



## LETTER TO THE EDITOR

## Hypoventilation: A physiological, non-semiological term



## Hipoventilación: un término fisiológico no semiológico

Dear Editor:

In the June 2025 issue of the journal ANALES DE PEDIATRÍA, while reading the article titled “Consolidación radiológica y dificultad respiratoria con ecografía pulmonar normal”,<sup>1</sup> I came across, not for the first time, the term “hipoventilación” in reference to a finding of lung auscultation. I proceeded to search for this term on the journal’s website from 2000 to 2025 and found that it had been used in 162 instances, 127 of which referred to a finding of lung auscultation, and 39 to a physiological finding. Likewise, in the English version of the journal, I found it incorrectly translated as *hypoven-tilation* in 15 out of 22 instances, instead of as *decreased breath sounds*.

The dictionary of the Real Academia Nacional de Medicina de España (Royal Academy of Medicine of Spain) defines the term *hipoventilación* (which translates directly to English as *hypoventilation*)<sup>2</sup> as “shallow or slow breathing that fails to deliver sufficient air to the alveoli to maintain an adequate partial oxygen pressure in arterial blood, systematically accompanied by an increase in partial CO<sub>2</sub> pressure in arterial blood. If it persists, it causes a drop in blood pH (respiratory acidosis). It occurs in disorders that depress the respiratory center, neuromuscular diseases, disorders that alter the skeletal structure of the rib cage, or end-stage respiratory diseases, such as chronic obstructive pulmonary disease, obstructive sleep apnea and hypopnea syndrome, diffuse interstitial lung diseases, etc.”

In addition, the term hypoventilation does not appear in any other linguistic reference work to refer to a finding of lung auscultation.

The confusion surrounding this term has already been reported in an article published by Alfredo Pinzón in the journal *Acta Médica Colombiana* in 2016,<sup>3</sup> in which the author proposes two terms to refer correctly to decreased

or absent breath sounds on auscultation, “disminución del murmullo vesicular” and “ruidos respiratorios disminuidos”.

Surprisingly enough, this phenomenon is not isolated to pediatric journals, but also occurs, although at a lower rate, in specialized pulmonology journals, such as *Archivos de Bronconeumología*. However, in English-language journals, such as *Pediatrics*, the same search does not yield a single instance of the term “hypoventilation” describing a finding of lung auscultation, and instead the term “decreased breath sounds” is used every single time.

The misuse of the term hypoventilation as a semiological rather than physiological concept can have consequences in the field of communication, as it can cause confusion when reading and translating into other languages, particularly English. Moreover, we can see that both physicians and residents routinely use the term incorrectly in presentations and clinical reports. Reading articles in the journal ANALES DE PEDIATRÍA where this term has gone undetected by reviewers and editors may reinforce its incorrect use and hinder the educational role in scientific language communication competency that most of us fulfill as physicians, particularly for students and residents.

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### References

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