

REVIEWER'S REPORT

Manuscript No.: IJAR-53976

Date: 22/09/2025

Title: Left Ventricular Free Wall Rupture Revealed by Periprocedural Echocardiography in a Patient with Extensive Anterior STEMI: A Fatal Case

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: 22/09/2025

Reviewer's Comment for Publication:

The manuscript effectively demonstrates an acute and fatal complication of STEMI, highlighting the critical role of echocardiography in emergent diagnosis. Its contribution lies in capturing a rare event with real-time imaging. Strengthening the literature review, providing additional insights into risk factors and prevention, and clarifying language would enhance its impact.

Reviewer's Comment / Report

Strengths:

- Clinical Relevance and Urgent Topic:** The paper describes a rare but highly fatal complication of acute myocardial infarction (AMI), emphasizing the importance of rapid diagnosis with echocardiography. The real-time documentation enhances its educational value.
- Clear Case Presentation:** The case is well-detailed, with precise descriptions of the patient's presentation, ECG findings, and the sequence of events leading up to the complication.
- Imaging and Video Documentation:** Inclusion of echocardiographic images and videos (although the videos cannot be viewed here) enriches the report, aiding in visual understanding of the rupture.
- Emphasis on Point-of-Care Echocardiography:** The discussion rightly highlights the vital role of transthoracic echocardiography in emergencies.

Weaknesses:

- Limited Literature Context:** The discussion refers to previous cases but could benefit from a more comprehensive review of existing literature discussing incidence, risk factors, and management strategies for LV free wall rupture.
- Lack of Detailed Post-Mortem or Autopsy Findings:** As the patient expired despite resuscitation, any additional insights from autopsy, if available, would strengthen the causation and understanding.
- Absence of a Broader Discussion on Prevention:** The paper could discuss preventive strategies or early identifying features to alert clinicians before rupture occurs.
- Clarity and Language Style:** Some sentences are lengthy and could be rephrased for clarity. For example, the phrase "*The rupture was caught via echocardiography just as she was being transferred for catheterization*" could be more concise.

Recommendations for Revisions:

- Language and Grammar:** Correct minor grammatical errors and typos. For example:
 - Change "*a massive hemopericardium and left ventricular free wall rupture*" to "*a massive hemopericardium resulting from a left ventricular free wall rupture*" for clarity.

International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

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- Rephrase lengthy sentences for coherence, e.g., *"Emergent transthoracic echocardiography confirmed a massive hemopericardium due to LV rupture"*.
- 2. **Expand Literature Context:** Strengthen the discussion with more recent studies or reviews on LV free wall rupture post-AMI, including incidence, risk factors, and outcomes.
- 3. **Add Preventative and Early Identification Strategies:** Include insights into early warning signs or imaging features that could predict impending rupture.
- 4. **Figures and Videos:** Ensure all figures/tables are clearly labeled and referenced. Verify that videos are accessible and appropriately captioned.
- 5. **Formatting:** Check for consistent formatting, especially for references and figure legends.