

REVIEWER'S REPORT

Manuscript No.: IJAR-52884

Date: 18/07/2025

Title: *A Comparative Study of Bier's Block Using Lignocaine & Lignocaine with Dexmedetomidine in Upper Limb Surgeries*

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: 19/07/2025

Reviewer's Comment for Publication:

The study convincingly demonstrates that adding dexmedetomidine to lignocaine enhances the efficacy of Bier's Block anesthesia for upper limb surgeries. It accelerates block onset, prolongs postoperative analgesia, and improves patient comfort through higher sedation levels without significant adverse effects. These findings support dexmedetomidine as a valuable adjuvant in IVRA, potentially improving perioperative management for short-duration upper limb surgeries.

Reviewer's Comment / Report

Strengths of the Study:

- **Robust Study Design:** Randomized, prospective, and single-blinded, enhancing validity.
- **Clear Objectives & Parameters:** Focused on relevant clinical outcomes like block onset, duration, analgesia, and sedation.
- **Statistical Rigor:** Appropriate use of SPSS and significance testing ($p < 0.05$).
- **Clinical Relevance:** Demonstrates meaningful improvements in analgesia and patient comfort, which can influence practice.
- **Safety Profile:** No significant adverse effects noted, supporting the safety of dexmedetomidine as an adjuvant.

Weaknesses of the Study:

- **Sample Size:** Although 60 patients provide initial insight, a larger cohort could enhance generalizability.
- **Single-Blinded Design:** May introduce some bias compared to double-blinding.
- **Limited Long-term Data:** The study primarily reports intraoperative and immediate postoperative outcomes; long-term effects or rare side effects are not addressed.
- **Lack of Detailed Hemodynamic Monitoring Data:** While no instability was noted, detailed blood pressure and heart rate data would reinforce safety claims.
- **Specific Dosage Parameters:** Use of 1 mcg/kg dexmedetomidine; effects of different doses were not explored.