ISSN: 2320-5407



International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

www.journalijar.com

REVIEWER'S REPORT

Manuscript No.: IJAR-51476

Date: 09-05-2025

Title: Pre-emptive Analgesia with Pregabalin in Elective Lower Limb Orthopaedic Surgeries: A Randomized Controlled Trial

Recommendation:	Rating	Excel.	Good	Fair	Poor
Accept as it is YES Accept after minor revision Accept after major revision Do not accept (<i>Reasons below</i>)	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

Abstract: Evaluation

The abstract is well-structured and effectively summarizes the study's rationale, methodology, results, and conclusion. It clearly establishes the significance of managing postoperative pain in orthopedic surgery and presents the concept of pre-emptive analgesia. The research design—randomized, double-blind, placebo-controlled trial—is appropriately highlighted, enhancing the study's credibility.

The sample size (60 patients), intervention (pregabalin 150 mg vs. placebo), and primary/secondary outcomes are clearly mentioned. The results are presented with relevant statistical values, demonstrating significant differences in time to first epidural top-up, number of

International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

www.journalijar.com

REVIEWER'S REPORT

top-ups, and rescue morphine doses between the pregabalin and control groups. The conclusion is concise and aligns well with the findings, reinforcing the potential benefit of incorporating pregabalin into multimodal analgesia protocols.

Introduction: Evaluation

Contextualization and Relevance

The introduction effectively outlines the clinical challenge of postoperative pain management in lower limb orthopedic surgeries. It connects the physiological basis of pain—particularly peripheral and central sensitization—to the rationale for pre-emptive analgesia. By citing definitions and mechanisms of pain and sensitization, the authors provide a solid conceptual framework for their investigation.

Scientific Basis

The mechanisms of action of pregabalin in modulating neuronal excitability and inhibiting central sensitization are implied, though not deeply explored in this section. Nonetheless, the references to pain physiology are appropriate and support the justification for using pregabalin as a pre-emptive analgesic agent.

Structure and Clarity

The flow of information is logical, moving from general issues of postoperative pain to specific pathophysiological mechanisms, and then to the rationale for evaluating pregabalin. The writing is clear and precise, and technical terms are used accurately.

Methods and Results (as presented in the abstract): Evaluation

Although the full methods section is not provided, the abstract outlines a robust study design with appropriate randomization and blinding. The choice of 150 mg pregabalin administered one hour before surgery is in line with commonly used protocols. The selection of primary and secondary outcomes (VAS score, opioid use, adverse effects) is appropriate for assessing analgesic efficacy.

International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

www.journalijar.com

REVIEWER'S REPORT

The results are presented with mean ± standard deviation and include p-values, indicating statistically significant differences. The metrics reported (time to epidural top-up, number of top-ups, rescue morphine doses) effectively support the primary hypothesis.

Keywords: Evaluation

The keywords are relevant and specific, aiding discoverability and clearly reflecting the core components of the study.

Overall Assessment

This study is clinically relevant and methodologically sound. It addresses a significant issue in postoperative care and supports the use of pregabalin as part of a multimodal analgesia regimen. The randomized controlled design and double-blinding enhance the study's rigor. The results are clearly presented and statistically validated. The introduction provides a solid physiological rationale for the intervention.

Overall, the manuscript is clear, well-organized, and contributes meaningfully to the literature on pain management in orthopedic surgery.