

## REVIEWER'S REPORT

Manuscript No.: IJAR- 51705

Date: 19/05/2025

**Title:** Efficacy of Magnesium Sulfate in Attenuating the Hemodynamic Response to Laryngoscopy and Endotracheal Intubation

### 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: 19/05/2025

### Reviewer's Comment for Publication:

The study concludes that magnesium sulfate is an effective agent for blunting the sympathetic response associated with laryngoscopy and endotracheal intubation. It demonstrates a capability to significantly reduce the elevations in heart rate and blood pressure during critical peri-intubation periods, with a favorable safety profile. These findings suggest magnesium sulfate could be a valuable adjunct in anesthesia management, especially for patients at risk of cardiovascular complications. However, further research with larger sample sizes and comparisons to other agents is warranted to confirm its efficacy and safety in broader clinical settings.

## *Reviewer's Comment / Report*

### Strengths:

- **Clear Objective and Methodology:** The study aims to evaluate the effectiveness of intravenous magnesium sulfate in attenuating hemodynamic responses, utilizing a prospective, randomized design, which enhances the validity of the findings.
- **Quantitative Data:** The study provides specific measurements of heart rate and blood pressure at multiple intervals, offering detailed insight into the hemodynamic changes.
- **Positive Findings:** Results demonstrate that magnesium sulfate significantly reduces the increases in HR and BP during and after intubation, supporting its potential clinical utility.
- **Safety Profile:** No adverse effects were reported, indicating magnesium sulfate is a safe adjunctive agent in this context.

### Weaknesses:

- **Limited Sample Size Information:** The summary does not specify the total number of participants, making it difficult to assess the statistical power of the study.
- **Short-term Evaluation:** The measurements focus on immediate hemodynamic responses, with no long-term follow-up to assess sustained effects or complications.
- **Lack of Comparative Analysis:** While magnesium sulfate was tested, the study does not compare its efficacy against other agents like opioids, beta-blockers, or calcium channel blockers within the same cohort.
- **Potential Biases:** Details regarding blinding or allocation concealment are not provided, which could influence the objectivity of the results.