

Preoperative Fasting and More: Expanding the Acceptance of Evidence-based Practices. Comment on JBPKIHS. 2021;4(1):1-3

Dear Editor,

This was a good read on the topic of evidence-based practice raising the issue of “Fasting or starving our patients to an inhumane extent? A plea for some common sense” in the editorial Vol 4, No 1 (2021) in your esteemed journal. Very true, we need more such reminders for the evidence-based clinical practices to benefit the patients. Preoperative, and for that matter postoperative, nil per os (NPO) of surgical patients are the areas in which we need to do more work, reminding the surgeons, anesthetists, and nurses, to raise the awareness to implement the evidence-based practice guidelines for the change needed in day to day clinical practices.

The editorial has rightly pointed out that the issue of NPO for patients undergoing surgery requires an overhaul. We need to remind all the stakeholders, the academicians, the clinicians, and the patients of the changing concept and evidence in traditional clinical practices so that patients do not need to suffer unnecessarily from blanket midnight NPO before surgery [1]. Same is also true for the routine prolonged NPO after surgery [2].

The tradition of perioperative NPO practices need to be revised based on scientific evidence. And for that matter, many such changes we have implemented at Patan Hospital, Patan Academy of Health Sciences. For such, we had generated evidence for the feasibility of changing the NPO practices in the department of surgery [1], but more needs to be done for the wider acceptance of changes required for perioperative unnecessarily prolonged fasting.


In line with the enhanced recovery after surgery (ERAS), both pre- and postoperative NPO, discontinuation of intravenous (IV) drip, and allowing early postoperative oral feeding practices are feasible for which the students and postgraduate trainees have helped spread the changes [2, 3]. Traditional clinical practices require re-visit to make changes based on evidence.

We need to generate more research evidence locally to make relevant changes in clinical practices while keeping in line with the international literature available on the Web. Evidence generated internationally should be complemented with research in local scenarios for wider implementation. This is because the ‘grass is greener on the other side of the fence’ is not always beneficial and automatically accepted in local scenarios. Generating evidence, its visibility, and acknowledgment are important to further strengthen and expand evidence-based clinical practices.

Mechanisms of change are complex and reducing the gap between clinic practices and research needs more effort to implement the changes. Practicalities and the potential contribution of clinical research, training, and participation in a research project, use of information technologies for dissemination of findings are useful for wider acceptance of necessary changes [4]. Unlearning old practice is more difficult than learning a new one and requires a multi-directional process for successful changes [5]. Availability of clinical guideline alone is not enough for a change in old practices; and require dissemination, implementation, and evaluation for local adaptation and refinement to promote the successful changes.

Congratulations for trying to raise awareness, especially important when it is from the teaching institutions and academia where we train the future physicians. Interdisciplinary involvement of multiple institutions for wider consensus goes a long way when there is a need for change in clinical practices, for the introduction of the change itself, and more importantly for the sustainability of the changes.


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Citation

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Declarations

None

References

1. Shah JN, Maharjan S, Gurung R. Shortened preoperative fasting time to allow oral rehydration solution clear liquid up to two hours before elective major surgery in adults. *J Coll Physicians Surg Pak.* 2018;28(5):348–51. DOI: 10.29271/jcsp.2018.05.348
2. Shah JN. Implementation of enhanced recovery after surgery-ERAS, a paradigm shift in surgery. *J Patan Acad Health Sci.* 2018;5(1):1–2. DOI: 10.3126/jpahs.v5i1.24033
3. Shah JN, Maharjan SB, Shah S, Manadhar K, Shrestha S, Shrestha A, et al. Feasibility, safety and benefit of no drip after cholecystectomy: a prospective observational study. *Health Renaissance.* 2012;10(3):187–91. DOI: 10.3126/hren.v10i3.7133
4. Thurin JM, Thurin M, Midgley N. Does participation in research lead to changes in attitudes among clinicians? Report on a survey of those involved in a French practice research network. *Counselling and Psychotherapy Research.* 2012;12(3):187–93. DOI: 10.1080/14733145.2012.696122.
5. Gupta DM, Boland RJ, Aron DC. The physician's experience of changing clinical practice: a struggle to unlearn. *Implement Sci.* 2017;12(1):28. DOI: 10.1186/s13012-017-0555-2

Reconsidering Nil Per Oral Start Time Order or Modifying the ASA Guideline: A Different Perspective. Comment on JBPKIHS. 2021;4(1):1-3

Dear Editor,

I read with interest your “Fasting or Starving our Patients to an Inhumane Extent? A Plea for Some Common Sense”, published in the recent issue of *Journal of BPKIHS 2021* [1]. You have mentioned that it's time to replace a common “NPO now” order with the specific “NPO start time” order based on the scheduled time of the patient's procedure, which is worth noting. It has also been mentioned that removing the time limit for clear fluids reduces the incidence of extended preoperative fasting, so you voted for 6-4-0 regimen in routine paediatric anaesthetic practice. But studies have shown that 250–300 ml of water leaves the stomach in < 30 - 60 min [2]. It means even clear fluid takes some time to leave stomach. In case the 6-4-0 regimen is strictly followed and if children are allowed to drink ad lib, there is risk of aspiration. So “Clear fluid at any time” though resolve the issue of starvation but reinstate the risk of aspiration. Therefore what I would like to suggest is that the idea to replace “NPO now” order with “NPO start time” order based on scheduled time of the patient's procedure is worth applying instead of changing the 6-4-2 guideline to 6-4-0 [3].

