Preoperative oral carbohydrate to enhance recovery—need for better study analysis

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Recently, Cheng et al. [1] performed a meta-analysis of randomised controlled trials of preoperative oral carbohydrate (CHO) on different surgical outcomes and concluded that preoperative CHO can alleviate patients' discomfort and that CHO should be promoted as a strategy to enhance recovery. Unfortunately, this is just another meta-analysis that follows the established search methodology for such an analysis, but not going into details about the individual studies with regard to perioperative care, use of evidence-based principles for nausea prophylaxis, pain management, etc. [2].

Of note, it is an uncritical analysis of the studies compared to a placebo or just to drink some sort of inexpensive commonly used juices instead of special CHO drinks. Obviously, compared to fasting (which is not evidence-based) you improve discomfort by just getting something to drink preoperatively.

Regarding the postoperative outcomes (hospital stay), it is irrelevant to pool all surgical studies, since each operation has its own recovery issue [3]. Importantly, there is no discussion or information on the use of fully implemented, evidence-based enhanced recovery programmes in the analysis, which is necessary for the interpretation, as many studies have too long length of stay and therefore difficult to explain by CHO alone.

Summarising, we have an overflow of meta-analyses in recent years [4], but still with an insufficient scientific interpretation of the detailed individual study clinical setup. Although the principle of preoperative CHO is rational

based on initial studies on glucose homeostasis and trauma-induced insulin resistance, it is essential to get valid data for its procedure-specific recommendation in a fully implemented ERAS programme, since some drinks are quite expensive compared to just drinking an inexpensive lemonade drink.

Declarations

Conflict of interest The authors declare no competing interests.

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