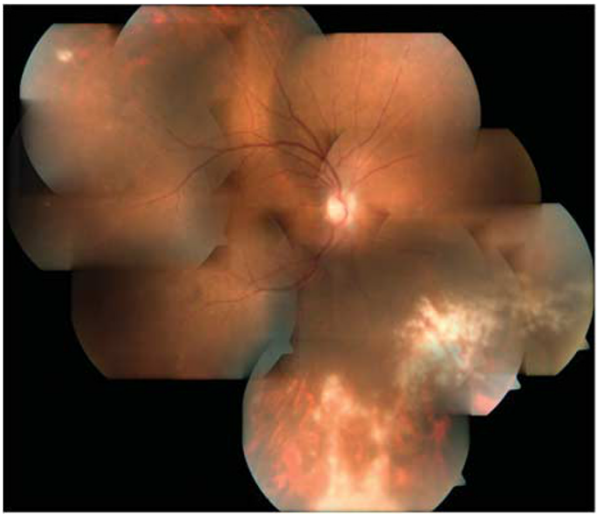

Figure 1 Nine-view fundus photograph of the patient's right eye, showing both superotemporal and active CMV retinitis involving 40% of inferior retina.

cases in patients with CD4 counts >100 cells per μl at time of diagnoses, they had low CD4 counts before diagnosis of CMVR, before or following ART.[2] Our case is unique that CD4 counts before the diagnosis of CMVR had never decreased below 254 cells per μl.

Postulated reasons for the lack of correlation between CD4 counts and occurrence of CMVR include the functional dysfunction of CD4 T cells in AIDS. Although there is high correlation between counts and function, CD4 counts are a surrogate marker for immune dysfunction and do not reflect functional abnormalities in the immune system.[3] Initial increment in CD4 counts after ART may be because of systemic redistribution of memory non-specific T lymphocytes, whereas the actual increase in CMV-specific T cells occurs later. CMVR may occur during this latent period between quantitative restoration of CD4 counts and actual functional restoration of immunity. Moreover, clonal deletions of CMV-specific T lymphocytes can occur, impairing immunity against CMV, while maintaining overall high CD4 counts.

In addition to absolute CD4 counts, CMVR may be correlated with other predictive factors; for example, rapid decline in CD4 counts by >100 cells per μl after diagnosis of CMVR,[1,3,4] high HIV viral loads >100 000 copies per ml, and presence of CMV viremia.[5] Other risk predictors, such as trends in CD4 counts and viral load should also be considered. Therefore, the clinical diagnosis of CMVR should not be dismissed in the presence of a normal CD4 count.

Conflict of interest

The author declares no conflict of interest.

References

1 Pertel P, Hirschtick R, Phair J, Chmiel J, Poggensee L, Murphy R. Risk of developing cytomegalovirus retinitis in persons infected with the human immunodeficiency virus. *J Acquir Immune Defic Syndr* 1992; **5**: 1069–1074.
2 Deayton JR. Changing trends in cytomegalovirus disease in HIV-infected patients. *Herpes* 2001; **8**: 37–40.
3 Fairley I, Waugh MA. Cytomegalovirus retinitis in a healthy antiretroviral naive HIV positive male with a CD4-count of 277/mm^3. *Genitourin Med* 1996; **72**: 446–447.
4 Fekrat S, Dunn JP, Lee D, Miller T, Jabs DA. Cytomegalovirus retinitis in HIV-infected patients with elevated CD4+ counts. *Arch Ophthalmol* 1995; **113**: 18.
5 Salmon-Céron D, Mazeron MC, Chaput S, Boukli N, Senechal B, Houhou N *et al*. Plasma cytomegalovirus DNA, pp65 antigenaemia and a low CD4 cell count remain risk factors for cytomegalovirus disease in patients receiving highly active antiretroviral therapy. *AIDS* 2000; **14**: 1041–1049.

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Sir,

Comment on 'Effects of Merogel coverage on wound healing and ostial patency in endonasal endoscopic dacryocytorhinostomy for primary chronic dacryocystitis'

We read the article on 'Effects of Merogel coverage on wound healing and ostial patency in endonasal endoscopic dacryocytorhinostomy for primary chronic dacryocystitis' by Wu *et al*[1] with great interest. The surgical procedure involved in this randomized controlled trial was clearly presented and reproducible, and the paper made excellent use of both per-protocol and intention-to-treat analyses in interpretation of the data. We had the following observations regarding the methodology and interpretation of the results.

