



Letter to the Editor Regarding “Comparison of Ultrasound-Guided Caudal Epidural Blocks and Spinal Anesthesia for Anorectal Surgery: A Randomized Controlled Trial”

Vinai Theerthaan Meenakshi Sundaram · Vinod Krishnagopal · Rashmi Chellappa · Raghuraman M. Sethuraman · Sathyasuba Meenakshi Sundaram

Received: August 17, 2022 / Accepted: November 8, 2022 / Published online: November 29, 2022
© The Author(s) 2022

Keywords: Caudal epidural; Subarachnoid block; Anorectal surgeries

To the Editor,

We read with great interest the recently published article that compared ultrasound-guided caudal epidural blocks vs spinal anesthesia for anorectal surgery by Chen et al. [1]. We congratulate the authors on this wonderful study and wish to seek some clarification from the authors.

The main point of contention is that whenever the term “double blinding” is used, it means that the experimenter and the participants are unaware of the procedure done. In this study, patients were not blinded from the procedure they underwent as the site as well as positioning for both the procedures was different. Hence, we feel that the use of the term “double blinding” in this study may not be appropriate [2]. Although it appears that the block performer and the assessors were blinded, it still cannot be considered “double blinding”.

Another point that needs clarification is that no precautionary technique was used to exclude

intravascular placement of the needle in the caudal epidural group. Fluoroscopy studies reveal that the incidence of accidental intravascular injections ranges between 3% and 14%, despite negative aspiration. The presence of unidirectional flow in color Doppler may be considered as a surrogate of injectate spreading in the caudal epidural space [3].

The number of attempts, being a confounding factor, should have been taken into account since spinal anesthesia is a blind procedure and an increase in the number of attempts can lead to a decrease in patient satisfaction as compared to ultrasound-guided caudal epidural block which can be done in a single attempt. So in the Chen et al.’s study, the number of attempts underwent by the patient subjected to spinal anesthesia should have been mentioned and patients undergoing multiple attempts must have been excluded from the study.

Lastly, we feel that some of the important conditions like the fusion of sacrum in adults, previous spinal surgeries, and spinal deformities should have been in the exclusion criteria [3]. Also, Chen et al. did not mention the total dose of dexmedetomidine used in each patient, which we believe could have an impact on two factors: (1) mean arterial pressure and (2) patient satisfaction scores [4, 5].

V. T. Meenakshi Sundaram (✉) · V. Krishnagopal · R. Chellappa · R. M. Sethuraman · S. Meenakshi Sundaram
Department of Anesthesiology, Sree Balaji Medical College and Hospital (BIHER), #7, Works Road, New Colony, Chromepet, Chennai 600044, India
e-mail: vinai0710@gmail.com

ACKNOWLEDGEMENTS

Funding. No funding or sponsorship was received for this letter or publication of this article. No Rapid Service Fee was received by the journal for the publication of this article.

Authorship. All named authors meet the International Committee of Medical Journal Editors (ICMJE) criteria for authorship for this article, take responsibility for the integrity of the work as a whole, and have given their approval for this version to be published.

Authors' Contributions. Vinai Theerthaaan M (Concept, drafting of manuscript). Vinod Krishnagopal (Concept, drafting of manuscript). Rashmi Chellappa (Concept, drafting of manuscript). Raghuraman M Sethuraman (Concept, drafting of manuscript). Sathyasuba Meenakshi Sundaram (drafting of manuscript).

Disclosures. Vinai Theerthaaan M, Vinod Krishnagopal, Rashmi Chellappa, Raghuraman M Sethuraman, Sathyasuba Meenakshi Sundaram have nothing to disclose.

Compliance with Ethics Guidelines. This article is based on previously conducted studies and does not contain any new studies with human participants or animals performed by any of the authors.

Data Availability. Data sharing is not applicable to this article because no data sets were generated or analyzed during the current study.

Open Access. This article is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License, which permits

any non-commercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc/4.0/>.

REFERENCES

1. Chen S, Wei A, Min J, Li L, Zhang Y. Comparison of ultrasound-guided caudal epidural blocks and spinal anesthesia for anorectal surgery: a randomized controlled trial. *Pain Ther.* 2022;11(2):713–21.
2. Misra S. Randomized double blind placebo control studies, the “Gold Standard” in intervention based studies. *Indian J Sex Transm Dis AIDS.* 2012;33(2):131–4.
3. Kao S-C, Lin C-S. Caudal Epidural Block: an updated review of anatomy and techniques. *BioMed Res Int.* 2017;2017:9217145.
4. Kaur M, Singh PM. Current role of dexmedetomidine in clinical anesthesia and intensive care. *Anesth Essays Res.* 2011;5(2):128–33.
5. Jouybar R, Nemati M, Asmarian N. Comparison of the effects of remifentanil and dexmedetomidine on surgeon satisfaction with surgical field visualization and intraoperative bleeding during rhinoplasty. *BMC Anesthesiol.* 2022;22:24.