

REVIEWER'S REPORT

Manuscript No.: IJAR-51919

Date: 28-05-2025

Title: STUDY OF RARE BACTERIAL ISOLATES IN A TERTIARY CARE HOSPITAL

Recommendation:

Accept as it is.....YES.....

Accept after minor revision.....

Accept after major revision

Do not accept (*Reasons below*)

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

Reviewer's Name: Dr Aamina

Reviewer's Decision about Paper: **Recommended for Publication.**

Comments (*Use additional pages, if required*)

Reviewer's Comment / Report

Introduction Evaluation:

The introduction effectively contextualizes the study within the broader global health concern of emerging bacterial pathogens. It successfully highlights the clinical and epidemiological challenges posed by novel and multidrug-resistant bacteria, particularly in hospital settings. The references to transmission potential, virulence factors, and diagnostic complexity underscore the significance of studying rare bacterial isolates. The emphasis on the need for clinical acumen and laboratory precision reflects the practical difficulties in differentiating contaminants from true pathogens. The rationale for understanding susceptibility patterns is well-anchored and clinically relevant.

Materials and Methods Evaluation:

The methodological description is clear and sufficiently detailed. The prospective observational design is appropriate for the study's objective, and the use of standard microbiological practices including gram staining, culture, and susceptibility testing under CLSI guidelines adds credibility to the results. The inclusion and exclusion criteria are well-defined and ensure a focused study cohort. The mention of the

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VITEK 2 system for bacterial identification indicates a modern and reliable diagnostic approach. The temporal scope and departmental sample collection are logically structured and provide a solid foundation for analysis.

Results Evaluation:

The results are systematically presented and reveal important demographic and clinical trends. The age and gender distribution data are precise and clearly indicate a higher susceptibility among middle-aged and elderly males. The enumeration of comorbidities is relevant, as it aligns with the known risk factors for nosocomial and opportunistic infections.

The microbiological findings are exemplified by a specific case involving *Pantoea agglomerans*, which is well-described in terms of its clinical source and susceptibility profile. The detailed antibiotic sensitivity results offer valuable insight into treatment options and resistance patterns. The isolate's susceptibility to a broad spectrum of antibiotics and resistance to a single agent (Fosfomycin) is a notable finding.

Scientific Relevance and Clinical Significance:

The study addresses a pertinent issue in hospital microbiology and infectious disease management. Rare pathogens often escape timely detection and contribute to increased patient morbidity and healthcare costs. By shedding light on such isolates and their antimicrobial profiles, this research adds to the clinical knowledge required for effective infection control and therapeutic intervention. The focus on real clinical cases enhances the translational value of the findings.

Overall Evaluation:

This study offers a valuable contribution to the field of medical microbiology by documenting rare bacterial isolates, their associated clinical presentations, and antibiotic sensitivity profiles. The methodology is sound, and the results are relevant and presented with clarity. The work is grounded in clinical practice and addresses a crucial gap in hospital infection surveillance and antimicrobial stewardship.