REVIEWER'S REPORT

Manuscript No.: IJAR- 51840   Date: 23/05/2025

Title: Pleural Effusion: A Rational Approach to Diagnosis and Management

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: 24/05/2025

Reviewer's Comment for Publication:

This paper underscores the complexity of diagnosing pleural effusions and advocates for a patient-centered, resource-conscious approach. It highlights that combining clinical evaluation with appropriate use of minimally invasive diagnostic tools can enhance diagnostic accuracy, particularly in resource-limited settings. However, further detailed methodology and outcome data are needed for a more definitive assessment of diagnostic strategies.

Reviewer's Comment / Report

Strengths:

- **Comprehensive Diagnostic Approach:** The paper emphasizes a variety of diagnostic tools, including biochemical analysis, cytology, microbiology, imaging (CXR, USG, CT), and biopsy techniques (closed pleural biopsy, thoracoscopy), providing a holistic perspective.
- **Clinical Relevance:** It highlights the importance of tailored diagnostic pathways considering resource availability, patient comfort, and safety—a practical approach for clinicians.
- **Study Data:** The inclusion of a prospective study with 103 cases gives real-world insights, especially regarding the etiology distribution (notably TB as the predominant cause in the Indian context).
- **Comparison of Procedures:** The analysis of diagnostic yields from different procedures like thoracoscopy and bronchoscopy adds valuable information on their effectiveness.

Weaknesses:

- **Limited Methodological Details:** The paper provides scant information on the study design, inclusion/exclusion criteria, and statistical analysis, which limits the ability to evaluate the robustness of findings.
- **Inconsistent Data Presentation:** Some data points are fragmented or appear in different sections (e.g., percentages for etiology, procedures, diagnostic yields), which may lead to confusion.
- **Lack of Follow-up Data:** There's minimal discussion on patient outcomes, response to treatment, or long-term follow-up, which are crucial for assessing management efficacy.
- **Overgeneralization:** While the study is relevant locally (India), its applicability to other populations or healthcare systems is not discussed.