CORRESPONDENCE



Comment on: Risk of acute stroke in patients with retinal artery occlusion: a systematic review and meta-analysis

Arani Nitkunan^{1,2} · Anthony C. Pereira²

Received: 23 November 2019 / Revised: 28 January 2020 / Accepted: 29 January 2020 / Published online: 5 February 2020 © The Royal College of Ophthalmologists 2020

To the Editor:

We congratulate Fallico et al. on their clear collation and presentation of data on the incidence of acute cerebral ischaemia detected by magnetic resonance imaging (MRI) following acute central retinal artery occlusion (CRAO) and branch retinal artery occlusion (BRAO) [1]. Their article reports 25–30% of these patients have evidence of cerebral ischaemia.

We would like to make three points. Firstly, while many of the diffusion-weighted lesions identified were asymptomatic, their presence is important. MRI in a truly asymptomatic population has been reported to yield no diffusion-positive lesions [2]. Therefore, identifying diffusion-positive lesions in the population of patients with CRAO or BRAO implies that these patients are at risk of clinical ischaemic events many of which may be preventable with early diagnostic evaluation and treatment.

Secondly, in the data presented, up to 45% of acute lesions on MRI were not ipsilateral to the affected eye. This emphasises how the use of MRI can highlight the need to look for a more proximal, probably cardiac, source of emboli. These patients may benefit from echocardiography and prolonged cardiac monitoring for atrial fibrillation in particular.

Thirdly, we fully support the close collaboration of neurological and ophthalmological vascular services. However, we think hospital admission or emergency department attendance could be avoided for most patients who could be dealt with very effectively through rapid access TIA clinics. In practical terms, however, this approach is likely to include some delay. Therefore, we would encourage ophthalmologists to institute vascular secondary prevention measures immediately on diagnosis of CRAO or BRAO before referring on for further neurological evaluation.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

References

- Fallico M, Lotery AJ, Longo A, Avitabile T, Bonfiglio V, Russo A, et al. Risk of acute stroke in patients with retinal artery occlusion: a systematic review and meta-analysis. Eye. 2019;33. https://doi.org/ 10.1038/s41433-019-0576-y.
- Batool S, O'Donnell M, Sharma M, Islam S, Dagenais GR, Poirier P. PURE Study Investigators, et al. Incidental magnetic resonance diffusion-weighted imaging-positive lesions are rare in neurologically asymptomatic community-dwelling adults. Stroke. 2014;45:2115–7. https://doi.org/10.1161/STROKEAHA.114.005782.

Arani Nitkunan anitkunan@nhs.net

¹ Department of Neurology, Croydon University Hospital, London Road, Croydon CR7 7YE, UK

² Department of Neurology, St George's University Hospitals NHS Foundation Trust, London SW17 0QT, UK