

Comment on the Article: Outcome of Sclerokeratoplasty in Devastating Sclerocorneal Infections

Dear Editor,

We read with interest the article on “Outcome of sclerokeratoplasty in devastating sclerocorneal infections” by Thatte *et al.*¹ We would like to appreciate the authors on assessing the achievement of anatomical integrity after primary tectonic sclerokeratoplasty procedure for severe corneoscleral infection threatening the structural integrity of the eyeball.

However, a few untouched and warranted issues need special mention. Seventy-five percent of the eyes in the study group underwent corneal transplantation of size more than 11 mm. Such a large graft would lead to loss of limbal stem cells in either few quadrants or a whole of the 360° of the limbus. This would result in an iatrogenic limbal stem cell deficiency (LSCD). This LSCD would in turn lead to a persistent epithelial defect. Persistent corneal epithelial defects with or without ulceration are a serious and urgent clinical problem, which can be complicated by microbial infections and thus threaten patients’ vision. Experimental studies have revealed that corneal epithelial injuries with or without involvement of the stroma result in rapid healing so long as the eye retains its normal ocular surface defenses and possesses healthy limbal epithelial stem cells as mentioned by Tseng.² Therefore, whenever there is a persistent defect or ulcer, the diagnostic examination should first be directed to ruling out LSCD, followed by analysis of the integrity of the ocular surface defence governed by neuroanatomical integration of both trigeminal and facial nerves. It would have been more informative if the authors had mentioned the incidence of persistent or non-healing epithelial defect in their study group, particularly in Group B and Group C who underwent large-sized corneoscleral grafts. This persistent epithelial defect could lead to stromal melts, corneal perforation, and loss of anatomical integrity of the eye. As assessment of the anatomical integrity after primary tectonic sclerokeratoplasty was the main purpose of this study, this question becomes more relevant.

In addition, when medical treatments fail and the defect or ulcer persists, alternative modalities such as punctal occlusion, application of bandage, scleral lens or tissue adhesive, lamellar or full-thickness corneal transplantation, tarsorrhaphy, amniotic membrane, and conjunctival flap have been described.³ The authors should have mentioned whether these procedures have been done or not in the secondary surgical procedures after a primary sclerokeratoplasty.

Lastly, what was the minimum endothelial cellular density of the donor corneas that were transplanted, and what was the death to surgery time? Although these were not the main purposes of this study, this information would help analyze the overall outcomes and complications rates.

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Conflicts of interest

There are no conflicts of interest.

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