#### LETTER



# Letter to the Editor Regarding: The Effect of Preoperative Anxiety and Pain Sensitivity on Preoperative Hemodynamics, Propofol Consumption, and Postoperative Recovery and Pain in Endoscopic Ultrasonography

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#### To the Editor,

We read the article written by Ferda Yilmaz Inal and colleagues [1] with great interest.

Their investigation assessed how preoperative anxiety and pain sensitivity affect the consumption of anesthetics, preoperative hemodynamics, postoperative recovery time, and postoperative pain. They concluded that a linear correlation between preoperative anxiety and pain sensitivity and anesthesia need can facilitate better preoperative management. This is a wonderful study to demonstrate that preoperative anxiety and pain sensitivity affect the consumption of anesthetics, preoperative hemodynamics, postoperative recovery time, and postoperative pain. However, there are

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several aspects of this study that should be clarified and discussed.

First, in the Methods section, the author listed the inclusion criteria. However, to our knowledge, propofol is not appropriate for persons allergic to soy-based or egg-based products. Therefore, we suggest that the inclusion criteria should contain patients who are not hypersensitive to any of the study medications [2].

Second, the author used the bispectral index (BIS) to monitor the depth of anesthesia. Although BIS monitoring is a better method for assessing the sedation depth at present, it is also easily affected by other factors [3, 4]. In fact, in clinical practice, we usually give additional doses of propofol according to patients' manifestations, vital signs, and BIS in such kinds of procedures. Therefore, it would be of more clinical significance if BIS was used in combination with other clinical manifestations and vital signs to determine whether to give an additional dose of propofol.

Nevertheless, we congratulate the authors for this interesting study based on the clinical situation and agree with the author's concluding statement. We believe that the article would be stronger and more useful to readers by addressing these issues. 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.

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*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.

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## REFERENCES

- 1. Yilmaz Inal F, Yilmaz Camgoz Y, Daskaya H, et al. The effect of perioperative anxiety and pain sensitivity on preoperative hemodynamics, propofol consumption, and postoperative recovery and pain in endoscopic ultrasonography. Pain Ther. 2021. https://doi.org/10. 1007/s40122-021-00292-7.
- 2. Kim DB, Kim JS, Huh CW, Ma DW, Ji J-S, Kim B-W, Choi H. Propofol compared with bolus and titrated midazolam for sedation in outpatient colonoscopy: a prospective randomized double-blind study. Gastrointest Endosc. 2020. https://doi.org/10.1016/j.gie. 2020.05.045.
- 3. Zetterlund E-L, Green H, Oscarsson A, et al. Determination of loss of consciousness: a comparison of clinical assessment, bispectral index and electroencephalogram. Eur J Anaesthesiol. 2016;33:922–8.
- 4. Gross T, Feliot E, Gayat E, et al. Bispectral index during maintenance of total intravenous anesthesia: frequency of out of recommended range and impact of patients' characteristics: a brief report. Anesth Analg. 2019;131:e52–4.