# LETTER TO THE EDITOR





# Comments on: The impact of Aprepitant on Nausea and Vomiting Following Laparoscopic Sleeve Gastrectomy: A Blinded Randomized Controlled Trial

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Received: 17 March 2024 / Revised: 20 March 2024 / Accepted: 20 March 2024 © The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2024

# Dear Editor,

We read with interest the recent article by Ortiz et al. comparing the effect of aprepitant on the postoperative nausea and vomiting (PONV) incidence after laparoscopic sleeve gastrectomy (LSG) [1]. Although they show an improvement in PONV of their cohort on the postoperative first day, some methodological issues should be clarified to reach the optimum results. Firstly, PONV is extremely common in high-risk patients undergoing laparoscopic gastrointestinal surgery. The preoperative patient-related risk factors for PONV are female sex, history of motion sickness or PONV, postoperative opioid usage for management of pain, and non-smoking status [2]. The authors consider the smoking status of patients as an exclusion criterion, but they did not report postoperative total opioid consumption, patient history of PONV, or motion sickness. Secondly, as mentioned in the article, general anesthesia is also accepted as a risk factor for PONV. On the other hand, inhalational agents compare to total intravenous anesthesia increase the incidence of PONV beyond the selection of neostigmine for the reversal of neuromuscular block [2, 3]. The authors did not define the type of anesthesia, and reveal the total dose of drugs including opioids and neostigmine used during the perioperative period for the group comparison. Lastly, the amount of fluid infused during the intraoperative period and fasting time may be other factors that would be related to PONV [4]. The authors did not add any discussion related to these possible reasons for the PONV. Based on the above we believe that statistical models that include all the possible risk factors of PONV would provide detailed information about the real effects of aprepitant on PONV incidence in patients undergoing LSG.

# **Declarations**

**Ethics Approval** This article does not contain any studies with human participants or animals performed by any of the authors.

Consent to Participate Informed consent does not apply.

Conflict of Interest The authors declare that they have "No conflict of interest".

# References

- Ortiz E, González AI, Jaime V, et al. The impact of aprepitant on nausea and vomiting following laparoscopic sleeve gastrectomy: a blinded randomized controlled trial. Obes Surg. 2024. https:// doi.org/10.1007/s11695-024-07129-0.
- Naeem Z, Chen IL, Pryor AD, et al. Antiemetic prophylaxis and anesthetic approaches to reduce postoperative nausea and vomiting in bariatric surgery patients: a systematic review. Obes Surg. 2020;30:3188–200. https://doi.org/10.1007/s11695-020-04683-1.
- Hsieh YL, Lin CR, Liu YC, et al. The effect of sugammadex versus neostigmine on postoperative nausea and vomiting: a meta-analysis of randomized controlled trials with trial sequential analysis. Minerva Anestesiologica. 2023;89(5):434–44. https://doi.org/10.23736/s0375-9393.22.16972-5.
- Jewer JK, Wong MJ, Bird SJ, et al. Supplemental peri-operative intravenous crystalloids for postoperative nausea and vomiting: an abridged Cochrane systematic review. Anaesthesia. 2020;75(2):254–65. https://doi.org/10.1111/anae.14857.

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Published online: 16 April 2024



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