PORTUGUESE JOURNAL OF PEDIATRICS

PERMANYER

Check for updates

LETTER TO THE EDITOR

Is post-pandemic bronchiolitis a question of health assistance and ventilatory support?

A bronquiolite pós-pandemia é uma questão de cuidados de saúde e suporte ventilatório?

Mehmet Çeleğen[1], Benan Bayrakci[1], and Antonio M. Esquinas[2]*

[1]Department of Pediatric Intensive Care Medicine, The Center For Life Support Practice and Research, Hacettepe University, Ankara, Türkiye; [2]Intensive Care Unit, Hospital Meseguer, NIV-ICM, Instituto Murciano de Investigación Biosanitaria, Murcia, Spain

Dear Editor,

We read with great interest the research made by Croca et al.[1], which examines the changing epidemiology of bronchiolitis and the increased demand for ventilatory support in the post-COVID-19 era. Their work is relevant and clinically essential, particularly now that healthcare professionals are dealing with unpredictable seasonal bronchiolitis surges of increasing severity. The findings of Croca et al. are consistent with international data, including a review by Dalziel et al.[2], which revealed higher requirements for oxygen, advanced respiratory support, and intensive care unit admissions following the pandemic.

We commend the authors for addressing this important issue and would like to offer some additional thoughts that may provide further context.

To begin with, the authors correctly highlight the role of "immunity debt" in shaping the epidemiology of bronchiolitis following the pandemic. Social distancing, mask use, and reduced exposure to common respiratory pathogens have been associated with delayed acquisition of protective immunity in infants and young children. The current study only tested for RSV, SARS-CoV-2, and influenza A and B viruses. Comprehensive virological surveillance, including rhinovirus, adenovirus, and human metapneumovirus would have revealed whether the increased severity was due to the reemergence of RSV or a broader shift.

In addition to this, the relatively limited use of high-flow nasal cannulas (HFNC) is remarkable, given its recognition as a first-line therapy in many centers. Other studies have also reported changes in HFNC applications, which may reflect not only disease severity but also evolving physician behaviors and resource availability[3]. Standardized respiratory support algorithms across centers would allow for more reliable comparisons and ensure consistent escalation thresholds[4].

Furthermore, the concentration of intensive care admissions among infants younger than one month old is consistent with prior reports, underscoring the need for preventive strategies and early triage in this high-risk group[5]. The fact that RSV accounted for 90% of bronchiolitis cases in the current study highlights the importance of ensuring access to RSV immunoprophylaxis. Increasing parental awareness of early warning signs could also reduce delays in accessing advanced care.

Although the study by Croca et al. provides valuable evidence to a growing body of literature indicating increased bronchiolitis severity post-COVID-19, further prospective multicenter studies are needed to determine the necessity of more comprehensive viral testing and standardized support protocols.

***Correspondence:**
Mehmet Çeleğen
E-mail: mcelegen@hotmail.com

Received: 26-08-2025
Accepted: 19-11-2025
https://pjp.spp.pt

Available online: 13-01-2026
Port J Pediatr. (Ahead of print)
DOI: 10.24875/PJP.25000066

Author contributions

M. Çeleğen: Writing, Review & Editing; B. Bayrakci and A.M. Esquinas: Supervision.

Funding

None to report

Conflicts of interest

None to report.

Ethical considerations

Protection of humans and animals. The authors declare that no experiments involving humans or animals were conducted for this research.

Confidentiality, informed consent, and ethical approval. The study does not involve patient personal data nor requires ethical approval. The SAGER guidelines do not apply.

Declaration on the use of artificial intelligence. The authors declare that no generative artificial intelligence was used in the writing of this manuscript.

References

1. G.P. Croca, C. Mendonça, T. Magalhães, M. Viegas, C. Gomes. Do post-pandemic bronchiolitis require more ventilatory support? Perspec2. tive from a level II hospital. Port J Pediatr. 2025;56(3):132-136.
2. S.R. Dalziel, L. Haskell, S. O'Brien, M.L. Borland, A.C. Plint, F.E. Babl, et al. Bronchiolitis: increased severity in the post-COVID-19 era. Lancet. 2022;400(10349):392-406.
3. S. Ghirardo, G. Cozzi, G. Tonin, F.M. Risso, L. Dotta, A. Zago, et al. Increased use of high-flow nasal cannulas after the pandemic in bronchiolitis: a more severe disease or a changed physician's attitude? Eur J Pediatr. 2022;181(11):3931-6.
4. F. Guerrero-Del-Cueto, J.M. Ramos-Fernandez, I. Leiva-Gea, E. Reina-Moreno, A. Ortiz-Ortigosa, B. Carazo-Gallego, et al. Bronchiolitis before and after the SARS-CoV-2 pandemic: twelve years of experience in a Spanish paediatric hospital. Pediatr Pulmonol. 2023;58(4):1201-9.
5. S.N. Nguyen, T.N.T Nguyen, L.T. Vu, T.D. Nguyen. Clinical epidemiological characteristics and risk factors for severe bronchiolitis caused by respiratory syncytial virus in Vietnamese children. Int J Pediatr. 2021;2021:9704666.