

Malnutrition in Intensive Care Unit Patients Requiring Noninvasive Ventilation: Lesson Pending to Resolve

Sir,

We have read with great interest Sharma *et al.*'s study on the existence of significant malnutrition in patients receiving noninvasive mechanical ventilation (NIMV) and its impact.^[1] We agree that the implementation of nutrition in these patients continues to be a matter of controversy due to the beneficial effects or complications that the use of a nasogastric (NG) tube may entail. The authors consider that it is important to take into account the effects of the association of NG feeding and NIMV.

At this point, we want to highlight that technically, this difficulty can be controlled (level of asynchronies, leaks, etc.) with the use of devices recently developed and published. We consider that the author should consider them as a recommendation. Quintero *et al.*^[2] developed a tube adapter for NIMV (TA-NIMV) responding to the need for a device that allowed NIMV and nutritional support without altering the mask's traditional design. This device allows the use of up to two tubes concomitantly, one for nutritional support and the other for gastric decompression, avoiding gastric insufflation and controlling residual gastric volume. TA-NIMV allows proper ventilation with enteric nutritional support either continuous or intermittent, while reducing the risk of tube collapse and diminishing the risk of air leakage through the oronasal mask. Moreover, other initiatives such as the double-purpose tubes,^[3,4] used in conjunction with the TA-NIMV, could reduce complications and improve patients' nutritional status while contributing to adequate respiratory management.

We agree with the authors that more studies are needed to validate previous observations and study further outcomes in this population.

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Conflicts of interest

There are no conflicts of interest.

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REFERENCES

1. Sharma G, Venkataraman R, Rajagopal S, Ramakrishnan N, Abraham BK, Savio RD. Nutrition therapy in patients requiring noninvasive ventilation in the Intensive Care Unit: Feasibility, tolerance, and complications. *Indian J Respir Care* 2021;10:289-93.
2. Quintero OI, Sanchez AI, Chavarro PA, Casas IC, Ospina Tascón GA. Impact of using a novel gastric feeding tube adaptor on patient's comfort and air leaks during non-invasive mechanical ventilation. *Arch Bronconeumol (Engl Ed)* 2020;56:353-9.
3. Silk DB, Quinn DG. Dual-purpose gastric decompression and enteral feeding tubes rationale and design of novel nasogastric and nasogastrojejunal tubes. *JPEN J Parenter Enteral Nutr* 2015;39:531-43.
4. Toh Yoon EW, Nishihara K, Murata H. Maintaining enteral nutrition in the severely ill using a newly developed nasojejunal feeding tube with gastric decompression function. *Intern Med* 2016;55:2945-50.

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