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CORRESPONDENCE

Comment on: Association of glucagon-like peptide receptor 1 agonist therapy with the presence of gastric contents in fasting patients undergoing endoscopy under anesthesia care: a historical cohort study

Glenio B. Mizubuti, MD, MSc, FRCPC · Leopoldo Muniz da Silva, MD, PhD · Saullo Queiroz Silveira, MD · Ian Gilron, MD, FRCPC · Anthony M.-H. Ho, MD, FRCPC, FCCP

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To the Editor,

We read with interest the work by Wu *et al.*[1] (and its accompanying Editorial)[2] recently published in the *Journal*. The authors are to be congratulated as their findings add to the rapidly growing body of literature on the perioperative management of glucagon-like peptide-1 receptor agonists (GLP-1 RAs).

Using a retrospective cohort design, Wu *et al.* showed a strong correlation between perioperative GLP-1 RA use and the presence of residual gastric contents (RGC) (19%) compared with non-GLP-1 RA users (5%) in patients undergoing elective esophagogastroduodenoscopy (EGD) under anesthesia, with an associated confounder-adjusted odds ratio of 5.8 (95% confidence interval [CI], 1.7 to 19.3; $P = 0.004$).[1] Indeed, and as pointed out by the authors,[1] their results are remarkably similar to those previously reported by our group,[3] where patients taking perioperative semaglutide (a long-acting GLP-1 RA) had a 24% incidence of increased RGC compared with nonsemaglutide users (5%) ($P < 0.001$), with semaglutide users being 5.15 times (95% CI, 1.92 to 12.92) more likely to present with increased RGC in the propensity weighted analysis.[3] While both these (retrospective) studies are inherently subject to bias, such a strong association is noteworthy and should be considered while balancing the risks (e.g., poor glycemic control) and benefits (e.g., reduced RGC and risk of pulmonary aspiration) of preoperative GLP-1 RA therapy discontinuation.

To this end, Wu *et al.*[1] seemingly supported a 3-week preoperative semaglutide interruption for patients undergoing elective procedures. This was based on the fact that "… *the incidence of residual gastric contents in our patients who did not hold the drug was similar to that reported by Silveira et al., in which patients held semaglutide for ten days prior to the procedure.*"[1] It is important to note that, while in our cohort the time intervals of semaglutide interruption in patients with and without increased RGC were 10 [6–15] and 11 [7.75–12.5] days, respectively ($P = 0.67$), such intervals are expressed as median [25th–75th percentile/interquartile range]; therefore, patients with much shorter (or even absent) discontinuation intervals were also included.[3] The same applies to refute the idea that despite similar incidences of RGC in both ours and Wu *et al.*'s cohorts, "… *the patients included in this study* (i.e., Silveira *et al.*[3]) *had been*

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G. B. Mizubuti, MD, MSc, FRCPC (✉) ·
I. Gilron, MD, FRCPC ·
A. M.-H. Ho, MD, FRCPC, FCCP
Department of Anesthesiology and Perioperative Medicine, Queen's University, Kingston General Hospital, Kingston, ON, Canada
e-mail: gleniomizubuti@hotmail.com

L. M. da Silva, MD, PhD
Department of Anesthesiology, São Luiz Hospital - Rede D'Or, São Paulo, Brazil

S. Q. Silveira, MD
Department of Anesthesiology, Vila Nova Star Hospital - Rede D'Or, São Paulo, Brazil

holding semaglutide for ten days prior to the procedure."[1] All in all, any discrepancies between the (remarkably similar) findings of these two investigations should not be necessarily attributed to the time interval of semaglutide interruption pre EGD.

Finally, in the accompanying Editorial published in the same issue of the *Journal*,[2] McIsaac *et al*. cleverly propose several key questions to help disentangle the possible causal pathway between perioperative GLP-1 RA use and the incidence of bronchoaspiration. As well pointed out by the authors,[2] there are currently fewer knowns than unknowns on patients taking GLP-1 RAs perioperatively and who have not held the drug long enough (whatever that optimal preoperative interruption interval might be). Until high-quality evidence is available to adequately and reliably address such questions and given the very low likelihood of perioperative bronchoaspiration[4] as alluded to by McIsaac *et al*.,[2] we suggest a pragmatic approach of proceeding with (as opposed to postponing) elective cases taking the usual mitigating measures against bronchoaspiration.[5] Indeed, gastric point-of-care ultrasound may play an important role in the clinicians' decision-making, its limitations notwithstanding.[2]

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