

Comment on: Two-year clinical outcome after Descemet membrane endothelial keratoplasty using a standardized protocol

Dear Editor,

As we all know in the last two decades corneal transplantation has undergone a huge revolution with special emphasis on innovations in lamellar surgeries. With the introduction of DMEK in 2006 by Melles^[1] it gained popularity worldwide as a procedure to address corneal endothelial dysfunctions. The main advantages over penetrating keratoplasty (PKP) being less complications, better refractive result, faster visual rehabilitation, less induction of higher-order aberrations, lower rejection rate, less use of topical steroids and chance of secondary glaucoma as well as decrease in surgical cost.^[2] We read the article by Siddharthan *et al.*^[3] in the November issue of Indian Journal of Ophthalmology and we were deeply impressed by their 2-year analysis of Descemet's Membrane Endothelial Keratoplasty (DMEK). However, we have few important observations and suggestions to make.

Firstly, in the methodology it is not clear, whether it was a prospective study or a retrospective analysis and was all the surgeries were performed by a single surgeon? This is important to know from the readers point of view. Secondly, the authors have also included patients with aphakic bullous keratopathy for DMEK. In aphakic patients, there is always a risk of fall of donor graft in the vitreous cavity and moreover it is very difficult to give air tamponade as there is a direct communication with the vitreous cavity. How did the authors manage this? It would be interesting to know their way of managing these cases. Did all these patients undergo secondary IOL in the same sitting?

One important suggestion is, the key for excellent DMEK outcome is good patient selection. The important points to be kept in mind are absence of stromal scarring, good pupil dilatation, deep anterior chamber, absence of peripheral anterior synechiae and posterior synechiae and intact posterior chamber and absence of posterior segment pathology.^[4] The authors have included aphakic bullous keratopathy and ICE syndrome patients also which can be a relative contraindication for DMEK. These preoperative parameters could be a part of the

methodology and patient selection criteria. Did the authors used anterior segment optical coherence tomography (AS-OCT) in their analysis, as AS-OCT is helpful preoperatively in selective cases to assess epithelial hypertrophy or stromal scarring.^[4] Can the authors throw some light on this?

Thirdly, the authors have correctly highlighted the recipient preparation by removing the epithelium and scoring of Descemet's Membrane (DM). The important modification we do is we do 8 mm marking over the Bowman's layer with the calliper marked with blue ink. This helps us to score roughly 8 mm DM without extension to the periphery. We think this can be useful for future corneal surgeons.

Fourthly, the authors have mentioned that "A full-chamber air bubble is injected into the anterior chamber which supports the adherence of the graft to the host stroma." We follow the same technique, but a small modification we do is we release the 10% air bubble after tamponade for 20 min to prevent any pupillary block postoperatively.

Once again we want to congratulate the authors for this excellent analysis probably the largest study on DMEK from southern India.

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Conflicts of interest

There are no conflicts of interest.

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