

# Donor Lenticule Centration for Trephination in DSAEK

## To the Editor:

Koenig has described a marking technique of the donor's lenticule for the improvement of centration during lenticule trephination as part of Descemet's stripping automated endothelial keratoplasty surgery.<sup>1</sup> We would like to commend the author for his publication.

During the last years we have been using a similar technique successfully; however, our modification obviates the need for the the 10-mm trephine described in Koenig's technique.

We instill a small drop of vital stain (usually VisionBlue trypan blue 0.06%; DORC International, Zuidland, Netherlands) to the round gutter created after the removal of the anterior lenticule while the donor tissue is still anchored to the artificial anterior chamber. A thin dye film subsequently spreads along and around the gutter, marking the edges of the exposed stroma (Figure).

Hence, a central trephination inside or through the mark is feasible, ensuring the creation of a thin and uniform lenticule, which will improve the success of the surgery.

We would also like to add that unlike the trephination of a full-thickness cornea for penetrating keratoplasty, the trephination of the posterior lamella for DSAEK causes no sound or sensation in the surgeon's fingers. These delicate signs are important clues that a complete trephination has taken place.

In order to ensure complete trephination, we adopted Busin's technique. While the lenticule is still pressed in the trephine cradle, we rotate the outer corneal rim with forceps, making sure that a complete cut was made all around.

It is important to note that most of the marked margins are cut away from the graft during trephination, limiting the endothelial exposure of the dye.

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**Figure.** The gutter of the exposed stroma has just been dyed with trypan blue.

## REFERENCE

1. Koenig SB. A simple technique to improve centration during trephination of the donor lenticula in DSAEK. *Ophthalmic Surg Lasers Imaging Retina*. 2010;41(4):485-486. doi:10.3928/15428877-20100525-04.

## Author's Reply:

In their letter entitled "Donor Lenticule Centration for Trephination in DSAEK," Drs. Yovel and Kleinmann have described a simple technique for marking the boundary of the anterior lamellar dissection of the donor cornea during DSAEK lenticule preparation. In their technique, a small amount of trypan blue dye is used to outline the gutter of the resection bed. By using trypan blue dye, the authors avoid any possible toxicity of gentian violet dye to the donor endothelium. However, it is unclear from the description whether the boundary of the stained corneal stroma is easily visible from the endothelial side during trephination of the donor lenticule.

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