Ultrawide field angiography in proliferative diabetic retinopathy

Dear Editor,

We went through the article titled "Topographic distribution of retinal neovascularization in proliferative diabetic retinopathy using ultrawide-field angiography" by Nidhi V *et al*.[1] We have a few observations and queries for the authors. In methods, the authors have mentioned that the study design was a prospective observational study. For a study to be prospective, the authors have to define an outcome, and patients need to be followed up at regular intervals until the desired outcome is achieved. However, in the present study, the patients were examined at a single point in time. There have been no follow-up examinations. The study design is cross-sectional rather than a prospective study. The image template created by the software and overlaid on the ultrawide-field image appears to be smaller than the size of the image that a 30° field of a fundus camera would have obtained.

We would also like to know how the results of the present study add to or change the way in which we manage a case of treatment-naïve proliferative diabetic retinopathy (PDR) without any significant traction. The authors have mentioned that many patients had foci of neovascularization (NV) beyond the template image projected on the ultrawide-field image. Most of the NV can be easily documented using the conventional fundus camera. Using the montage image feature, even slightly peripheral NV can be visualized. Wide-angled cameras are costly and cannot be afforded by all centers. It will be interesting to know if any of the patients in the current study had an NV in the far periphery, which cannot be visualized by a conventional fundus camera.

The current gold standard for PDR is pan-retinal photocoagulation (PRP). Intravitreal anti-vascular endothelial growth factor (VEGF) agents have also been used in treatment-naïve PDR.[2] However, they need to be injected repeatedly, and treatment is costly and cannot be afforded by most of our population. The authors have mentioned that determining capillary non-perfusion (CNP) areas can help perform targeted or selective scatter photocoagulation. However, in treatment-naïve PDR cases, the laser is guided by the presence of NV and not CNP areas. Even if there is a single NV, we perform three sittings of PRP in such cases. Determining the CNP areas can be helpful if there is a recurrence of lesions following PRP or if there is persistent macular edema following optimal treatment. The authors have mentioned that there was a mismatch between the CNP area and the location of NV. Diabetic retinopathy is a dynamic disease process, and it is possible that NV can develop with time in those CNP areas that had no NV at the time of examination.

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Conflicts of interest

There are no conflicts of interest.

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