

## REVIEWER'S REPORT

Manuscript No.: IJAR- 51920

Date: 26/05/2025

**Title:** Evaluation of Biochemical and Hematological Alterations in Patients with Cholelithiasis: A Hospital-Based Cross-Sectional 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: 27/05/2025

### Reviewer's Comment for Publication:

This study effectively highlights significant biochemical and hematological changes in patients with cholelithiasis, particularly in liver function and systemic inflammation markers. These parameters are valuable in the early diagnosis and management of gallstone disease, emphasizing the need for routine assessment. However, future research with longitudinal designs and multi-center populations is warranted to confirm these findings and explore their prognostic significance.

## Reviewer's Comment / Report

### Strengths:

- **Large Sample Size & Well-Defined Population:** The study includes 240 participants, with detailed demographic data, which enhances the reliability of findings.
- **Comprehensive Parameter Assessment:** Multiple biochemical and hematological parameters were evaluated, including bilirubin, liver enzymes, pancreatic enzymes, and inflammatory markers, providing a holistic view of the physiological state in gallstone patients.
- **Standardized Methodology:** Utilized standard laboratory protocols and appropriate statistical analysis (Mann-Whitney U test), which adds validity.
- **Clinical Relevance:** The study underscores the importance of routine biochemical tests in early detection of gallstone-related complications, potentially guiding clinical decision-making.

### Weaknesses:

- **Cross-Sectional Design Limitation:** The observational nature limits the ability to establish causality between biochemical changes and disease progression.
- **Limited Scope for Causality and Longitudinal Outcomes:** No follow-up data to assess changes over time or response to treatment.
- **Potential Selection Bias:** Conducted at a single hospital in Moradabad, which may affect the generalizability of findings to broader populations.
- **Insufficient Exploration of Pathophysiology:** While alterations are documented, deeper mechanistic insights into how these biochemical changes contribute to disease severity are lacking.
- **Lack of Correlation with Clinical Severity:** No analysis correlating biochemical parameters with clinical or imaging severity of gallstones.