



Figure 1 Fundus photograph of the right eye at 2 days after pars plana vitrectomy. Several exudative lesions with white vessels were observed at the nasal and inferior mid-peripheries of the fundus.

Marked cells and flare with angle hypopyon were present in the anterior chamber. A thin-walled bleb existed at the upper side of the conjunctiva. However, no opaque or leakage was seen in the bleb. The fundus was invisible because of extreme vitreous opacity.

A pars plana vitrectomy was conducted with a tentative diagnosis of bleb-related endophthalmitis. The retina was mostly intact and several exudative lesions with white vessels were observed at the nasal and inferior mid-peripheries of the fundus (Figure 1). Suspecting of a viral infection, vitreous humour was sampled. Whereas the culture examination resulted in no bacterial growth, varicella-zoster virus (VZV)-specific DNA was detected by polymerase chain reaction (PCR). The patient was diagnosed as ARNS caused by VZV.

Intravenous infusion of acyclovir of 750 mg/day and oral corticosteroid of 40 mg/day with topical corticosteroid were initiated. The white-exudative lesions gradually subsided and became necrotic degeneration. Visual acuity improved up to 160/200 in the right eye 2 months after vitrectomy.

To our knowledge, this is the first description of ARNS mimicking bleb-related endophthalmitis. We should be aware that viral infection could masquerade clinical features resembling a bacterial endophthalmitis.

Acknowledgements

Sponsoring organization: None.

References

- 1 Tan TY, Escardo-Paton JA, Walters RF. Late onset group B streptococcus endophthalmitis associated with conjunctival filtration bleb. *Eye* 2003; **17**(5): 656–658.
- 2 Greenfield DS, Suner IJ, Miller MP, Kangas TA, Palmberg PF, Flynn Jr HW. Endophthalmitis after filtering surgery with mitomycin. *Arch Ophthalmol* 1996; **114**(8): 943–949.
- 3 Waheed S, Ritterband DC, Greenfield DS, Liebmann JM, Seedor JA, Ritch R. New patterns of infecting organisms in late bleb-related endophthalmitis: a ten-year review. *Eye* 1998; **12**(Part 6): 910–915.
- 4 Ruesch R, Buchi ER, Bischoff P, Schneider P. Pseudallescheria boydii fungal endophthalmitis. 6 years after trabeculectomy. *Klin Monatsbl fur Augenheilkd* 1994; **204**(5): 468–469.

T Kaburaki¹, S Sato¹, H Kawashima¹, M Sakurai², J Numaga³, Y Fujino⁴ and M Araie¹

¹Department of Ophthalmology
The University of Tokyo Graduate School of
Medicine, 7-3-1 Hongo, Bunkyo-ku, Tokyo, Japan

²Department of Ophthalmology
Kawagoe Branch hospital
Saitama Medical College
Kawagoe, Saitama, Japan

³Section of Ophthalmology
Tokyo Metropolitan Geriatric Medical Center
Tokyo, Japan

⁴Department of Ophthalmology
The Tokyo Kosei Nenkin Hospital
Tokyo, Japan

Correspondence: Toshikatsu Kaburaki
Tel: +81 3 3815 5411
Fax: +81 3 3817 0798
E-mail: kabutosi-ky@umin.ac.jp

Eye (2005) **19**, 692–693. doi:10.1038/sj.eye.6701556
Published online 21 May 2004

Sir,
Time taken to do external and endoscopic endonasal dacryocystorhinostomy (DCR) surgery

We read with interest the article by Mallhotra *et al*¹ on 'A consideration of the time taken to do dacryocystorhinostomy (DCR) surgery'. In the article, they reported and compared the surgical time and success rates of external, endoscopic endonasal surgical

and endoscopic endonasal laser DCR. A few issues, however, that can directly affect the final results may need further discussion.

