



REVIEWER'S REPORT

Manuscript No.: IJAR- 50100

Date: 30/01/2025

Title: "Clinical Profile, Investigations, and Management of 150 Corneal Ulcer Patients: A Comprehensive Study"

Recommendation:

- ✓ Accept as it is
- Accept after minor revision.....
- Accept after major revision
- Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality		✓		
Techn. Quality		✓		
Clarity		✓		
Significance	✓			

Reviewer Name: Dr. S. K. Nath

Date: 31/01/2025

Reviewer's Comment for Publication.

This is a well-structured and clinically relevant study with strong methodology and insightful findings. However, improvements in language, sample size, follow-up duration, and data visualization would enhance its impact.

Reviewer's Comment / Report

Strengths of the Paper:

1. Relevance and Clinical Significance: The study addresses a crucial ophthalmic issue—corneal ulcers, which are a major cause of visual impairment and blindness worldwide. It provides a comprehensive analysis covering clinical presentation, microbiological findings, management strategies, and treatment outcomes.

2. Well-Defined Study Design and Methodology: The prospective, randomized design enhances credibility. Clear inclusion and exclusion criteria ensure a well-defined study population. Detailed clinical evaluation and investigative protocols (microbiological analysis, corneal scraping, PCR for viral detection) strengthen the study's diagnostic accuracy. Appropriate statistical methods (t-tests for continuous variables, chi-square for categorical data) make the analysis reliable.

3. Comprehensive Data Presentation: Demographics, risk factors, microbiological findings, treatment outcomes, and visual acuity improvement are presented in well-organized tables. The categorization of ulcer types (bacterial, fungal, viral, Acanthamoeba-related) and treatment responses provides valuable clinical insights.

4. Strong Discussion and Interpretation: The discussion effectively explains:

- The prevalence of bacterial ulcers and the importance of early intervention.

REVIEWER'S REPORT

- The significance of fungal keratitis in agricultural workers.
- The need for surgical interventions in non-responsive cases.
- The comparison with global trends strengthens the study's relevance.

5. Practical Clinical Implications: The study emphasizes the importance of early diagnosis and targeted therapy. It highlights the need for preventive measures (e.g., contact lens hygiene, eye protection for workers). The findings align with established literature, as shown in the well-cited references.

Areas for Improvement:

1. Language and Grammar Issues: Some sentences need better structuring for clarity. Example:

- *“Understanding the clinical profile, diagnostic methods, and management of corneal ulcers is crucial for improving treatment outcomes and preventing complications such as corneal perforation and scarring.”*
- Could be rewritten as:
- *“A thorough understanding of the clinical profile, diagnostic approaches, and management strategies for corneal ulcers is essential to enhance treatment outcomes and prevent complications like corneal perforation and scarring.”*
- Minor grammatical errors (e.g., missing articles, awkward phrasing) should be corrected through proofreading.

2. Limited Sample Size and Single-Center Study: 150 patients is a reasonable number, but a multicenter study with a larger cohort would provide more generalizable results. Geographic and demographic variability in microbial profiles and treatment responses should be discussed in greater detail.

3. Lack of Long-Term Follow-Up: The study only follows patients for 3 months—longer follow-up (6 months–1 year) could help assess:

- Recurrent ulcers.
- Long-term visual prognosis.
- Corneal scarring outcomes.

4. Limited Discussion on Treatment Failures: The study mentions 5 cases of treatment failure requiring surgical intervention but does not analyze the reasons behind these failures. A more detailed discussion on refractory cases would add depth to the findings.

5. Figures and Graphs Would Enhance Readability: The tabular data is excellent, but graphs or charts (e.g., bar graphs for microbiological trends, line charts for visual acuity improvement) would improve visual representation of trends.