



Letter to the article by Yunoki et al.

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To the Editor:

We read with great interest the recent article by Yunoki et al. [1]. Their inspirational study on this important topic deserves further discussion. However, we have some concerns in regards to their study conclusion: There was no difference in the prevalence of Postoperative nausea and vomiting (PONV) between remimazolam and sevoflurane anesthesia in patients undergoing artificial joint replacement surgery.

During the surgical recovery period, especially 24 h after emergence from general anesthesia, patients may undergo physiological and psychological disturbance [2]. Due to the residual effects of general anesthetics and surgery factors, PONV is a common adverse outcome exhibited during this period [3]. It was known that the timing of the onset of PONV could be usually divided into early (0–2 h) and late postoperative phases (2–24 h), respectively. The studies had shown that volatile anesthetics are the leading cause of postoperative vomiting (PONV) during the early phase (0–2 h) [4]. A study found that remimazolam would reduce the incidence of early (0–2 h) PONV in comparison to desflurane in gynecological laparoscopic surgery, with no significant difference observed in the incidence of PONV 24 h after surgery [5].

However, an important question is raised: This method of data collection may have resulted in an underestimation of the frequency of PONV in the current study during the early phase (0–2 h) after general anesthesia. And more, patients'

mental and physiological status can only resume to its original baseline gradually over time. Under such the setting, although there was no significant difference in the incidence of PONV during total 24 h after general anesthesia, the value of PONV about volatile anesthetics (sevoflurane) could not reflect the truth during the early phase.

From the discussion above, the current study by Yunoki et al. does not provide convincing evidence that there was no difference in the prevalence of PONV between remimazolam and sevoflurane anesthesia in patients undergoing artificial joint replacement surgery, especially during the early phase (0–2 h).

Data availability There are no data obtained for this report.

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