The diagnosis of primary chronic dacryocystitis was made on the basis of a history of epiphora with purulent discharge and regurgitation on nasolacrimal irrigation. Unfortunately, either no attempt was made to locate the level of obstruction or it was not reported. Many factors influence the outcome of endoscopic dacryocystorhinostomy, and one of the most important prognostic factor is the level of obstruction in the lacrimal system.[2,3] A recent study from South Korea showed that the ductsac junction obstruction was treated most successfully, followed by nasolacrimal obstruction, common canaliculus obstruction, and saccal obstruction.[4]

Various clinical tests are available to identify the level of obstruction of the lacrimal system. Simple tests such as probing and Jones test can identify punctual and canalicular obstruction, and can be performed in the office. Dacryocystography is considered the gold standard and can localize obstruction within the lacrimal sac or duct.[5]

If the authors had data on the individual patient's level of obstruction of the lacrimal system, a subgroup analysis should be performed to further analyse the effect and safety profile of Merogel on the different levels of obstruction.

Once again, we would like to congratulate the authors for this successful and nicely performed randomized controlled trial that demonstrated the effect of Merogel on wound healing and ostial patency in endonasal endoscopic dacryocystorhinostomy for primary chronic dacryocystitis.

Conflict of interest

The authors declare no conflict of interest.

References

1 Wu W, Cannon PS, Yan W, Tu Y, Selva D, Qu J. Effects of Merogel coverage on wound healing and ostial patency in endonasal endoscopic dacryocytorhinostomy for primary chronic dacryocystitis. *Eye* 2011; **25**: 746–753.
2 Beigi B, Westlake W, Chang B, Marsh C, Jacob J, Chatfield J. Dacryocystorhinostomy in south west England. *Eye* 1998; **12**(Pt 3a): 358–362.
3 Yung MW, Hardman-Lea S. Analysis of the results of surgical endoscopic dacryocystorhinostomy: effect of the level of obstruction. *Br J Ophthalmol* 2002; **86**: 792–794.
4 Choi JC, Jin H-R, Moon YE, Kim M-S, Oh JK, Kim HA *et al*. The surgical outcome of endoscopic dacryocystorhinostomy according to the obstruction levels of lacrimal drainage system. *Clin Exp Otorhinolaryngol* 2009; **2**(3): 141–144.
5 Cubuk R, Tasali N, Aydin S, Saydam B, Sengor T. Dynamic MR dacryocystography in patients with epiphora. *Eur J Radiol* 2010; **73**(2): 230–233.

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Sir,

Response to 'Comment on 'Effects of Merogel coverage on wound healing and ostial patency in endonasal endoscopic dacryocytorhinostomy for primary chronic dacryocystitis"

We thank Dr Shiu Ting Mak and Albert Chak-ming Wong[1] for reviewing our paper[2] on Merogel coverage for ostial patency. Unfortunately, we do not agree with Dr Shiu Ting Mak's suggestion that we should consider the location of the level of the lacrimal obstruction for our procedure. In our paper, the Merogel is only used for the primary chronic dacryocystitis, not for other kinds of lacrimal obstruction. As we know, primary chronic dacryocystitis is the result of obstruction of the nasolacrimal duct, not obstruction of the common canaliculus or the inferior canaliculus. Just as Dr Shiu Ting Mak suggests, simple tests such as probing and Jones tests can identify punctual and canalicular obstruction performed in the office. Therefore, it is enough for us to diagnose primary chronic dacryocystitis based on the history of epiphora with purulent discharge and regurgitation on nasolacrimal irrigation, and dacryocystography if necessary. Our procedure of endoscopic transnasal dacryocytorhinostomy (DCR) in this paper is only for obstruction of the nasolacrimal duct, not for the common or inferior canaliculus.

We admit that many factors influence the outcome of endoscopic transnasal DCR, but we think that the most important prognostic factor influencing our procedure is the size of the lacrimal sac, not the level of lacrimal obstruction. For some special patients, dacryocystography was performed to evaluate the size of the lacrimal sac and actual location of the lacrimal obstruction. If they were combined with obstruction or stenosis in the common or inferior canaliculus, the patients were excluded in our study. So we think that it is not necessary to perform a subgroup to further analyse the effect and safety profile of Merogel on the different levels of lacrimal obstruction as Dr Shiu Ting Mak suggests.

Once again, we really appreciate Dr Shiu Ting Mak for carefully reviewing our paper and offering different suggestions for us.

Conflict of interest

The authors declare no conflict of interest.

References

1 Mak ST, Chak-ming Wong A. Comment on 'Effects of Merogel coverage on wound healing and ostial patency in endonasal endoscopic dacryocytorhinostomy for primary chronic dacryocystitis'. *Eye* 2012; **26**(8): 1154–1155.
2 Wu W, Cannon PS, Yan W, Tu Y, Selva D, Qu J. Effects of Merogel coverage on wound healing and ostial patency in endonasal endoscopic dacryocytorhinostomy for primary chronic dacryocystitis. *Eye* 2011; **25**: 746–753.

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