

## REVIEWER'S REPORT

Manuscript No.: IJAR- 50445

Date: 27/02/2025

**Title: "An Adult Presentation of Ebstein's Anomaly of Tricuspid Valve: Case Report and Review of Literature"**

### 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: 28/02/2025

### Reviewer's Comment for Publication:

This paper provides an in-depth case report and literature review on Ebstein's anomaly, particularly its diagnosis and surgical management in adults. The detailed clinical presentation, diagnostic imaging, and surgical strategy make it a valuable reference for cardiologists and cardiac surgeons. However, further studies with larger patient samples, long-term follow-up, and comparisons of surgical versus conservative treatments would enhance the understanding of optimal management strategies for this rare congenital heart defect. Overall, this study contributes significantly to the existing literature on adult cases of Ebstein's anomaly and emphasizes the importance of early diagnosis, advanced imaging, and surgical innovations in improving patient outcomes.

### *Reviewer's Comment / Report*

This paper presents a case study of a 30-year-old female diagnosed with Ebstein's anomaly, a rare congenital heart disease affecting the tricuspid valve and right ventricular function. The patient exhibited symptoms of severe palpitations, dizziness, and cyanosis, with diagnostic tests confirming a severe Type C Ebstein's anomaly. Treatment involved tricuspid valve repair using the Da Silva technique along with partial cavopulmonary diversion to manage right atrial pressure. The paper further provides a comprehensive literature review on the embryological basis, pathophysiology, clinical presentation, diagnostic approaches, and surgical treatment options for Ebstein's anomaly. It highlights the importance of echocardiography and right heart catheterization in disease assessment and discusses the Carpentier classification system for anatomical severity grading.

### Key Strengths of the Study

**1. Well-Documented Case Presentation:** The case report provides detailed clinical findings, including electrocardiographic, echocardiographic, and catheterization data. The treatment strategy and surgical intervention are thoroughly explained, with references to modern surgical techniques such as the Da Silva Cone repair.

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**2. Comprehensive Literature Review:** The paper discusses embryological development, pathophysiology, and clinical manifestations of Ebstein's anomaly. It compares various diagnostic and classification approaches, making it a valuable reference for clinicians.

**3. Scientific and Clinical Relevance:** Ebstein's anomaly is rare, and adult presentations are even less common. This study contributes valuable insights into late-diagnosed cases. The study underscores the importance of a multidisciplinary approach, including cardiology, electrophysiology, and cardiothoracic surgery, in managing complex congenital heart defects.

**4. Strong Use of Imaging and Diagnostic Tools**

The paper effectively demonstrates the role of echocardiography, catheterization, and angiography in confirming the diagnosis. The inclusion of figures and classification tables improves reader understanding of disease severity and treatment options.

### Limitations of the Study

**1. Single-Case Limitation:** The study presents only one case, limiting generalizability to a broader patient population. A comparative analysis with multiple cases or surgical outcomes over time could strengthen the findings.

**2. Lack of Long-Term Follow-Up:** While the study discusses surgical intervention, it does not provide long-term post-operative outcomes or prognosis. Future studies could include follow-up data to assess the success of the Da Silva technique and risk of recurrence of arrhythmias.

**3. Limited Discussion on Alternative Treatment Approaches:** The paper mainly focuses on surgical correction. However, some adult patients with Ebstein's anomaly may be managed conservatively with medical therapy or electrophysiology interventions. Discussing non-surgical approaches in greater detail could provide a more balanced perspective.