Medicina Intensiva xxx (xxxx) 502155

medicina intensiva

http://www.medintensiva.org/en/

IMAGES IN INTENSIVE MEDICINE

Monitoring through electrical impedance tomography in pediatric ECMO

Monitoreo a través de tomografía por impedancia eléctrica en ECMO pediátrico

Gabriel Appendino*, **Fernando Paziencia**, **Carlos Lovesio**

Unidad de Terapia Intensiva, Sanatorio Parque, Rosario, Argentina

Received 19 November 2024; accepted 26 November 2024

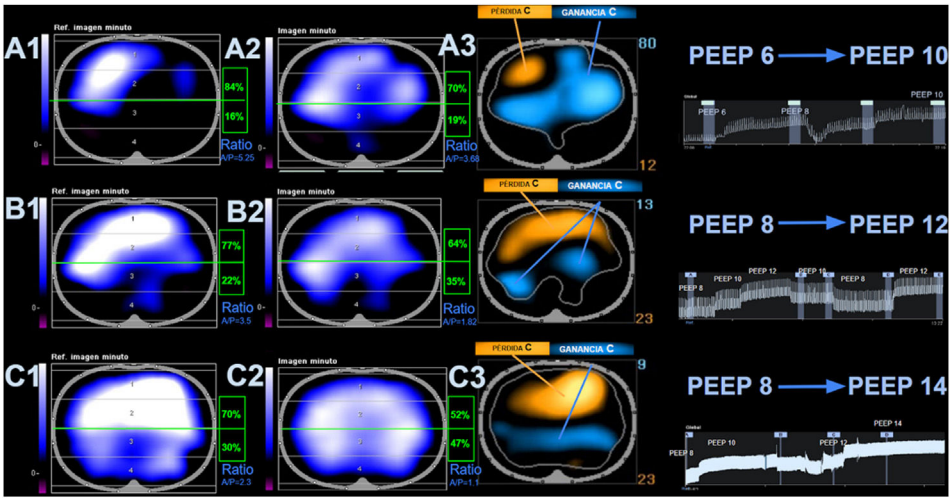

Figure 1

DOI of original article: https://doi.org/10.1016/j.medin.2025.502155
* Corresponding author.
E-mail address: gappendino@ugr.edu.ar (G. Appendino).

https://doi.org/10.1016/j.medine.2025.502155

Please cite this article as: G. Appendino, F. Paziencia and C. Lovesio, Monitoring through electrical impedance tomography in pediatric ECMO, Medicina Intensiva, https://doi.org/10.1016/j.medine.2025.502155

Screenshots are shown of electrical impedance tomography (EIT) monitoring of a pediatric patient subjected to venoarterial extracorporeal membrane oxygenation (ECMO) due to acute respiratory distress syndrome caused by influenza infection. EIT allowed the assessment of incremental positive end-expiratory pressure (PEEP) adjustments on days 1, 4 and 7 (references A, B and C). A PEEP of 10 cmH2O was initially established, showing compliance gain in collapsed zones and loss in over-distended zones (A3). On day 4, PEEP was titrated, redistributing volume from the non-dependent to the dependent zones (B3). Prior to ECMO weaning, the anteroposterior ratio (A/P ratio) was improved, reducing overdistension in ROI 1 and 2 (C1-C2) and recruiting in posterior zone ROI 3 and 4 (Fig. 1).

Financial support

None.

Declaration of competing interest

Fernando Paziencia is a Public Speaker of Drager Argentina related to EIT.

Acknowledgments

None.