criteria. Even where they are met, this presentation still merits investigation. We have seen a 63-year-old gentleman with a 10-day history of generalised headaches, intermittent scintillating scotomata, and an isolated cotton wool spot on examination (Figure 1). Within 24 hours of presentation he developed a central retinal artery occlusion and, despite the absence of any systemic symptoms, a diagnosis of giant cell arteritis was later confirmed by biopsy. Ominously, retinal migraine was initially considered a likely diagnosis.

It is worth noting that the understanding of migraine pathophysiology has changed. Alterations in cortical blood flow, though associated with migraine, do not reliably explain the complex nature or time course of the symptoms experienced by migraineurs. Evidence to support the modelling of migraine as a pathological state of neuronal instability is growing.[4] Cortical migraine and retinal vasospasm may therefore be pathologically distinct entities.[5] One must also bear in mind that 'migraine' is a term widely used by the public and is the commonest neurological diagnosis. Therefore, when a history of migraine is elicited from a patient with cotton wool spots, it is important not to be falsely reassured by this finding as it may be purely incidental.

Conflict of interest

The authors declare no conflict of interest.

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Sir,
Reply to 'Response to: Cotton wool spots and migraine: a case series of three patients'

We would like to thank Svasti-Salee *et al* for their response to our letter entitled 'Cotton-wool spots and migraine: a case series of three patients'. The authors give a long list of all possible diagnoses that may present with cotton-wool spots (CWS). We would agree that patients with CWS should be appropriately investigated.

Indeed, all three of our patients had blood pressure measurement, routine serum biochemistry, and haematology tests (including inflammatory markers) on presentation. Furthermore, fundus fluorescein angiogram (FFA), optical coherence tomography (OCT), and Goldmann visual field testing were performed in each case. The patients, who were all below the age of 50, were then followed-up initially within 1 month, then around 2 months following this, then finally at 6 months, at which point symptoms and signs had completely resolved. All tests carried out were normal, other than the presence of an isolated CWS on the FFA and OCT images. We were unable to give all this detail due to the word count stipulation of this article.

We would also agree with Svasti-Salee *et al* that our observation, that isolated CWS and migraine could be linked, is speculation. Migraine is a complex disorder and, as the authors point out, the understanding of its pathophysiology is evolving. However, we would suggest that it seems likely that there is an association based on the evidence that we have cited and our observations in these three young, healthy patients.

Svasti-Salee *et al* appear to have misinterpreted the message of our article. We would certainly advocate appropriate investigation and follow-up of patients with CWS. The risk of an associated life or sight threatening disease becomes higher with the presence of any concerning clinical features such as increasing age, evidence of vascular disease elsewhere in the retina, or elsewhere in the body.

Conflict of interest

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