

Comments on: A comparative study of tarsorrhaphy and amniotic membrane transplantation in the healing of persistent corneal epithelial defects

Dear Editor,

We read with interest the article on “A comparative study of tarsorrhaphy and amniotic membrane transplantation in the healing of persistent corneal epithelial defects” by Dhillon *et al.*^[1] We would like to appreciate the authors on comparing and evaluating the clinical outcomes of tarsorrhaphy and amniotic membrane transplant (AMT) in the healing of persistent epithelial defects (PED) and subsequent corneal vascularization, if any, thereby providing symptomatic relief. However, we have some concerns about the article.

Firstly, the authors have mentioned that the total number of eyes evaluated were 60 eyes; 30 in each group. However, the

results section mention that 15 eyes had PED due to exposure keratopathy, 32 secondary to penetrating keratoplasty (PK), 5 due to trauma, and 5 were idiopathic. This gives a total number of eyes as 57 eyes and not 60 eyes which were included for the study. If it is a calculation error, it needs to be clarified.

Secondly, though the preoperative sizes of the epithelial defect were similar in both the groups, the size of the epithelial defect reduced faster in the group A patients compared to the group B patients, at 1 week and 2 weeks, which was statistically significant. We feel that even though there was no statistically significant difference in the preoperative size of epithelial defect, there was a significant clinical difference of a mean of 7–8 mm² larger PED area in the group B, when compared to the group A, which could be responsible for a faster healing time in group A. The mean area \pm standard deviation of the epithelial defect preoperatively was 34.90 ± 30.14 mm² but in Table 3, it was given as 34.90 ± 30.16 mm².

Thirdly, the authors have not mentioned about the postoperative treatment regimen, i.e. use of topical lubricants or topical steroids, which is important as these drugs are

responsible for the healing of the epithelial defect. It is a well-known fact that AMT has anti-inflammatory effect on the cornea and use of topical steroids would augment this anti-inflammatory effect.^[2]

Fourthly, 32 eyes underwent PK, which had subsequent PED. The indications for PK is not mentioned in the article. Conditions such as post chemical injury, postherpetic corneal scar, large-sized therapeutic PK would more likely result in PED in the postoperative period. Moreover, it was not mentioned whether any of the patients had preoperative dryness or dry eye workup was performed. The management of PED in such scenarios with ocular surface disease would require additional procedures like punctal occlusion, use of artificial tears, or autologous serum drops, after tarsorrhaphy or AMT.^[3]

Lastly, in 10/60 eyes the epithelial defect did not heal at the end of 4 weeks, in both the groups collectively. It would be informative if the etiology and primary pathology of the PED was mentioned for these 10 eyes, where neither tarsorrhaphy nor AMT worked.

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Conflicts of interest

There are no conflicts of interest.

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