Feasibility and outcome of simple limbal epithelial transplantation (SLET) in unilateral total limbal stem cell deficiency (LSCD) following chemical injury, in a semiurban location in Western India

Sir,

Simple limbal epithelial transplantation (SLET) was first described by Sangwan *et al.* as an innovative technique for the management of unilateral total limbal stem cell deficiency (LSCD).^[1] Subsequently, its efficacy has been described by Vazirani *et al.* in a multicenter study conducted across advanced eye care centers in urban locations in India, United States, and Mexico.^[2]

We describe the outcome and feasibility of performing SLET by a trained corneal surgeon in a semi-urban setting in western India. Patients with unilateral total LSCD following chemical injury with healthy fellow eye were included. Surgical technique as described by Sangwan *et al.* was followed.^[11] Outcome measures were as follows: (i) Improvement in visual acuity, (ii) improvement in corneal clarity and LSCD, (iii) ease of performing SLET in a semi-urban setting.

Three patients, two males and one female with age range 13-16 years were included in the study. One patient had history of lime burn while two had exposure to unknown chemicals. At mean follow up of 4.33 months (range 2-6 months), two patients (66.6%) improved from preoperative visual acuity of <20/400 to 20/80 and 20/60, respectively. One patient remained at 20/400 which could be attributed to pre-existing amblyopia. Complete resolution of LSCD was noted in two patients (66.6%) while one patient had localized residual pannus of 1 clock hour.

Our results are comparable to that of the multicenter study.^[2] As mentioned by Basu *et al.*, the advantages of SLET include minimal surgical paraphernalia, logistical support, and training.^[3] In our study, the procedures were easily performed by an experienced cornea specialist who had attended SLET workshops and had performed a few cases of SLET prior to this study. The other essential requirements include fresh frozen amniotic membrane and fibrin glue which can be made available even in semi-urban areas. SLET can thus be performed in hospitals located in such areas.

To conclude, this study establishes that SLET could be performed by a trained corneal surgeon even in semi-urban settings with useful outcomes.

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Conflicts of interest

There are no conflicts of interest.

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