

SPECULAR EVALUATION OF ENDOTHELIUM IN PSEUDOPHAKIC DONOR CORNEA

ABSTRACT

Purpose: This study was designed to evaluate the pseudophakic donor corneal tissue received in the eye bank by slit lamp examination and specular microscopic evaluation. The donor details were documented, the time of death and enucleation, death to preservation time, death to evaluation time, the storage time and surgery details were recorded. The aim was to calculate the percentage of pseudophakic donor eyes which could be used for optical purpose.

Methods: A prospective study was done at Rotary Aravind International Eye Bank, Aravind Eye Hospital and Post Graduate Institute of Ophthalmology, Madurai, over a period of twelve months, from July 2013 to August 2014.

Results: During the study period, out of 1666 eyes received at the eye bank, 601 were pseudophakic, (i.e. 36.07% were pseudophakic eyes). 32.61% of the pseudophakic donor eyes were utilized for corneal transplantations. 18.88% of the utilized pseudophakic donor eyes were used for optical purposes. 6.12% was used for Penetrating Keratoplasty, 5.61% for Deep Anterior Lamellar Keratoplasty and 7.14% was used for young Therapeutic Keratoplasties.

Conclusion: Endothelial cell count and specular parameters give an idea about the percentage of pseudophakic donor corneas, suitable for optical use.

Key words: pseudophakic donor corneas, specular microscopic evaluation, endothelial cell count.