



## LETTER TO THE EDITOR

### Acute respiratory distress syndrome: a definition on the line

### Síndrome de distrés respiratorio agudo: una definición en la picota

Dear Editor:

In the final version of the current definition (Berlin, 2012)<sup>1</sup> nothing was said on histopathological concepts although the panel of experts agreed that ARDS is a type of pulmonary, diffuse, acute, and inflammatory lesion characterized by an increased vascular patency. This approach is focused on clinical, radiographic, and gas variables only.

Currently, authorized voices categorize each of the 3 pillars of the Berlin definition as weak: significant inter-observer variability of radiographic criteria; variability in relation to the PaO<sub>2</sub>/FIO<sub>2</sub> ratio based on the degree of alteration in the association between ventilation/perfusion and the existing shunt; and time elapsed until arbitrary and random symptom onset.<sup>2</sup>

In this context, thinking of contexts with limited resources while looking for less invasive and earlier diagnoses different modifications to the definition of ARDS have been proposed assessing the lack of PEEP, use of the SpO<sub>2</sub>/FIO<sub>2</sub> ratio, and bilateral opacities through the use of pulmonary ultrasound.<sup>3</sup>

However, delayed diagnosis and, therefore, the use of protective ventilation therapies has been magnified by the overuse of the high-flow nasal cannula (HFNC) as an alternative to invasive and non-invasive ventilation despite the lack of evidence confirming benefits associated with mortality or other clinical outcomes. HFNCs are used in the routine clinical practice on a daily basis. Most patients who meet other ARDS criteria during part of the period of use of HFNC still meet the criteria for ARDS after intubation. These patients share clinical characteristics, inflammation biomarkers, and similar results compared to patients with ARDS. It seems reasonable to expand the ARDS Berlin defini-

tion including the HFNC to facilitate identification and early procedures, thus avoiding delayed mechanical ventilation and its consequences.<sup>4,5</sup>

In conclusion, the ARDS definition as a syndrome should make us optimize diagnosis, treatment, and eventually, individualization, and prognosis of specific conditions and diseases running away from definitions based on the fact of homogenizing recruitment of patients in clinical trials.<sup>2,5</sup>

## References

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