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Monitoring through electrical impedance tomography in pediatric ECMO



Monitoreo a través de tomografía por impedancia eléctrica en ECMO pediátrico

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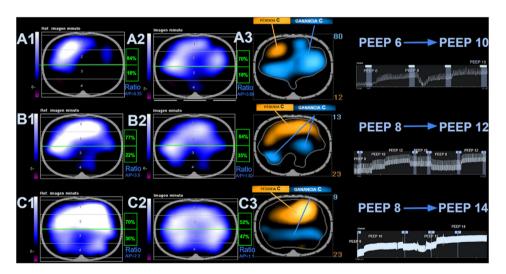


Figure 1

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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).

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Declaration of competing interest

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