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Sir,

Hulbert and Vernon[1] have performed a valuable service in reminding ophthalmologists who treat diabetic retinopathy of the importance of preserving as much of the visual field as possible. However, I suspect that they may be advocating dangerous undertreatment of patinets with proliferative diabetic retinopathy.

Most authors recognise that 'complete treatment' of proliferative retinopathy by panretinal photocoagulation requires approximately 1800–2000 laser burns of 500 μm size. This was the basis of laser treatment applied in the Diabetic Retinopathy Study[2] and forms the guidelines for present-day management of proliferative diabetic retinopathy.[3] Patients with aggressive retinopathy may well, of course, require much more laser treatment.

Hulbert and Vernon advocate the use of 200 μm spot size laser burns and comment in their guidelines that 'between 3000 and 3500 carefully applied burns induces regression in all but severe cases'. Using a 200 μm spot size it would require 12 500 laser burns to cover the same area of retina as the 'conventional' 2000 burns of spot size 500 μm. They therefore appear to be advocating considerably less laser treatment than is currently the norm, and I suspect this could well be a dangerous undertreatment. Furthermore, as far as I am aware, this form of treatment has never been tested in controlled studies and as such should, in my opinion, be regarded with caution.

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Sir,

I am grateful to Mr. Gibson for re-emphasising the importance of delivering sufficient laser photocoagulation to induce neovascular regression in proliferative diabetic retinopathy. I had hoped that this would be covered by Guideline 5 in our paper.[1] We are, of course, aware that our suggestions (specifically designed for individuals who require a driving licence) result in a smaller area of retina being photocoagulated. Our experience, as outlined in the tables,[1] would indicate that, based on the degree of severity of retinopathy of patients referred to our clinic, many do not require our 'standard retinal ablation' to induce stability of their disease. Titrating treatment in these patients, provided there are adequate facilities for follow-up, would not appear to prejudice the end result; thus a decision to deliver 2000 burns at 500 μm spot size in a patient who does not need that volume of photocoagulation is clearly unjustified. Conversely, patients with rapidly progressive, aggressive retinopathy (which would fall into the severe category) must be treated with more extensive photo-ablation.

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