



The importance of the spontaneous breathing trial to keep extubated

Carles Subirà¹, Rafael Fernández^{1,2}

¹Department of Critical Care, Althaia Xarxa Assistencial Manresa, Manresa, Spain; ²Universitat Internacional de Catalunya, CIBERES, Instituto de Salud Carlos III, Madrid, Spain

Correspondence to: Carles Subirà, MD, PhD. Department of Critical Care, Althaia Xarxa Assistencial Universitària de Manresa, C/ Dr. Soler 1-3, 08243 Manresa, Spain. Email: csubira@althaia.cat.

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We read with interest Dr. Fink's editorial *More Than Just a Screen to Liberate from Mechanical Ventilation: Treat to Keep Extubated?* We agree with the main idea: physicians must avoid reintubation because is related to an increased risk of death (1).

We appreciate its comments about our recent clinical trial (2), that merit some clarifications.

In our study, the prophylaxis with NIV or HFNC was not protocolized. Probably both were restricted to those patients in high risk of failure, being difficult to confidently interpret these results. A better picture is to calculate the rate of prophylactic NIV or HFNC among patients who were extubated after the SBT (532 patients in the PSV group and 486 patients in the T-piece group). Then, 26.7% in PSV group and 22% in T-piece group ($P=0.083$) received some prophylaxis. Moreover, a higher rate of prophylaxis in PSV group may also suggest an expected higher risk of failure. Interestingly, PSV patients showed similar postextubation failure and reintubation needs.

For further discarding any influence in the main result of our study, we performed a post-hoc analysis selecting only those patients without any prophylaxis. This new population included 433 patients in PSV group and 470 patients in the PSV group. Of them, 350 patients in the PSV group (80.8%) and 338 patients in the T-piece group (71.9%) were successfully extubated ($P=0.002$), suggesting that NIV or HFNC prophylaxis of postextubation respiratory failure, did not influence the main result of our study.

About the treatment of postextubation respiratory failure, in our study protocol, the use of NIV was not recommended, but open to the physician decision. We advise not to take any conclusion from patients treated with NIV or HFNC because we have no data to ascertain whether these patients were too sick to wait until reaching reintubation criteria, or too well, allowing for a NIV trial before going to reintubation. With the actual evidence, we remain against NIV for postextubation respiratory failure treatment because it could delay reintubation and increase mortality (3). Similarly, there are no available data about HFNC as treatment of postextubation respiratory failure. More future studies are needed to identify which strategies and treatments could reduce the needing of reintubation in postextubation respiratory failure patients.

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Footnotes

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are

appropriately investigated and resolved.

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