

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

Dear Editor:

We sincerely thank Srirampur A *et al.*^[1] for their interest in our article^[2] and hope to clarify their queries to the best possible extent.

After treatment for persistent corneal epithelial defect (PED) by amniotic membrane transplantation (AMT) or tarsorrhaphy, the conventional treatment was instituted. It comprised of artificial lubricants topically 2 hourly initially for a month and then a reduced dose to 6 times a day dose along with topical antibiotic (preservative free) 4 times a day for a week. Topical lubricant in gel form was also prescribed in patients with larger defects. Topical steroids (surface steroids e.g., fluomethalone) in low frequency and doses were prescribed to the patients who were post-operative

patients for penetrating keratoplasty (however they were not given in cases where keratoplasty was performed for fungal corneal ulcers).^[3]

Patients with chemical injury and other etiologies such as severe dry eye, ocular surface disorders, post chemical injuries and severe limbal stem cell deficiency do not respond well to treatment by AMT and tarsorrhaphy, hence were not included in the study. It has already been well established that the role of AMT is very limited in the healing of defects caused due to chemical injuries as these patients are candidates for additional procedure such as SLET (simple limbal epithelial transplantation).^[3,4]

Even the patients who underwent penetrating keratoplasty did not have had the above said mentioned etiologies as indication for the procedure if they were to be taken for just AMT or tarsorrhaphy.

Patients non responsive to the treatment of AMT or tarsorrhaphy were post penetrating keratoplasty patients with large PED's. Indication for penetrating keratoplasty in all these patients was deep corneal opacities with adherent leucoma (healed corneal ulcers). The culture reports of the

recipient buttons for such patients revealed negative reports. However, the histopathology reports were indicative of high inflammatory cell percentage on the basis of which it was assumed that the probable etiology of the adherent leucomas was healed viral keratitis.^[5] Given the neurotrophic nature of viral keratitis it corresponds with the fact that they do not respond to either of the treatment modalities.^[6] We feel that these cases would respond better if modalities such as neurotisation of the cornea or additional procedures such as the use of auto logus serum are instituted.^[7,8]

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

**Hennaav Kaur Dhillon, Anuradha Raj¹,
Harsh Bahadur²**

Clinical Fellow, Medical Research Foundation, Department of Pediatric Ophthalmology and Strabismus, Sankara Nethralaya, Chennai, Tamil Nadu, ¹Associate Professor, Department of Ophthalmology, All India Institute of Medical Sciences, Bathinda, Punjab, ²Professor, Department of Ophthalmology, Himalayan Institute of Medical Sciences, Swami Rama Himalayan University, Jolly Grant, Dehradun, Uttarakhand, India

Correspondence to: Dr. Anuradha Raj,
Associate Professor, Department of Ophthalmology, All India
Institute of Medical Sciences, Bathinda, Punjab, India.
E-mail: dranuradha_sagar@yahoo.com

References

1. Srirampur A, Kola P, Mansoori T, Vemuganti S. Comments on: A comparative study of tarsorrhaphy and amniotic membrane transplantation in the healing of persistent corneal epithelial defects. *Indian J Ophthalmol* 2020;68:1503-4.
2. Dhillon HK, Bahadur H, Raj A. A comparative study of tarsorrhaphy and amniotic membrane transplantation in healing of persistent corneal epithelial defects. *Indian J Ophthalmol* 2020;68:29-33.
3. Wan S, Cheng J, Dong Y, Xie L. Epithelial defects after penetrating keratoplasty in infectious keratitis: An analysis of characteristics and risk factors. *PLoSOne* 2018;13(11):e0208163.
4. Joseph A, Dua HS, King AJ. Failure of amniotic membrane transplantation in the treatment of acute ocular burns. *Br J Ophthalmol* 2008;85:1065-9.
5. Seitz B, Das S, Sauer R, Mena D, Houfmann-Rummelt M. Amniotic membrane transplantation for persistent corneal epithelial defects in eyes after penetrating keratoplasty. *Eye*. 2009;23(4):840-48.
6. Shtein RM, Elnor VM. Herpes simplex viral keratitis: Histopathology and allograft outcomes. *Expert Rev Ophthalmol* 2010;5:129-34.
7. Azher TN, Yin XT, Tajfirouz D, Huang AJW, Stuart PM. Herpes simplex keratitis: Challenges in diagnosis and clinical management. *ClinOphthalmol* 2017;11:185-91.
8. Koaik M, Baig K. Corneal neurotisation. *Curr Opin Ophthalmol* 2019;30:292-8.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code:	Website: www.ijo.in
	DOI: 10.4103/ijo.IJO_163_20

Cite this article as: Dhillon HK, Raj A, Bahadur H. Response to comments on: A comparative study of tarsorrhaphy and amniotic membrane transplantation in the healing of persistent corneal epithelial defects. *Indian J Ophthalmol* 2020;68:1504-5.

© 2020 Indian Journal of Ophthalmology | Published by Wolters Kluwer - Medknow