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**Sir,**  
**Electroretinography can provide objective assessment of inner retinal function prior to atrophic change on OCT**

The paper by Yusuf *et al*<sup>1</sup> describing cases of transient artery occlusion following phacoemulsification surgery provides an important addition to the differential for visual loss following cataract extraction, and in their subsequent letter<sup>2</sup> they suggest prospective case finding to establish what risk factors might be associated with this phenomenon. They state that OCT 'may provide the only objective evidence of TRAO, particularly in patients not presenting in the immediate post-operative period'. Unless patients are seen acutely when the characteristic inner retinal thickening may be evident, OCT changes may be quite subtle until inner retinal atrophy develops some time later. A modality that may be helpful in this intermediate period is electroretinography, which provides objective assessment of function, with some localisation of dysfunction. The full-field flash electroretinogram (ERG) can discern inner retinal dysfunction (by selective impairment of the b-wave in comparison with a relatively preserved a-wave, giving an electronegative ERG,<sup>3</sup> and also, more recently described, by reduction of the photopic negative response<sup>4</sup>). Electrodiagnostic testing is not as readily available as OCT, so this may not be always feasible. The development of handheld devices may allow more widespread use,<sup>5</sup> although recordings using these devices may need greater validation. Also, more localised arteriolar insufficiency may not be detected so sensitively by full-field techniques, in which case multifocal electroretinography can be helpful. This highlights the likely added value of using objective tests of retinal function in conjunction with high-resolution imaging of retinal structure; the latter is not always abnormal when function can be markedly impaired.

**Conflict of interest**

The author declares no conflict of interest.

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**Sir,**  
**Transient retinal artery occlusion: the potential utility and limitations of electroretinography**

We agree with Mahroo's<sup>1</sup> helpful suggestions on the utility of electroretinography (ERG) in suspected transient retinal artery occlusion (TRAO) cases.

TRAO is a recently proposed clinical entity supported by OCT findings.<sup>2,3</sup> The ERG features of TRAO are yet to be described, and may be sought as part of a prospective case-finding study. Two limitations of Ganzfeld ERG in TRAO are: (1) branch pattern TRAO may not be detected; and (2) b-wave attenuation on ERG reverses fully after 30 min in experimental models of transient retinal ischaemia.<sup>4</sup> ERG evidence of widespread ischaemia may vanish before testing takes place.

However, if there is perimetric or OCT evidence of ongoing retinal ischaemia when ERG is performed, it is likely that ERG abnormalities would be detectable. If the ischaemic changes extend beyond the obviously affected area of the retina, the Ganzfeld ERG might provide evidence of retinal ischaemia in the form of b-wave amplitude reduction and increased 30-Hz photopic flicker implicit time.

The multifocal ERG (mfERG) may provide evidence of localised ischaemic changes and might have contributed to the diagnosis in cases 2 and 3.<sup>2</sup> Branch retinal artery occlusion attenuates the N1, P1, and N2 components in the distribution of ischaemic retina on mfERG.<sup>5</sup> mfERG is capable of identifying wider retinal dysfunction than that suggested clinically.<sup>6</sup> It has been used to demonstrate functional recovery following retinal artery occlusion<sup>7</sup> and to detect subclinical retinal dysfunction in Susac's syndrome.<sup>8</sup> Pattern ERG may also demonstrate reduced amplitude or delayed P50 in cases

of macula-involving TRAO, and may have supported a diagnosis in case 1.<sup>2</sup>

The mechanism underlying TRAO is unknown. If vasospasm or thromboembolism was responsible, it is conceivable that retinal ischaemia may persist beyond the specific occlusive episode and may be detectable on ERG or mfERG. It is also possible that reperfusion after prolonged TRAO would produce ERG changes, although we are not aware of this having been studied in human subjects.

Although a normal ERG may not exclude TRAO, it may therefore be considered in suspected TRAO when OCT findings are inconclusive or where persistent retinal ischaemia is suspected.

### Conflict of interest

The authors declare no conflict of interest.

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### Sir, The effectiveness of asking multiple questions at the Royal College of Ophthalmologists Annual Congress

I had the pleasure of attending four full days of the Royal College Congress at Birmingham last year, including the retina day. I had noted in previous years that those audience members asking more than one question following a presentation, without waiting for an answer in between questions, as a rule did not have satisfactory answers to all the questions. I determined at this Congress to see whether this indeed was the case.

Over the 4 days of Congress I observed 106 audience interactions with speakers, including the rapid fire sessions, in a variety of different-sized gatherings. Where audience members asked more than one question having waited for an answer before asking another question, each question was regarded as a separate interaction. Of these interactions, 87 involved one question per interaction, of which 85 were answered by the speaker (97.7%). Fifteen audience interactions involved asking two questions at once, of which 15 had at least one question answered and 7 both questions answered (46.7%). Two interactions involved three questions asked at once, one of which resulted in two questions answered and the other with only one question answered, resulting in none having had all three questions answered (0.0%). A further two interactions were difficult to classify due to the nature of the questions and disregarded.

Asking questions in a public setting such as Congress can be said to have two purposes. Primarily it may be regarded as a data gathering exercise on behalf of the questioner but secondly, the asking of questions may be to convey a message to the audience and the speaker's answer is a secondary consideration. Assuming that the asking of questions is mainly for the receipt of information, this analysis would suggest that the best strategy would be to ask questions individually and only ask further questions once a satisfactory answer is received as only 46.7% had both questions answered when asked together. It may be argued that asking two questions at once may be a better strategy due to time constraints and a desire on behalf of the chairperson to be fair to a broad section of the audience reducing the chance of a single member of the audience being able to ask more than a single question. However, if this were indeed the case, asking two or more questions at once can be deemed both ineffective and unfair, and perhaps should be discouraged at future Congresses in order to use the time most efficiently.

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