

# Diabetes Mellitus

**Jerome Sherman, O.D., F.A.A.O.**  
**Eye Institute and Laser Center**  
**New York, NY**

## Introduction

We recently had the P200°C installed in our uptown office for evaluation, where the majority of patients have pathology. We present below a case study which demonstrates the value of ultra-widefield, ultra-high resolution imaging for following patients with diabetes.

## Patient History

The patient was a 55-year-old male with a 9-year history of diabetes. Patient presented with no symptoms and had normal visual acuity.

## Discussion

In the higher resolution ResMax™ view of the right eye, a number of macular hemorrhages can be seen. These show up particularly well in the green separation view. More dramatic however are the 3 small hemorrhages seen temporally in the far periphery of the same eye in the widefield view provided by the P200°C. Small hemorrhages like these are typically missed with BIO because of their size. They are most likely due to diabetes. It was noted that some of the veins are tortuous.

The ability to image so much of the diabetic patient's retina (>80%)\* in one image is significant. It is now accepted that diabetic retinopathy can occur throughout the retina simultaneously, not just in the central pole, as many of us have previously learned. We have seen cases where only peripheral hemorrhages (and not posterior pole hemorrhages) have been detected in patients not known to be diabetic but were later diagnosed with diabetes.

## Conclusion

Imaging 200 degrees of the fundus simultaneously allows for detection of lesions in the posterior pole and the mid and far periphery in a very efficient manner. Although most lesions in the posterior pole are detectable with ophthalmoscopy and standard fundus photography, many of the small lesions in the peripheral retina go undetected without the panoramic view provided by Optos® imaging technology. Careful follow-up of this and similar patients is indicated.

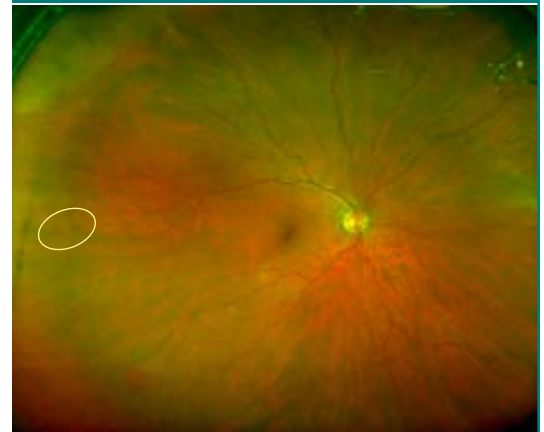
In our practice it is important that we are able to capture quality images that identify pathology anywhere in the fundus quickly and easily. The P200°C has made this desire a reality.

\*Imaged Area of the Retina – Alastair Atkinson, BSc, MSc, MIEE, CEng & Christophe Mazo, BSc, MSc, and MPhil. (Data on file).

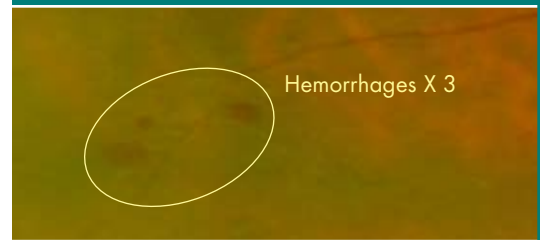


DISCOVER • DIAGNOSE • DETERMINE

Optos plc is a leading and rapidly growing medical technology company for the design, development, manufacturing and marketing of devices that image the retina. The Company has gained regulatory clearance (CE and FDA 510(k)) to market its third device - P200°C. The P200°C is aimed at practices looking for advanced clinical capabilities. With a view up to 82% of the retina in a simultaneous, single image, Optos' technology provides an unequalled combination of wide-field retinal imaging, speed and convenience for both practitioner and patient.



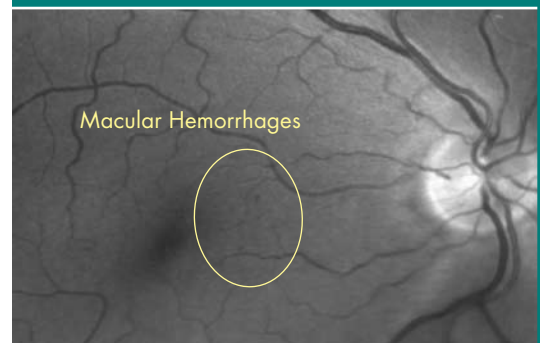
optomap® plus image



Zoomed view of peripheral hemorrhages detected in the above image.



ResMax™ image showing approx 100 degree view of central pole.



Zoomed view of the same ResMax™ image in the green separation view showing macular hemorrhages.