



REVIEWER'S REPORT

Manuscript No.: IJAR-50781

Date: 26-03-2025

Title: Management of low blood pressure during spinal anaesthesia for caesarean section: Comparison between ephedrine and low-dilute norepinephrine

Recommendation:

- Accept as it is.....**YES**.....
- Accept after minor revision.....
- Accept after major revision
- Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality	√			
Techn. Quality		√		
Clarity		√		
Significance			√	

Reviewer's Name: Dr Aamina

Reviewer's Decision about Paper: **Recommended for Publication.**

Comments (*Use additional pages, if required*)

Reviewer's Comment / Report

Summary

The study presents a well-structured comparative analysis of weakly diluted norepinephrine versus ephedrine for managing hypotension induced by spinal anaesthesia during caesarean sections. Conducted at the Ibn Rochd University Hospital in Casablanca over six months, the research includes a sample of 120 patients, ensuring a substantial dataset. The study effectively highlights norepinephrine's superior hemodynamic stability, with better control of heart rate and systolic blood pressure while maintaining optimal umbilical cord pH levels. The comparison between 16 mcg and 8 mcg doses of norepinephrine further strengthens the findings by providing insight into dose-dependent efficacy. The results suggest that norepinephrine may offer a safer and more effective alternative to ephedrine in this clinical setting, emphasizing maternal and fetal safety.

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Introduction

The introduction effectively contextualizes the study by outlining the risks associated with general anaesthesia in pregnant women and the benefits of spinal anaesthesia for caesarean sections. It appropriately discusses the primary complication of spinal anaesthesia—hypotension—and the importance of its management. The rationale for comparing ephedrine with norepinephrine is clearly established, reinforcing the clinical significance of the study.

Patients and Methods

The methodology is clearly structured and detailed, specifying the study's goal, type, and criteria for patient selection. The inclusion and exclusion criteria are well-defined, ensuring clarity on the study population. The perioperative monitoring of SBP, DBP, MAP, and HR at key time points (t0, t1, t2, t3) provides a robust framework for assessing the efficacy of the vasopressors. The definition of hypotension is appropriately stated, aligning with standard clinical guidelines.

Overall Evaluation

The study is well-designed, with a clear focus on comparing two vasopressors for hypotension management during spinal anaesthesia. The methodology is rigorous, and the findings contribute valuable insights into perioperative care for caesarean sections. The emphasis on maternal and fetal safety enhances the clinical relevance of the research.