Declarations

Conflict of Interest: None

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Citation

“Shrestha N. Reconsidering nil per oral start time order or modifying the ASA guideline: a different perspective. Comment on JBPKIHS. 2021;4(1):1-3. JBPKIHS. 2021;4(2):50-51”



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References

1. Pokharel K. Fasting or Starving our Patients to an Inhumane Extent? A Plea for Some Common Sense. JBPKIHS. 2021 Jun 30;4(1):1-3. DOI: 10.3126/jbпкиhs.v4i1.36337
2. Okabe T, Terashima H, Sakamoto A. Determinants of liquid gastric emptying: comparisons between milk and isocalorically adjusted clear fluids. Br J Anaesth. 2015 Jan 1;114(1):77-82. DOI: 10.1093/bja/aeu338
3. Practice guidelines for preoperative fasting and the use of pharmacologic agents to reduce the risk of pulmonary aspiration: Application to healthy patients undergoing elective procedures: An updated report by the American Society of Anesthesiologists Task Force on Preoperative Fasting and the Use of Pharmacologic Agents to Reduce the Risk of Pulmonary Aspiration. Anesthesiology. 2017;126(3):376-93. DOI: 10.1097/ALN.0000000000001452

Editor's Reply to Nischal Shrestha's Letter

I would like to thank the author for showing interest in the editorial on “Fasting or starving our patients to an inhumane extent? A plea for some common sense” published in our previous issue and raising a concern. The rationale for advocating the practice of clear fluids until called to the operating suite (6-4-0 regimen) in routine pediatric anesthetic practice for healthy children are twofold. Firstly, in real world setting factors that prolong the fasting duration once a patient is called to the operating suite include the time taken for arranging the transfer and even after the patient gets transferred to the theater, the waiting period till the anesthesia induction room is vacant. Randomized controlled trials and prospective observational studies have shown that real time median fasting duration was 48 to 76 min with 6-4-0 regimen compared to 135 min to 3.9 h with 6-4-2 regimen [1]. Hence, even if 6-4-0 regimen is strictly followed, zero hour translates to a little longer than 30 to 60 min which is adequate for the 250 ml to 300 ml of water to leave the stomach. By shortening fasting duration, zero hour regimen therefore, may reduce patient discomfort while keeping a flexibility in operating room schedule [2]. Secondly, recent studies suggest liberalizing clear fluid fasting times in healthy children does not increase the incidence of pulmonary aspiration [3]. Even if regurgitation and aspiration of clear fluid occurs, it is unlikely to result in morbidity and mortality [3]. Based on the above facts, various anesthesia societies in Europe, Canada and Australasia, in addition to the international consensus for clear fluid fasting for children, now encourage clear fluid intake up to 1 h prior to pediatric elective anesthesia [1, 4]. Hence, unless contraindicated, liberal preoperative fluid intake should always be encouraged in children. We do agree that ad lib volume may be dangerous and do not advocate beyond 3ml/kg. [5].

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References

1. Frykholm P, Disma N, Andersson H, Beck C, Bouvet L, Cercueil E, et al. Pre-operative fasting in children: A guideline from the European Society of Anaesthesiology and Intensive Care. *Eur J Anaesthesiol*. 2022;39(1):4-25. DOI: 10.1097/EJA.0000000000001599.
2. Friedrich S, Meybohm P, Kranke P. Nulla Per Os (NPO) guidelines: time to revisit? *Curr Opin Anaesthesiol*. 2020;33(6):740-5. DOI: 10.1097/ACO.0000000000000920.
3. Morrison CE, Ritchie-McLean S, Jha A, Mythen M. Two hours too long: time to review fasting guidelines for clear fluids. *Br J Anaesth*. 2020;S0007-0912(19)31004-9. DOI: 10.1016/j.bja.2019.11.036.
4. Green SM, Leroy PL, Roback MG, Irwin MG, Andolfatto G, Babl FE, et al. International Committee for the Advancement of Procedural Sedation. An international multidisciplinary consensus statement on fasting before procedural sedation in adults and children. *Anaesthesia*. 2020;75(3):374-85. DOI: 10.1111/anae.14892. Erratum in: *Anaesthesia*. 2020;75(6):818.
5. Thomas M, Morrison C, Newton R, Schindler E. Consensus statement on clear fluids fasting for elective pediatric general anesthesia. *Paediatr Anaesth*. 2018;28(5):411-4. DOI: 10.1111/pan.13370.