interval until such time that long-term drug delivery implants are available. Future, prospective studies with a larger sample size are required to confirm the findings of our initial study and also to potentially identify anatomical characteristics that would be predictive of eyes that might require fewer injections.

Conflict of interest

The authors declare no conflict of interest.

Reference

1 Homer N, Grewal DS, Mirza RG, Lyon AT, Gill MK. Transitioning to intravitreal aflibercept following a previous treat-and-extend dosing regimen in neovascular age-related macular degeneration: 24-month results. Eye 2015; 29: 1152-1155.

N Homer, DS Grewal, RG Mirza, AT Lyon and MK Gill

Department of Ophthalmology, Northwestern University Feinberg School of Medicine, Chicago, IL, USA

E-mail: mgill@nmff.org

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Comment on 'The Royal College of Ophthalmologists Guidelines on retinal vein occlusions'

I read with great interest the recently updated retinal vein occlusion (RVO) guidelines published by The Royal College of Ophthalmologists. Ever since the previous guidelines published in 2010 the treatment of RVO in the UK has undergone a rapid evolution, mainly attributed to the recommendation and approval of the use of ranibizumab (Lucentis, Novartis, Basel, Switzerland) and aflibercept (Eylea, Bayer, Berlin, Germany) by The National Institute for Health and Care Excellence (NICE).^{2,3} The authors have produced a very clear and comprehensive strategy in stratifying the management plan based on the types of RVO (central vs branch and ischaemic vs non-ischaemic), the visual acuity (>6/12 vs 6/12–6/96 vs <6/96), and the presence of macular ischaemia in branch RVO.

However, I believe there is a very slight error in the section on 'anti-vascular endothelial growth factor agents for treatment of macular oedema due to RVO'. The authors quoted NICE TA238 in relation to the use of ranibizumab for treating macular oedema secondary to RVO. NICE TA238 refers to the use of tocilizumab for the treatment of systemic juvenile idiopathic arthritis.⁴ This should be replaced by NICE TA283, which refers to the use of ranibizumab for treating visual impairment caused by macular oedema secondary to RVO.²

In summary, I would like to thank and congratulate the authors on updating the RVO guidelines with the most current evidence, which helps to streamline the current practice in the UK and ultimately benefits the patients whom we are treating.

Conflict of interest

The authors declare no conflict of interest.

References

- 1 Sivaprasad S, Amoaku WM, Hykin P. RVO Guideline Group. The Royal College of Ophthalmologists Guidelines on retinal vein occlusions: executive summary. Eye (Lond) 2015; 29(12): 1633-1638.
- NICE TA283. Ranibizumab for treating visual impairment caused by macular oedema secondary to retinal vein occlusion. Available at www.nice.org.uk (accessed May 2013).
- NICE 305. Aflibercept for treating visual impairment caused by macular oedema secondary to central retinal vein occlusion. Available at www.nice.org.uk (accessed February 2014).
- NICE TA238. Tocilizumab for the treatment of systemic juvenile idiopathic arthritis. Available on www.nice.org.uk (accessed December 2011).

DSJ Ting

Newcastle Eye Centre, Royal Victoria Infirmary, Newcastle upon Tyne, UK E-mail: ting.darren@gmail.com

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Comment on 'The Royal College of Ophthalmologists Guidelines on retinal vein occlusions: executive summary'

We read with great interest the legitimate and comprehensive guidelines on retinal vein occlusions (RVO) elaborated by Sivaprasad et al. However, the reference data were not updated with the available long-term results of the trials, which had dealt with the efficacy of therapy with ranibizumab (Lucentis, Genentech, Inc., South San Francisco, CA, USA) and aflibercept (Eylea, Regeneron Pharmaceuticals, Inc., Tarrytown, NY, USA) for macular edema secondary to central RVO (CRVO).2-4 Specifically, the rates of unresolved macular edema were 56% in the RETAIN study,² 65.7% in the COPERNICUS study,³ and 39.4% in the GALILEO study, ⁴ after 51.4, 24, and 18 months of follow-up, respectively. Delayed deterioration in the outcome measures in the mentioned trials could be explained by the lower frequency of injections as well as the long duration of time from CRVO diagnosis to initiation of treatment, during which time patients went without treatment for example, an average of 6.39, 2.73,



and 2.6 months in the RETAIN, 2 COPERNICUS, 3 and GALILEO⁴ trials, respectively. These facts favored the delayed occurrence of ischemic and irreversible lesions of the macular ganglion cell complex, close to the foveola, with macular edema being a minor factor.

Sivaprasad et al¹ mentioned intravitreal bevacizumab (Avastin, Genentech, Inc., San Francisco, CA, USA) use (off-licence) for ischemic RVOs with neovascularization. Why only in these forms? In 2015, we published a prospective clinical study⁵ on the 3-year results of bevacizumab treatment in patients with acute (≤1 month after the occlusion was diagnosed) central/hemiCRVOs (C/HCRVOs). The results of this study showed, for the first time, evidence suggesting that early treatment applied immediately after the clinical onset of venous occlusion provided significant and sustained improvements in visual acuity and foveal thickness with inactive disease (dry retina and stable visual acuity for at least 6 months after the last injection) in most phakic patients with acute C/HCRVOs, making this treatment option a rational and viable therapeutic strategy. Bevacizumab was more effective in patients with ischemic occlusions who required a significantly higher number of injections.

In conclusion, we believe that regardless of the anti-vascular endothelial growth factor agents used, the response to therapy depends primarily on the precociousness of the treatment after C/HCRVO onset.

Conflict of interest

The authors declare no conflict of interest.

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References

- Sivaprasad S, Amoaku WM, Hykin P, RVO Guideline Group. The Royal College Of Ophthalmologists Guidelines on retinal vein occlusions: executive summary. Eye (Lond) 2015; 29(12): 1633-1638.
- Campochiaro PA, Sophie R, Pearlman J, Brown DM, Boyer DS, Heier JS et al. Long-term outcomes in patients with retinal vein occlusion treated with ranibizumab. The RETAIN study. Ophthalmology 2014; 121(1): 209-219.
- Heier JS, Clark WL, Boyer DS, Brown DM, Vitti R, Berliner AJ et al. Intravitreal aflibercept injection for macular edema due to central retinal vein occlusion. Two-year results from the COPERNICUS study. Ophthalmology 2014; 121(7): 1414-1420.
- Ogura Y, Roider J, Korobelnik JF, HOlz FG, Simader C, Schmidt-Erfurth U et al. Intravitreal aflibercept for macular edema secondary to central retinal occlusion. 18-month results of the phase 3 GALILEO study. Am J Ophthalmol 2014; **158**(5): 1032-1038.
- Călugăru D, Călugăru M. Intravitreal bevacizumab in acute central/hemicentral retinal vein occlusions: three-year results of a prospective clinical study. J Ocul Pharmacol Ther 2015; 31(2): 78-86.

D Călugăru and M Călugăru

Department of Ophthalmology, University of Medicine, Clui-Napoca, Romania E-mail: mihai.calugaru@mail.dntcj.ro

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