Sir—We read with interest this paper regarding optimization of preoperative fasting in a pediatric cohort (1). We would like to congratulate the authors and provide some constructive contributions.

This study analyses techniques for optimization of preoperative fasting times to minimize discomfort and postoperative complications often caused by inappropriate fasting. The study concludes that a new protocol (OPT) significantly improves fasting times, MAP values (mean arterial pressure), and ketone body levels compared to a previously studied group (OLD).

These metabolic parameter outcomes were measured after induction of anesthesia. However, postoperative clinical parameters (cognition, vomiting, pain, and discharge time) would have also been impactful in measuring the effect of the techniques. Furthermore, we cannot ignore the different fluid losses and shifts that occur with different surgeries. These impact metabolic imbalances at the end of a case, hence future studies should take account of this too; with parameters measured postoperatively as well as postinduction.

An audit carried out in 2013 (2) found improvements using similar techniques as this study, showing these are effective in improving adherence. We do however question which intervention is best and importantly most easily achievable and we would welcome a survey of staff at this center in Hanover to further elucidate this. Individual techniques could be investigated by a multisite study. Patients would be randomized for surgery to different sites each with an individual optimization technique, but we appreciate location is limited by patient preference, logistics, and funding.

The OLD and OPT cohorts were matched effectively; however, half of the OLD cohort was lost and we feel a more robust analysis, with increased statistical power, would have included a larger OPT cohort.

This study investigated a population with a large age range (0–36 months), encompassing significant differences in physiology and feeding. We would welcome data looking at more specific age subgroups. For instance, the authors presented an improvement in MAP across the OPT cohort overall despite different blood pressure targets below 1 year against those 2–3 years old.

Mean MAP values were significantly lower in the OLD cohort, however still above a hypotension defining value of 40 mmHg. While we accept this statistical significance (50.3 vs 55.2 mmHg), we question whether a change of 5 mmHg is clinically relevant in this age range. Furthermore, significantly fewer cases of hypotension are presented in the OPT cohort. We agree that 40 mmHg is hypotensive in children below 3 years of age; however, we were unable to find coherent evidence to justify it as a definitive cut-off with clinical implications.

Ketone levels have been shown to correlate, unsurprisingly, with reduced oral intake and vomiting in a pediatric population; however, there was no correlation with illness severity (3). In this study regarding optimization, mean ketone levels were shown to be significantly higher in the OLD cohort, however this was still considered just within normal boundaries (0.6 mmol·l⁻¹) (4). Importantly, the range presented within the OLD cohort did not extend beyond 1.3 mmol·l⁻¹. This is within a value of 1.5 mmol·l⁻¹ which is considered a possible keto-acidotic boundary (4) used in NHS trust guidelines. In light of this, we question the clinical significance of this reported reduction in the OPT cohort.

We feel the suggestions made are very valuable but have their own challenges with local implementation hence we would value input from other centers who have tried to implement these. While this research paper addresses an important question in search of the holy-grail of pediatric fasting times, we look forward to more data regarding clinical relevance and successful application of the recommendations to other hospitals.

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**Conflict of interest**

The authors report no conflict of interest.

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**References**


**Prevent the need for front of neck access**

Sir—we commend the authors for their comprehensive review of the currently available pediatric front of neck access techniques and equipment as well as for their evidence and opinion-based clinical use (1).

The authors acknowledge that such an event is rare in general pediatric anesthetic practice and associated with a poor survival. This indeed has been confirmed by the recent and until now most comprehensive analysis of the Pediatric Difficult Airway (PeDI) registry (2). This technique should, therefore, not be considered as a ‘safety net’ that will be available to salvage ‘cannot ventilate/cannot oxygenate’ situations in children.

Difficult or impossible oxygenation (and ventilation) is either anticipated or unexpected (2). They are caused by either anatomical or functional airway obstructions (3). While anatomical causes (inadequate positioning, poor facemask technique, large tonsils/adenoïds, foreign body) must be solved with the operator’s skills, functional airway obstructions (laryngospasm, insufficient depth of anesthesia, glottic closure due to opioid-induced muscle rigidity, bronchospasm) can be solved with drugs. Early administration of muscle relaxants will overcome all functional airway problems with the exception of severe bronchospasm for which systemic epinephrine should be immediately available in a peri-arrest scenario (3).

Early muscle relaxation will also allow easier and less traumatic (direct) laryngoscopy and tracheal intubation. This approach is consistent with the NAP 4 recommendation: ‘Even if it was not part of the initial airway management strategy, if CICV occurs and waking the patient up is not an option, a muscle relaxant should be given before determining the need to proceed to a surgical airway’ (4).

Dedication to teaching, training, and daily practice of prevention and management of the normal and difficult pediatric airway based on current knowledge must be at the forefront clinical practice and is key to prevent the need of front of neck access in children (5). A preventative institutional approach should include a skills workshop for locally available alternative oxygenation/ventilation/intubation techniques and IV access as well as emphasis on appropriate expertise rather than a sole focus on the acquisition of front of neck access skills. The front of neck access technique can only be considered as an option in the context of difficult pediatric airway management and should not be propagated as a recognized effective treatment in desperation.

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Not required.

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