Study Spotlight: CLARUS UWF in Diabetic Retinopathy
Assessment and Comparative Study

Seeing beyond

Source

Title
Prospective observational study: Assessment of diabetic retinopathy using two ultra wide-field fundus imaging systems, the CLARUS and Optos systems

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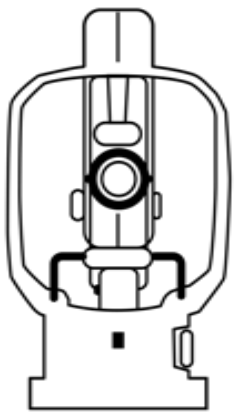
Methodology

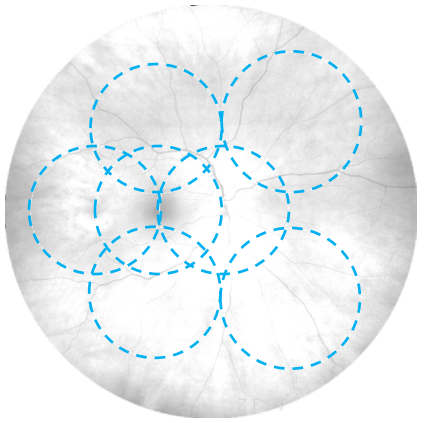
UWF systems compared



- Single image obtained from both CLARUS 500 and Optos California without mydriasis
- Total retinal area captured and the obscured retinal area were compared

CLARUS 500 and Optos CA
Ultra-widefield fundus imaging

Evaluation Criteria



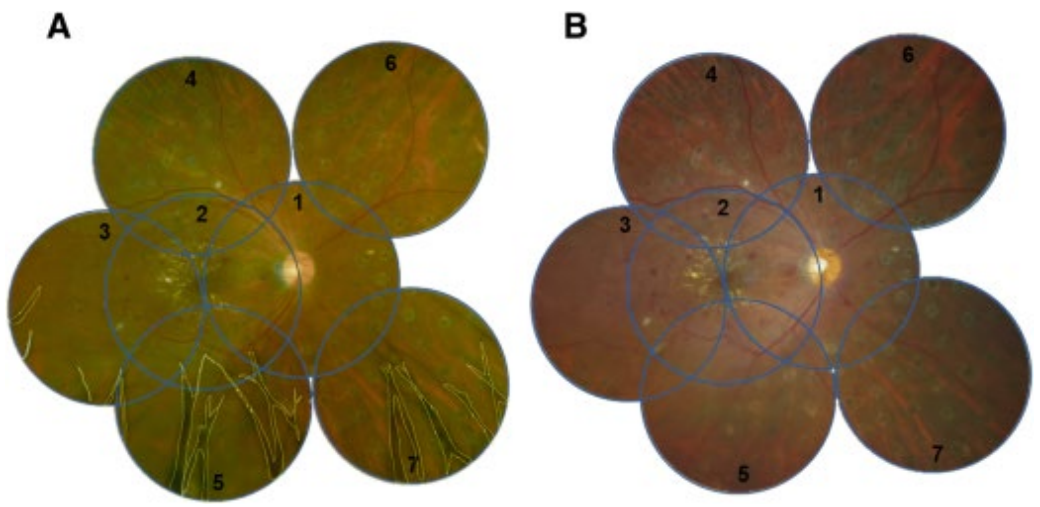
Analysis of Early Treatment of Diabetic Retinopathy Study (ETDRS) and DR severity between two UWF devices.

Sample Size

50 Eyes
of 28 consecutive patients with DR

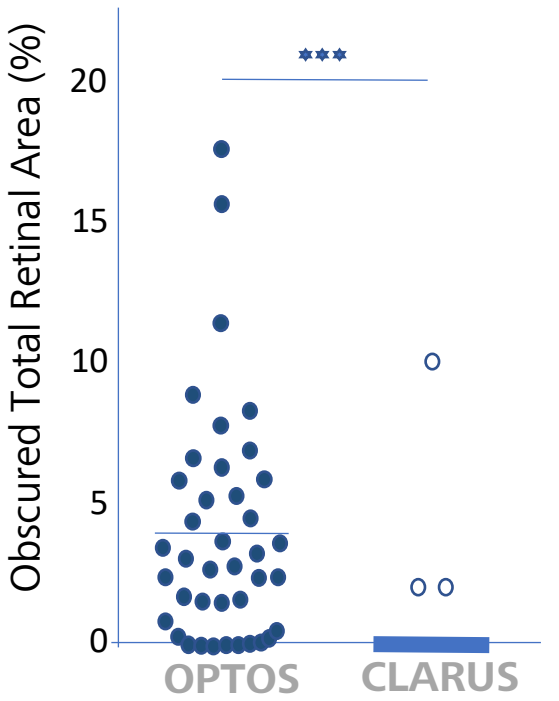
Results

The obscured total retinal area in the ETDRS-7 field had significantly higher values in Optos® images than in CLARUS® images (4.15 ± 4.00 vs. 0.47 ± 1.87%, *P* < 0.001)



Comparison of obscured retinal area in ETDRS 7-field area. (a) ETDRS 7-field cropped from an Optos® image. (b) ETDRS 7-field cropped from a CLARUS® image. The blue line circles in (a) and (b) show the ETDRS 7-field. The number in (a) and (b) indicate the number of the ETDRS 7-field. The yellow dotted lines in (a) show the obscured area.

In 85% of Optos® images, a slightly obscured area was observed within the ETDRS-7 field area.



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