Like many other surgical procedures, endoscopic endonasal lacrimal surgery has a steep learning curve that can affect the surgical time and success rate of the procedure. Onerci *et al*² have demonstrated a disparity in the results of endoscopic endonasal DCR surgery performed by experienced and less experienced surgeons, and the success rates were 94.4% and 58%, respectively. From the methodology of the present study, we understand that all surgeries were performed by 'an oculoplastic trained ophthalmologist while learning endonasal lacrimal surgery'. We are not sure whether the unequal skill levels in different procedures may influence the surgical outcomes. Information on the actual experiences of the surgeon with regard to the three procedures involved in the study before starting the study may be relevant in interpreting the final results.

Anatomical variations inside the nasal cavity are likely to affect the endoscopic approach more than the external approach in DCR surgery. Narrow nasal cavity, as an example, is a challenging and demanding situation for endoscopic procedure, in which extra time or ancillary procedure might be required.³ We have observed a marked difference in the surgical time of the endoscopic surgical and endoscopic laser procedures. Basically, the steps in preparation and in passing the tube were quite similar between these two procedures. Was this due to a difference in case-mix? We would be grateful for information on the possible reasons of the time difference.

Lastly, duration of silicone tube intubation and granulation tissue formation are known to be important factors for surgical failure in endoscopic endonasal DCR. Prolonged intubation has been shown to associate with higher failure rate because of granulation reaction induced at ostium.⁴ Strategic postoperative endoscopic cares including tube repositioning, and debris and granulation tissue removal would improve the success rate of endoscopic surgery.⁵ These factors that may affect the outcomes, nevertheless, have not been fully addressed in the article.

We commend Malhotra and co-workers for their good work. We hope the discussion would broaden our understanding on the merits and shortcomings of the different DCR procedures.

Acknowledgements

Proprietary interest: Nil. Financial support: Nil.

References

- 1 Malhotra R, Wright M, Olver JM. A consideration of the time taken to do dacryocystorhinostomy (DCR) surgery. *Eye* 2003; **17**: 691–696.
- 2 Onerci M, Orhan M, Ogretmenoglu O, Irkec M. Long-term results and reasons for failure of intranasal endoscopic dacryocystorhinostomy. *Acta Otolaryngol* 2000; **120**: 319–322.
- 3 Whittet HB, Shun-Shin GA, Awdry P. Functional endoscopic transnasal dacryocystorhinostomy. *Eye* 1993; **7**: 545–549.
- 4 Watkins LM, Janfaza P, Rubin PAD. The evolution of endonasal dacryocystorhinostomy. *Survey Ophthalmol* 2003; **48**: 73–84.
- 5 Hartikainen J, Grenman R, Puukka P, Seppa H. Prospective randomized comparison of external dacryocystorhinostomy and endonasal laser dacryocystorhinostomy. *Ophthalmology* 1998; **105**: 1107–1113.

KSC Yuen, L Mahesh, DDN Chan, DSC Lam and W-M Chan

Department of Ophthalmology & Visual Sciences
Prince of Wales Hospital
The Chinese University of Hong Kong
C/o 3/F, Hong Kong Eye Hospital
147 K Argyle Street, Kowloon, Hong Kong
People's Republic of China

Correspondence: W-M Chan
Tel: + 852 2762 3157
Fax: + 852 2715 9490
E-mail: cwm6373@netvigator.com

Eye (2005) **19**, 693–694. doi:10.1038/sj.eye.6701563
Published online 28 May 2004

Sir,
Reply to KSC Yuen *et al*

We thank Yeun *et al* for taking the time to read our article¹ in detail and for their valid comments.

Firstly, the authors request clarification on the surgeon's actual experience with regard to the three procedures in order to help interpret the final results. We agree that the learning curve may influence surgical time and success. At the time of commencing the study, the operating surgeon (JMO) had gained sufficient training, both in supervision and independently in order to perform endoscopic surgical and laser dacryocystorhinostomy (DCR) competently and safely. Since completing this study, endosurgical times have decreased marginally with increased experience. We have in fact abandoned endolaser (holmium) because we were disappointed with the poor results in comparison to endosurgical DCR.²