

# Reply to Letter to Editor: Effect of Percutaneous Tracheostomy on Optic Nerve Sheath Diameter [TONS Trial]

Indu Kapoor 

**Keywords:** Intracranial pressure, Optic nerve sheath diameter, Tracheostomy.  
*Indian Journal of Critical Care Medicine* (2022); 10.5005/jp-journals-10071-24209

We thank Paola et al. for showing interest in our article and appreciate their keen observations.<sup>1</sup> We welcome the comments made by them and will try answering to their satisfaction. Our response to their concerns is given below:

- The study by Geng et al. is in patients undergoing laparoscopic surgery in Trendelenburg position where the head is lowered 45° along with pneumoperitoneum. They used propofol and sevoflurane anesthetic agents for the maintenance of anesthesia throughout the surgery.<sup>2</sup> However, in our study, we used propofol only once at the beginning as a bolus dose @ 2 mg/kg to facilitate the procedure. Thereafter we took optic nerve sheath diameter (ONSD) measurements at different stages of percutaneous tracheostomy (PCT). Though the effect of propofol on ONSD cannot be denied, we feel that a single bolus may not have influenced the ONSD values as much as continuous infusion would have, as in the study by Geng et al.<sup>2</sup>
- We agree with Paola et al. regarding their suggestion to use A-scan technique for similar studies in the future, which could possibly give more reliable findings. However, there are studies suggesting the reliability and good correlation between B-mode sonographic ONSD and invasive intracranial pressure measurements which are considered gold standard also.<sup>3,4</sup>

## ORCID

Indu Kapoor  <https://orcid.org/0000-0002-3065-4940>

Department of Neuroanaesthesiology and Critical Care, AIIMS, New Delhi, India

**Corresponding Author:** Indu Kapoor, Department of Neuroanaesthesiology and Critical Care, AIIMS, New Delhi, India, Phone: +91 9013439134, e-mail: dr.indu.me@gmail.com

**How to cite this article:** Kapoor I. Reply to Letter to Editor: Effect of Percutaneous Tracheostomy on Optic Nerve Sheath Diameter [TONS Trial]. *Indian J Crit Care Med* 2022;26(5):652.

**Source of support:** Nil

**Conflict of interest:** None

## REFERENCES

1. Kapoor I, Wanchoo J, Mahajan C, Singhal V, Roy H, Kumar S, et al. Effect of percutaneous tracheostomy on optic nerve sheath diameter [TONS trial]. *Indian J Crit Care Med* 2021;25(4):382–387. DOI: 10.5005/jp-journals-10071-23783.
2. Geng W, Chen C, Sun X, Huang S. Effects of sevoflurane and propofol on the optic nerve sheath diameter in patients undergoing laparoscopic gynecological surgery: a randomized controlled clinical studies. *BMC Anesthesiol* 2021;21(1):30. DOI: 10.1186/s12871-021-01243-7.
3. Kimerly HH, Shah S, Marill K, Noble V. Correlation of optic nerve sheath diameter with direct measurement of intracranial pressure. *Acad Emerg Med* 2008;15(2):201–204. DOI: 10.1111/j.1553-2712.2007.00031.x.
4. Geeraerts T, Merceron S, Benhamou D, Vigué B, Duranteau J. Non-invasive assessment of intracranial pressure using ocular sonography in neurocritical care patients. *Intens Care Med* 2008;34(11):2062–2067. DOI: 10.1007/s00134-008-1149-x.