle arrow) with the direct view of the choroid at the lower half of the tear (Figure 2 lower arrow).

The pictures also show a large haemorrhage at the top/left hand side edge of the tear (Figure 2 top arrow) and a consequential retinal detachment around the tear (Figure 2 increased green).

I quickly put the patient back on the slit-lamp and noted a very small amount of red blood cells in the lower anterior vitreous (Shafer’s sign). But, no matter how I moved the eye, I could not see out far enough with the Volk lens to view the retinal tear. I also tried with a

Keeler headset indirect, which I have used for 18 years, but to no avail. Without scleral indentation, I was not going to get out far enough. I telephoned the duty ophthalmologist at our local eye clinic and booked an appointment for the patient the following day and he has since had successful laser treatment.


I have since made a note to always check the anterior vitreous when dilating diabetics and I am thankful that I have the Optomap retinal imaging system.

◆ *Kevin Lewis is an optometrist practising in Essex and is the incoming president of the College of Optometrists*

## The bigger picture


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