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.

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Sir,

Reply to KSC Yuen *et al*

We thank Yeun *et al* for taking the time to read our article[1] 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]

Secondly, Yeun *et al* ask for information on the possible reasons for the time difference between endosurgical and endolaser DCR with regard to preparation and passing tubes. In the study, the differences between these two small groups, both for preparation time and for passing tubes, were statistically insignificant. The apparent difference in preparation time may have reflected a choice of practice at the time, whereby aqueous povidine iodine was not applied to the skin for endolaser cases. Since the study, we have changed our practice and no longer use povidine iodine for endosurgical cases either.

Thirdly, the case mix for the endosurgical and endolaser groups was similar. No patient had a narrow nasal space requiring septoplasty. In addition, the tubes were knotted within the nose and the position of the knot in relation to the ostium was checked endoscopically at the end of surgery to ensure that they were not too loose and at risk of prolapse.[3]

Lastly, we agree with Yeun *et al* that granulation tissue formation may affect surgical success in DCR. During the follow-up period, all patients received a postoperative endoscopic endonasal examination by the senior author (JMO) 1 week after surgery, and then at the time of removal of tubes, which was usually 8 weeks postoperative. Although data were not prospectively recorded with regard to debris and granulation tissue removal, each group had a similar postoperative regimen. We do not give additional visits to endonasal DCR patients for debris removal.

We would once again like to thank Yeun *et al* for reading our paper so thoroughly and for raising valid questions and agree that they help promote discussion and ultimately better understanding of the issues surrounding the various approaches to DCR.

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Sir,

Unilateral lid retraction due to orbital fat entrapment in the anterior cranial fossa

We present a case of unilateral lid retraction secondary to orbital fat entrapment in the orbital roof of a patient with chronic hydrocephalus.

Case Report

A 39-year-old female patient was referred with a 5-year history of progressive left upper eyelid retraction, complaining of impaired cosmesis. She had congenital hydrocephalus due to a pineal mass, which had only been diagnosed at the age of 18 years. She had undergone a ventriculoperitoneal shunt at the age of 21 years to treat raised intracranial pressure manifesting as headaches and loss of balance. The shunt relieved her problems and she was asymptomatic until she noticed the left upper eyelid retraction.

Unaided visual acuity was 6/6 bilaterally. Hertel exophthalmometry readings were 15 mm on the right and 12 mm on the left. The right palpebral aperture was 10 mm and the left 16 mm. The marginal reflex distance on the right side was 4 mm in the primary position and in the downgaze, but on the left side, it was 10 mm in the primary position and 16 mm in the downgaze (Figure 1a and b). Her levator function was 15 mm on the right but only 5 mm on the left. She had a fair Bell's phenomenon bilaterally but 2 mm of lagophthalmos on the left. Intraocular pressures were normal. The left cornea showed inferior punctate fluorescein staining.

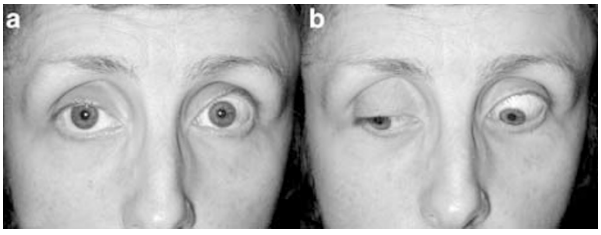

Figure 1 Left lid retraction (a) in straight ahead gaze and (b) increasing in the downgaze.