

# Endothelial cell loss after penetrating keratoplasty

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## ABSTRACT

**Purpose:** Corneal graft survival remains limited by endothelial cell loss and graft failure. The objective of this study was to determine the frequency of endothelial cell loss in donor cornea following penetrating keratoplasty.

**Method:** 79 patients, aged  $\geq 15$  to  $\leq 70$  years, both genders; excluding those history of intraocular surgery or ocular trauma, increased intraocular pressure, uveitis, evidence of endothelial dystrophy on slit-lamp bio microscopy and diabetes mellitus.

**RESULTS:** Among the participants at 3 months post operatively, in the age group of 15-25, endothelial cell loss was 29.79%. Between 26-35, loss was 28.84%, between 36-45, loss was 28.40%, between 46-55 loss was 27.73% , while between 56-70years, loss was 33.07%.

**CONCLUSION:** Our study revealed that there is a significant decrease in corneal endothelial cell count after penetrating keratoplasty in all age groups. Cell loss was more in the older age group. Gender had no influence on cell loss. *Al-Shifa Journal of Ophthalmology* 2015; 11(2): 76-81. © Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.

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