

Manche can reach no valid conclusions about the relationship between pupil size and patient satisfaction after LASIK," is completely without merit. We stand by our study design, pupil size measurement technique and the results of our study. We welcome additional independent studies to verify and reproduce our results in this important area of research.

EDWARD MANCHE, MD
ANNIE CHAN, MD
Stanford, California

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Lamellar Keratoplasty

Dear Editor:

Reinhart et al¹ have provided an excellent review, comparing deep anterior lamellar keratoplasty (DALK) with penetrating keratoplasty (PK). However, there are some issues we would like to raise.

The authors state that "the big-bubble technique, when successful, results in separation of Descemet's membrane (DM) from the deep corneal stroma." Since Anwar's original description of his "big-bubble" DALK technique,² most publications have promulgated this assumption that DM is bared, but not breached, during "maximum depth" DALK.

We have been unable to find a histological study of any form of DALK that has shown complete separation of corneal stroma from DM. One study of stroma excised during manual dissection DALK could confirm only the existence of an intra-DM cleavage plane.³ In another study, analyzing 25 eye-bank eyes, following visco-dissection DALK technique, "all eyes showed a level of dissection depth just anterior to Descemet's membrane."⁴

The only study to directly evaluate the plane of dissection after a successful big-bubble formation (using corneal stroma and DM obtained from 3 cases of conversion from DALK to PK) found that all samples marked as "DM" included a very thin layer of posterior stroma.⁵

Reinhart et al have suggested that future studies include imaging techniques to measure residual posterior corneal stroma in the donor bed.¹ However, given that the residual stroma on one cornea in the previously mentioned study was 6.4 microns using light and transmission electron microscopy,⁵ this may be beyond the axial resolution of most or all currently available anterior segment optical coherence to-

mography systems.⁶ We would like to know what imaging technique could be employed.

The authors have classified DALK as an "extraocular and not intraocular" procedure, and have listed microbial endophthalmitis as a complication unique to PK.¹ However, a number of surgeons enter the anterior chamber during DALK, either in unintentional perforation, or in order to inject an air or gas bubble into the anterior chamber.² It should be remembered that there is still a theoretical risk of endophthalmitis in DALK, although there are no case reports to support this.

Lastly, in their listing of comparative advantages and disadvantages of DALK versus PK, the authors did not mention the potential for the use of low cell-count donor material in DALK. There are some centers in which it is feasible to select low cell-count material intraoperatively, on confirmation of successful posterior lamella formation. This can preserve donor material with a good cell-count for use in PK and endothelial keratoplasty, which will ultimately optimise the number of patients receiving grafts.

ADAM CLOKE, MBChB
LIK THAI LIM, MBCh (UK), MRCSed(OPHTH)
Glasgow, Scotland

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Author reply

Dear Editor:

The authors thank Cloke and Lim for their critical reading of our manuscript. We agree with their observation that deep anterior lamellar keratoplasty (DALK) procedures are not always extraocular in the strict sense of the word. Although we would argue that there is still a potential clinical difference, however defined, between the risks of an "open-sky" penetrating keratoplasty (PK) and a successful DALK.

In regions of the world where donor tissue is in short supply, low endothelial cell-count donor corneas can be used for DALK although optimum scheduling should include the option of having available a donor cornea with an acceptable endothelial cell count if PK conversion is needed.

However, their main point addresses the terminology of the DALK literature, namely Descemet's membrane baring and/or maximum depth DALK (MD-DALK) and the impli-