Reply to Letter to Editor concerning “Effects of preoperative oral carbohydrate on postoperative discomfort in patients undergoing elective surgery: a meta-analysis of randomized controlled trials”

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To the Editor:

We read Kehlet's comments on our work reporting the synthesis of randomized controlled trials of preoperative oral carbohydrate (CHO) on different surgical outcomes [1]. Kehlet criticized that this was, unfortunately, just another meta-analysis that follows the established search methodology without details about the individual studies regarding perioperative care, the use of evidence-based principles for nausea prophylaxis, pain management, etc. [2]. Also, Kehlet believed that our work is an uncritical analysis of the studies compared to a placebo or to drink some sort of inexpensive juices instead of special CHO drinks. Furthermore, as commented by Kehlet, one can improve discomfort by just getting something to drink preoperatively compared to fasting (which is not evidence-based).

We think there are a few issues we should clarify here. First, following established methodology in a meta-analysis is necessary; otherwise, the included materials could be biased on the author's preference. Second, we did not avoid going into details about the individual studies regarding perioperative care, the use of evidence-based principles for nausea prophylaxis, pain management, etc. These contents would need several paragraphs exceeding the scope and word limit of the article, which are perhaps best described in other publications. Third, our topic indicates that we analyzed trials investigating the effects of CHO but not some sort of juice. Fourth, whether one feels better by getting something to drink is not necessarily obvious, and this claim would need support from evidence. Fifth, whether the fasting procedure was carried out precisely in the included trials is an appraisal issue that can be debated and should not be claimed as one wishes.

Kehlet indicated that the postoperative outcomes are irrelevant to pool all surgical studies since each operation has its recovery issue [3] and that our work did not include discussion or information on the use of fully implemented, evidence-based enhanced recovery programs in the analysis which are necessary for the interpretation, as many studies have a too-long length of stay and therefore difficult to explain by CHO alone. We agree that each operation has its recovery issue, but be aware that it is also a fact that each operation shares commonality with other operations. For fully implemented and evidence-based enhanced recovery programs, this is another topic to be analyzed, and discussing this ideal plan does not help interpret CHO's simple effects. Besides, it should be reminded that not all medical settings have the capability or willingness to carry out the fully implemented and evidence-based enhanced recovery programs. On the other hand, offering a CHO drink is simple to be incorporated into the preoperative preparation.

To summarize, we agree that there is an overflow of meta-analyses in recent years [4], but a meta-analysis should focus

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on methodological issues with necessary and sufficient discussion indicated in the PRISMA guidelines. We also agree on the importance of obtaining valid data for procedure-specific recommendations in a fully implemented ERAS program, providing that the medical settings can do so; otherwise, a simple solution is better than none.

Declarations

Competing interests The authors declare no competing interests.

References

1. Cheng PL, Loh EW, Chen JT, Tam KW (2021) Effects of preoperative oral carbohydrate on postoperative discomfort in patients undergoing elective surgery: a meta-analysis of randomized controlled trials. *Langenbecks Arch Surg* 406(4):993–1005
2. Kehlet H, Joshi GP (2015) Systematic reviews and meta-analyses of randomized controlled trials on perioperative outcomes: an urgent need for critical reappraisal. *Anesth Analg* 121(14):1104–1107
3. Kehlet H (2020) Enhanced postoperative recovery: good from afar, but far from good? *Anaesthesia* 75(Suppl 1):e54–e61
4. Kehlet H, Joshi GP (2020) The systematic review/meta-analysis epidemic: a tale of glucocorticoid therapy in total knee arthroplasty. *Anaesthesia* 75(7):856–860

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