



Modes of mechanical ventilation and ultrasound scan technique for evaluating the optic nerve sheath diameter in patients undergoing surgery in the steep Trendelenburg position

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Response to: Graziano M, Di Paola I, Marotta G. Ultrasound evaluation of optic nerve sheath diameter in relation to propofol and inhalational anesthetics in patients having surgery in the Trendelenburg position. *Ann Palliat Med* 2023. doi: 10.21037/apm-22-1301.

Submitted Dec 01, 2022. Accepted for publication Jan 29, 2023. Published online Feb 21, 2023.

doi: 10.21037/apm-2022-04

View this article at: <https://dx.doi.org/10.21037/apm-2022-04>

We appreciate the thoughtful comments shared by Mario Graziano *et al.* on our manuscript entitled “Effects of propofol and inhalational anesthetics on the optic nerve sheath diameter in patients undergoing surgery in the steep Trendelenburg position: a systematic review and meta-analysis”, which was published in *Annals of Palliative Medicine* (1).

In their letter, Graziano *et al.* (2) mentioned that optic nerve sheath diameter (ONSD) after anesthesia's induction was significantly lower in the pressure-controlled ventilation (PCV) mode than in the volume-controlled ventilation (VCV) mode referred to Karaca *et al.*'s study (3). However, this study was conducted during the surgery in the reverse-Trendelenburg position. While applying the reverse Trendelenburg position can prevent an increase in the ONSD undergoing laparoscopic cholecystectomy (4), the conclusion of ventilation mode's effect on ONSD was not efficient.

Until now, there was insufficient evidence to prove that different ventilation patterns cause differences in ONSD in the steep Trendelenburg position, thus data of ventilation mode was not extracted and analyzed through our study according to a standardized Population Intervention Comparison Outcome (PICO) scheme .

We agree that the B-scan sonographic technique used in ONSD measurement has several limitations. Nevertheless, it is currently the most widely used and valid method for evaluating the optic nerve (5). Although the Standardized A-scan technique has been already demonstrated by

Ossoinig (6) in the 1970s and despite being reliable and effective, there are rarely study in relevant databases, which utilize this technique for optic nerve assessment (7). Therefore, we believe that high-quality studies with larger sample sizes are still needed in the future to further confirm the result.

Acknowledgments

Funding: None.

Footnote

Provenance and Peer Review: This article was commissioned by the editorial office, *Annals of Palliative Medicine*. The article did not undergo external peer review.

Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at <https://apm.amegroups.com/article/view/10.21037/apm-2022-04/coif>). The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Cite this article as: Yang J, Yang X, Li X, Ou S. Modes of mechanical ventilation and ultrasound scan technique for evaluating the optic nerve sheath diameter in patients undergoing surgery in the steep Trendelenburg position. *Ann Palliat Med* 2023;12(3):616-617. doi: 10.21037/apm-2022-04