

CORRECTION

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Correction to: Effect of PEEP decremental on respiratory mechanics, gas exchange, pulmonary regional ventilation, and hemodynamics in patients with SARS-Cov-2-associated Acute Respiratory Distress Syndrome

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Correction to: *Critical Care* (2020) 24:596

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Following publication of the original article [1], the authors reported a title error in addition gas exchange was written incorrectly throughout the article, the affiliations of the author group were incorrect, Table 1 was missing punctuation, and the table had alignment errors. The revised title, Table 1, and revised text are indicated hereafter, and the changes have been highlighted in **bold typeface**.

The incorrect title is:

Effect of PEEP decremental on respiratory mechanics, gasses exchanges, pulmonary regional ventilation, and hemodynamics in patients with SARS-Cov-2-associated acute respiratory distress syndrome

The correct title is:

Effect of PEEP decremental on respiratory mechanics, **gas exchange**, pulmonary regional ventilation, and hemodynamics in patients with SARS-Cov-2-associated **Acute Respiratory Distress Syndrome**

The incorrect author group with affiliations read:

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The original article can be found online at <https://doi.org/10.1186/s13054-020-03311-9>.

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The correct author group with affiliations should read:

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The sentence currently reads:

PEEP decremental was not associated with significant changes in gasses exchanges but was associated with a significant decrease in plateau pressure and driving pressure and with a significant decrease in end-inspiratory and in end-expiratory transpulmonary pressures.

The sentence should read:

PEEP decremental was not associated with significant changes in **gas exchange** but was associated with a significant decrease in plateau pressure and driving pressure and with a significant decrease in end-inspiratory and in end-expiratory transpulmonary pressures.

The sentence currently reads:

These findings suggest that mechanically ventilated SARS-Cov-2 patients have a relatively preserved lung compliance and that the use of high PEEP was associated with a decrease in lung compliance while providing no beneficial effect on gasses exchanges.

The sentence should read:

These findings suggest that mechanically ventilated SARS-Cov-2 patients have a relatively preserved lung compliance and that the use of high PEEP was associated with a decrease in lung compliance while providing no beneficial effect on **gas exchange**.

Table 1 caption currently reads:

Table 1 Changes in hemodynamics, gasses exchanges, respiratory mechanics, and pulmonary regional ventilation between high and low PEEP in supine ($n = 10$)

Table 1 caption should read:

Table 1 Changes in hemodynamics, **gas exchange**, respiratory mechanics, and pulmonary regional ventilation between high and low PEEP in supine ($n = 10$)

The sentence currently reads:

In conclusion, this series of SARS-Cov-2-related ARDS describe an individualized multimodal approach of lung mechanics, gasses exchanges, pulmonary regional ventilation, and hemodynamics at the early phase of the disease and suggest that low PEEP should be used as part of the ventilation strategy, rather than high PEEP.

The sentence should read:

In conclusion, this series of SARS-Cov-2-related ARDS describe an individualized multimodal approach of lung mechanics, **gas exchange**, pulmonary regional ventilation, and hemodynamics at the early phase of the disease and suggest that low PEEP should be used as part of the ventilation strategy, rather than high PEEP.

Table 1 should read:

Table 1 Changes in hemodynamics, gas exchange, respiratory mechanics and pulmonary regional ventilation between High and Low PEEP in supine (n = 10)

	High PEEP	Low PEEP	P
Clinical variables			
Heart rate, beats.min ⁻¹	72 [64–95]	76 [59–97]	0.977
Systolic arterial blood pressure, mmHg	125 [108–138]	129 [118–140]	0.555
Diastolic arterial blood pressure, mmHg	63 [49–69]	58 [48–65]	0.158
Mean arterial blood pressure, mmHg	77 [72–89]	77 [73–86]	> 0.999
Transpulmonary thermodilution indices			
Cardiac index, L.min ⁻¹ .m ⁻²	2.5 [2.0–3.0]	2.6 [2.2–3.3]	0.027
Global end-diastolic volume indexed, mL.m ⁻²	661 [551–870]	668 [559–813]	0.432
Extravascular lung water, mL.kg ⁻¹	15 [13–18]	14 [13–17]	0.551
Pulmonary vascular permeability index	3.3 [2.7–3.9]	3.3 [2.7–3.6]	0.607
Cardiac function index, min ⁻¹	4.4 [2.4–5.3]	4.5 [2.8–5.8]	0.008
Gas exchanges			
pH	7.35 [7.29–7.37]	7.35 [7.30–7.41]	0.305
PaCO ₂ , mmHg	45 [39–51]	44 [40–47]	0.191
PaO ₂ /FiO ₂ ratio, mmHg	116 [99–196]	106 [86–129]	0.127
SaO ₂ , %	97 [95–98]	96 [92–97]	0.172
V _D /V _T	0.34 [0.29–0.39]	0.35 [0.30–0.39]	0.348
A–a gradient, mmHg	374 [304–533]	384 [275–543]	0.139
Respiratory mechanics			
Respiratory rate, breaths.min ⁻¹	27 [23–30]	27 [23–30]	–
Tidal volume, mL.kg ⁻¹ IBW	6.0 [6.0–6.3]	6.0 [6.0–6.3]	–
Positive end-expiratory pressure, cmH ₂ O	16 [16–16]	8 [8–8]	0.016
Peak pressure, cmH ₂ O	44 [42–47]	35 [33–36]	0.002
Plateau pressure, cmH ₂ O	28 [27–31]	20 [18–21]	0.002
Driving pressure, cmH ₂ O	14 [11–16]	12 [10–13]	0.004
End-expiratory transpulmonary pressure, cmH ₂ O	6 [4–8]	2 [– 1–4]	0.002
End-inspiratory transpulmonary pressure, cmH ₂ O	14 [13–17]	9 [6–10]	0.002
Respiratory system compliance, mL.cmH ₂ O ⁻¹	29 [27–36]	34 [30–42]	0.012
Respiratory system resistance, cmH ₂ O.L ⁻¹ .sec ⁻¹	0.24 [0.20–0.25]	0.23 [0.22–0.26]	> 0.999
Lung compliance, mL.cmH ₂ O ⁻¹	47 [40–56]	64 [46–82]	0.008
R/I ratio	0.33 [0.21–0.54]	–	–
End-expiratory lung volume, mL	2546 [2151–3019]	1725 [1450–2023]	0.002
Electrical impedance tomography derived indices			
Dorsal fraction, %	46 [43–54]	35 [32–39]	0.002
Global inhomogeneity index, %	58 [52–60]	60 [55–66]	0.059
End-expiratory lung impedance	251 [179–404]	139 [83–243]	0.008
Changes in end-expiratory lung impedance, %	– 118 [– 150 to – 32]	–	0.004

Data are presented as median [interquartile range] or number (percentage). Wilcoxon matched-pairs signed-rank test was used to evaluate differences between the median values of paired data. PaCO₂ partial pressure of arterial carbon dioxide, PaO₂ partial pressure of oxygen, FiO₂ fraction of inspired oxygen, SaO₂ oxygen saturation, V_D/V_T estimated dead space fraction, A–a gradient alveolar–arterial gradient, R/I recruitment to inflation ratio. P values refer to the comparison between high and low PEEP for each patient

The Acknowledgments section currently reads:

Not applicable.

The Acknowledgments section should read:

We thank Umar Saleem for his contribution to this work.

All the changes requested are implemented in this correction, and the original article [1] has been corrected.

Author details

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