ORIGINAL RESEARCH PAPER

Ophthalomology

VARIOUS CAUSES OF CORNEAL BLINDNESS IN A TERTIARY CARE

KEY WORDS:

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AIM A case series report on commonly encountered causes of corneal blindness in a Tertiary care Cornea clinic

STUDY DESIGN
Observational case study

PLACE OF STUDY
Department of Ophthalmology, Government Dharmapuri Medical college, Dharmapuri

PERIOD OF STUDY
JUNE 2024 TO JUNE 2025

DURATION
One Year

SAMPLE SIZE
120

INCLUSION CRITERIA
1) All patients attending the Cornea clinic with visual impairment due to corneal pathology
2) Patients of all age group, males, females and transgenders are included in the study
3) Patients who consented to participate

EXCLUSION CRITERIA
1) Patients not willing to participate in the study
2) Patients with non-corneal causes of blindness

MATERIALS AND METHODS
Patients fulfilling inclusion criteria were evaluated in Cornea Clinic as follows
1) Age
2) Sex
3) Visual acuity by Snellen chart
4) Best corrected visual acuity
5) Slit lamp examination
6) Corneal staining
7) Corneal topography and pachymetry if needed
8) Microbiological workup when indicated

OBSERVATION AND RESULTS
- Gender Distribution: 68 males (57%) and 52 females (43%).
- Age Distribution: Majority (42%) were between 31 and 50 years old.

Disease Distribution – Pie Chart

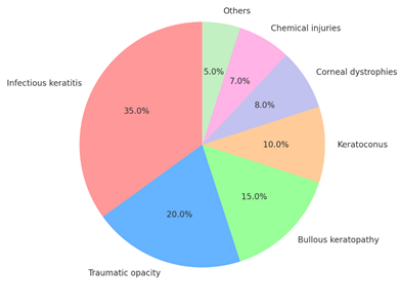

Figure 1 : distribution of corneal blindness

DISEASE DISTRIBUTION:
1. Infectious keratitis – 35%
2. Traumatic corneal opacity – 20%
3. Pseudophakic bullous keratopathy – 15%
4. Advanced keratoconus – 10%
5. Corneal dystrophies – 8%
6. Chemical injuries – 7%
7. Others – 5%

Tabular Summary of Causes of Corneal Blindness

Cause	Number of Cases (n=120)	Percentage (%)
Infectious keratitis	42	35%
Traumatic corneal opacity	24	20%
Pseudophakic bullous keratopathy	18	15%
Advanced keratoconus	12	10%
Corneal dystrophies	10	8%
Chemical injuries	8	7%
Others	6	5%

CONCLUSION
1. Corneal blindness arises from infections, trauma, degenerative, and hereditary causes.
2. Infectious keratitis is the most common cause.
3. Many causes are preventable through early care and education.
4. Tertiary services and eye banking play a crucial role in management.
5. Public health strategies should target working-age populations affected.

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