Conflict of interest

The authors declare no conflict of interest.

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L Mowatt^{1,3}, S Tarin² and NJ Price²

¹University Hospital of the West Indies, Mona, Kingston, Jamaica

²Wolverhampton Eye Infirmary, New Cross Hospital, The Royal Wolverhampton NHS Hospitals, Wolverhampton, UK

³Birmingham and Midland Eye Centre, Sandwell and West Birmingham Hospital NHS Trust, Birmingham, UK

E-mail: lizettemowatt@yahoo.com

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Sir,

Intravitreal bevacizumab vs triamcinolone acetonide for macular oedema due to central retinal vein occlusion

We read with great interest the article by Wu *et al.*¹ We have some comments to share with the authors and to broaden the discussion.

First, the proportion of ischaemic central retinal vein occlusion (CRVO) was different in the two treatment groups. The ITA group had 13.6% (3/22) of ischemic CRVO patients, while the IBe group had 38.5% (5/13) of those patients. Although not statistically significant, the chi-square test showed a trend of difference in the constitution of CRVO patients ($P=0.09$). A previous study had shown that intravitreal injection of triamcinolone acetonide (TA) might be more favourable to non-ischaemic CRVO.² The results of the present study also imply that non-ischaemic CRVO may have a better outcome than intravitreal injection of bevacizumab. The difference in constitution of ischaemic/non-ischaemic CRVO patients in the two treatment groups might lead to the conclusion that IVTA was as effective as intravitreal injection of bevacizumab in treating macular oedema because of CRVO being less convincing.

Second, we are curious about the choice of dosage of the TA. The SCORE study has shown the same efficacy of 1 and 4 mg TA in improving visual acuity in perfused CRVO patients, but lesser intraocular pressure (IOP) elevation and cataract with 1 mg TA.³ Although during the time of the authors' study, the results of the SCORE study were not available, the authors may need to specify their reasons for choosing 4 mg TA as the dosage.

Third, the authors used a full auto tonometer to measure the IOP instead of the Goldmann applanation tonometer, which is the golden standard in IOP measurement. We are wondering about the reasons behind the choice of the tonometer in this study.

Fourth, in the patient who had mature cataract during follow-up, the authors did not describe the appearance of the cataract, nor did they state how fast the cataract developed. This information was important for us to determine whether the cataract was caused by the needle during injection.

Conflict of interest

The author declares no conflict of interest.

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YJ Hu

Joint Shantou International Eye Center, Shantou, Guangdong, China

E-mail: kevin8899@sohu.com

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Sir,

Reply to Hu

We thank Hu¹ for the comments on our article. Below we propose our explanations to the queries raised.

1. The proportion of patients with ischaemic central retinal vein occlusion (CRVO) was different in the two treatment groups.

Answer: Indeed, the patient collection is a limitation of our study. Due to the retrospective design, we could not make a perfect match between the intravitreal triamcinolone acetonide (ITA) group and the IBe group, but we tried our best. There were no significant differences between the two treatment groups with regard to patient age, sex, follow-up period, baseline visual acuity, and retinal

thickness. The constitution of ischaemic/non-ischaemic CRVO patients between the ITA group and the IBe group was also not significantly different. Hence, our results were still reliable but we interpreted our results with caution. We also mentioned in our paper that large prospective, randomized clinical trials are necessary to compare the long-term efficacy and safety of ITA *vs* bevacizumab for patients with macular oedema associated with CRVO.

2. We are curious about the choice of dosage of the TA.

Answer: We reviewed many articles about ITA used in different diseases such as diabetic macular oedema,^{2,3} Vogt-Koyanagi-Harada syndrome,⁴ branch retinal vein occlusion,⁵ diabetic papillopathy,⁶ and CRVO.⁷⁻⁹ We found that most authors have adopted 4 mg TA for the therapeutic dosage. Hence we quoted their results and chose 4 mg TA as the dosage used.

3. The authors used a full auto tonometer to measure the IOP instead of the Goldmann applanation tonometer, which is the golden standard in IOP measurement.

Answer: In our outpatient department, the IOP measurement is routinely performed with a full auto tonometer by a well-trained and experienced technician. Hence the IOP data are reliable. If the ocular condition does not match the IOP measured by a full auto tonometer, we will double-check the IOP with a Goldmann applanation tonometer.

4. In the patient who had a mature cataract during follow-up, the authors did not describe the appearance of the cataract, nor did they state how fast the cataract developed.

Answer: The lens became completely opaque 4 months after the second ITA in the patient who had mature cataract during follow-up. Hence, this adverse event must be taken into consideration as being related to intravitreal injection of TA.

Conflict of interest

The authors declare no conflict of interest.

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W-C Wu^{1,3}, K-C Cheng^{2,4} and H-J Wu¹

¹Department of Ophthalmology, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan

²Department of Ophthalmology, Kaohsiung Municipal Hsiao-Kang Hospital, Kaohsiung, Taiwan

³Department of Ophthalmology, Faculty of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan

⁴Graduate Institute of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan

E-mail: ufping64@ms5.hinet.net

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Sir, Retinal laser photocoagulation, anaesthesia, and pain responses

We welcome the findings by Richardson and Waterman.¹ Their work relates to pre-2006 laser techniques, and has several limitations in study design and results' interpretation. We do not believe that there is a case any longer to support routine use of sub-tenons anaesthesia. We would like to clarify our clinical experience in using contemporary laser photocoagulation methods to treat patients at the Manchester Royal Eye Hospital (MREH).

Recent pathological work has demonstrated full-thickness retinal injury using conventional 100 ms laser photocoagulation that may contribute to pain associated with treatment of proliferative diabetic retinopathy (PDR).² Since November 2006, we have treated patients routinely using medium-pulse Pascal 10-20 ms laser photocoagulation under topical anaesthesia (oxybuprocaine hydrochloride 0.5% or tetracaine hydrochloride 1% as per the MREH protocol), and associated painful complications are not problematic.³

Among ophthalmologists, it is widely recognised that sub-tenons anaesthesia may be associated with subconjunctival haemorrhage that may compromise retinal laser application, or create an open conjunctival wound with a potential infection risk.⁴ The authors found that 9% of the respondents used primary sub-tenons anaesthesia; however, this figure seems inconsistent and unrealistic with modern laser practice.¹ We have conducted a randomised clinical trial that compared a 20-ms Pascal panretinal photocoagulation (PRP) with the conventional 100-ms PRP