

the viral load then was determined by real-time polymerase chain reaction. These 3 patients demonstrated positive results only for CMV, and demonstrated negative results for herpes simplex virus and varicella zoster virus.

We agree that both CMV and herpes simplex virus infections respond to valganciclovir. However, it should be emphasized that the valganciclovir gel was given prophylactically in these eyes with immune ring and that the mainstay of treatment was the anti-inflammatory therapy using either topical steroids or nonsteroidal anti-inflammatory drugs.

Today with the advent of confocal microscopy, noninvasive diagnostic tests increasing play an important role in our clinical practice, and we are now using this tool to help us confirm our diagnosis of CMV while ruling out other viruses.²⁻⁴

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A Prospective Study Comparing EndoGlide and Busin Glide Insertion Techniques in Descemet Stripping Endothelial Keratoplasty

EDITOR:

WE READ WITH INTEREST THE PAPER BY GANGWANI AND ASSOCIATES¹ comparing Busin glide with EndoGlide insertion of Descemet stripping automated endothelial keratoplasty (DSAEK) grafts. The authors find a significantly higher cell loss using the Busin glide (above 40%) and therefore advocate using the EndoGlide for the delivery of DSAEK grafts.

The 25% cell loss found using the EndoGlide is not a surprising result, as several other authors have reported similar values employing different insertion techniques.

What is more surprising is the very high value found with the Busin glide, as various authors have shown, both in experimental models and in patients, much lower endothelial cell loss values. In 2010 Chen and associates found no significant difference in cell loss between insertion with forceps and insertion with the Busin glide through a 5-mm incision.² Bahar and associates,³ Price and associates,⁴ and Busin and associates⁵ have all shown a similar average endothelial cell loss 6 months after DSAEK graft delivery with the Busin glide, with values below 30%.

What remains to be explained is the 45% cell loss experienced by the authors. The only surgical difference we could identify in the technique described by Gangwani and associates was the use of a clear corneal incision on the temporal side rather than on the nasal side, as we recommend. In fact, insertion of the forceps from the nasal side to pull the tissue through a temporal incision/tunnel is usually difficult and may cause excessive opening of the side entry with flattening of the anterior chamber, and possibly increased damage to the donor endothelium while it is delivered.

Although the authors are to be commended for their work, we think that their paper should have included a more extensive review of other papers dealing with this topic.

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REPLY

IN HIS LETTER, DR BUSIN SUGGESTS THAT THE HIGHER endothelial cell loss seen with the Busin glide in our study¹ may have arisen from the use of a temporal incision, rather than nasal. We had used the Busin glide for 10 months prior to the start of the study. Initially a nasal incision was used, but it was found that a temporal incision provided easier access and allowed combined surgery with phacoemulsification and lens implantation.

Other surgeons have similarly modified Busin's original technique, including 2 previous studies cited in his letter. Price and associates also used a temporal incision, and showed an endothelial cell loss of 34% at 6 months, not the lower value of less than 30% stated in Dr Busin's letter. Bahar and associates appear to have used a superior limbal incision and a suture pull-through technique. Of the previous studies cited by Dr Busin, only his own used a nasal incision. The paper by Chen and associates used forceps insertion and not the Busin glide.

A number of possible reasons are acknowledged in our study for the higher endothelial cell loss reported compared to previous studies. There are only 2 reports from the UK reporting postoperative endothelial cell counts (ECC), with losses of 38% and 61%.^{2,3} UK donor corneas are usually preserved in culture medium, rather than Optisol, and the preoperative ECC are taken before the corneas are put into dextran. This is associated with an 8% reduction in donor ECC.⁴ Consequently the preoperative ECC would actually be lower, giving a falsely higher-percentage postoperative cell loss.

In addition, the quality of the donor tissue might have influenced the cell loss. The donors used were older and had lower preoperative ECC than those used in some other countries.⁵ Older donors and lower donor ECC have been shown to be associated with a greater postoperative cell loss.⁵

Our results show that an experienced DSEK surgeon had almost twice the endothelial cell loss when using the Busin glide compared to the EndoGlide. There is no evidence to suggest that use of a nasal incision would have significantly changed these results.

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Randomized Double-Masked Controlled Trial Comparing Pain Scores With and Without the Use of Supplementary 2% Lidocaine Gel in LASIK

EDITOR:

I READ WITH GREAT INTEREST THE RECENT REPORT BY LAM and associates describing decreased patient subjective pain during LASIK when supplemental 2% lidocaine gel was topically applied.¹ For some time now as an oculoplastic surgeon, I have utilized 2% lidocaine gel for anesthesia of the conjunctiva and have found it to be superior to topical anesthetic drops. Lidocaine gel provides robust anesthesia for both the bulbar and palpebral conjunctiva, aiding in various procedures of the ocular adnexa.

Pterygium excision with conjunctival autograft may be performed using only topical 2% lidocaine gel anesthesia with great intraoperative and postoperative patient comfort. Similarly, conjunctival biopsies and excisions can be safely done with lidocaine gel. The benefits in both cases are avoiding systemic anesthetics for the patient, and the ability to perform such procedures in an office setting.

When performing anterior debulking of prolapsed orbital fat or dermolipomas, lidocaine gel can also be utilized to anesthetize the conjunctiva. In these cases, the surgeon can carry out transconjunctival dissection until the adipose tissue of interest is grasped, solely with gel anesthesia. The lesion can then be injected with lidocaine containing epinephrine for anesthesia and hemostasis purposes just prior to debulking. The advantage of this technique is that subconjunctival lidocaine injection is not needed prior to conjunctival dissection, which tends to displace the fatty tissue posteriorly, making intraoperative dissection toward the lesion more challenging. Additionally, less total injectable anesthetic can be used, postoperative subconjunctival hemorrhage is less severe, and again the procedure can comfortably be performed in an office setting without the need for systemic anesthesia.